Society for Conservation Biology

25th International Congress for Conservation Biology Auckland, New Zealand • 5-9 December 2011

ICCB 2011: Engaging Society in Conservation Te Whenua, Te Moana, Te Papa Atawhai Whakamaua ki Tina PROGRAMME

years of SCB



2017 University of Canterbury, Auckland, New Zealand 2010

University of Alberta, Edmonton, Alberta, Canada

Institute of Zoology, Chinese Academy of Sciences Beijing, China

2008 The University of Tennessee at Chattanooga Chattanooga, Tennessee, USA

2007 Nelson Mandela Metropolitan University Port Elizabeth, South Africa

2006 San Jose, California, USA

2005 Universidade de Brasília, Brasília, Brazil

2004 Columbia University, New York, New York, USA

2003 University of Minnesota, Duluth, Minnesota, USA

2002 University of Kent at Canterbury, United Kingdom

2007 University of Hawaii, Hilo, Hawaii, USA

2000 University of Montana, Missoula, Montana, USA

1999 University of Maryland, College Park, Maryland, USA

1998 Macquarie University, Sydney, Australia

1997 Victoria University, Victoria, British Columbia , Canada

1996 Brown University, Providence, Rhode Island, USA

1995 Colorado State University, Fort Collins, Colorado, USA

1994 University of Guadalajara, Jalisco, Mexico

1993 Arizona State University, Tempe, Arizona, USA

1992 Virginia Tech, Blacksburg, Virginia, USA

University of Wisconsin, Madison, Wisconsin, USA

1990 University of Florida, Gainesville, Florida, USA

1989 University of Toronto, Toronto, Ontario, Canada

1988 University of California, Davis Davis, California, USA

1987 Montana State University, Bozeman, Montana, USA



Society for Conservation Biology

Dedicated to advancing the science and practice of conserving Earth's biological diversity, the Society for Conservation Biology (SCB) is a global community of conservation professionals with thousands of members worldwide. The Society's membership comprises a wide range of people interested in the conservation and study of biological diversity: researchers, resource managers, educators, government and private conservation workers, and students.

SCB publishes the flagship peer-reviewed journal of the field, *Conservation Biology*, the award-winning magazine, *Conservation* and the new journal, *Conservation Letters*. The International Congress for Conservation Biology, ranging in location from Chattanooga to Beijing, is recognized as the most important global meeting for conservation professionals and students. The Society provides many benefits to its community, including local, regional, and global networking, an active conservation-policy program, and free online access to publications for members in developing countries. SCB also administers a postdoctoral program, the David H. Smith Conservation Research Fellowship Program, sponsored by the Cedar Tree Foundation.

www.ConservationBiology.org



25th International Congress for Conservation Biology, Hosted by the Society for Conservation Biology

ICCB 2011 Congress Guide

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Engaging Society in Conservation Te Whenua, Te Moana, Te Papa Atawhai Whakamaua ki Tina

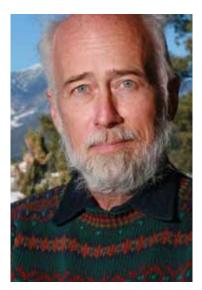
Biodiversity around the world continues to decline at an ever-increasing pace, yet much of society carries on business as usual. How can conservation professionals engage with society to achieve positive outcomes for conservation without compromising our scientific rigor or integrity?

New Zealand provides the perfect location to see first-hand the challenges facing conservation biology as we attempt to deal with habitat loss, changing farming practices, over-fishing, extinction, and a human population losing contact with the natural world. New Zealand offers examples of grass-roots conservation that have turned degraded land back to forest, of government agencies that have saved species on the brink of extinction, and of businesses that have actively engaged in biodiversity conservation. But it is also a place where primary production and industries dominate the economy, and their interactions with biodiversity continue to threaten conservation success. Engagement with farmers, foresters, fishers and business, as well as with local communities, NGOs and government agencies, is essential for successful biodiversity conservation.

We hope you will join us in Auckland for the 25th International Congress of the Society for Conservation Biology, as we explore both the science of conservation, and how we can engage all aspects of society in conservation.



Society for Conservation Biology



Dr. Paul Beier

Professor, Conservation Biology and Wildlife Ecology, School of Forestry, Northern Arizona University Happy we meet, happy we part, and happy we meet again

There is nothing like an International Congress of Conservation Biology (ICCB) to make you feel the love of our global community of conservation practitioners. This Congress is our 25th global meeting, and the 15th I have attended (including every Congress since 2001). Following far too long after the fabulous 1998 ICCB in Sydney, this Auckland ICCB will remind all SCB members that Oceania Section of SCB knows how to put on a beauty of a barbie. I hope these Congresses will become a recurring event for you, as they are for me.

Why do I attend every Congress of Conservation Biology? Quite simply, I need to connect with this nurturing community of conservation professionals. Community happens in the sessions and hallways, in the award ceremony and the banquet, in the SCB Members Meeting, and in meals, drinks, and laughter. Through all these activities, each Congress becomes much more than a place we share what we've learned from our efforts to use science to conserve life on Earth. It becomes the place where we are thanked for our insights and efforts, and where we thank others for their insights and efforts. We celebrate conservation successes, and console each other about conservation failures and mistakes. In these Congresses, we celebrate life on Earth and we take satisfaction in fighting the good fight. In short, we really do "feel the love" - our love for this grand scheme of life, for science, for each other as conservation practitioners and human beings, and for future generations to whom we bequeath this planet. At our meetings, we come together as a Society that is unabashedly FOR Conservation Biology. It's in our name. It's in our heart.

I hope each of you feels nurtured by the community that is occurring here in Auckland, and that you will reconnect with this community at Section Congresses in Oakland, Bangalore, or Glasgow next year, and at the 2013 ICCB. Happy we meet, happy we part, and happy we meet again.

Paul Beier SCB President 2011-2013

A global community of conservation professionals advancing the science and practice of conserving the Earth's biodiversity. www.ConservationBiology.org



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Tel: +64 3 364 2500, Fax: + 64 364 2590 Email: biology@canterbury.ac.nz



5 December 2011

Kia ora and welcome to Aotearoa/New Zealand!

On behalf of the Local Organising Committee, I am delighted to welcome you to the 25th International Congress for Conservation Biology (ICCB). The 2011 ICCB has been a truly collaborative effort, with the members of the Organising Committee having representatives from 6 Centres of Higher Education on both the North and South Islands (University of Canterbury, Lincoln University, Otago University, University of Auckland, Victoria University of Wellington, and Waiariki Institute of Technology), the two main government environmental research agencies (Landcare Research, and National Institute of Water & Atmospheric Research), and the major government agency charged with the management of the nation's biodiversity (New Zealand Department of Conservation). Together with a large number of enthusiastic volunteers and supporters, we hope you enjoy the conference and your visit to our special part of the world.

New Zealand provides the perfect location for our conference theme "Engaging Society in Conservation/*Te* Whenua, Te Moana, Te Papa Atawhai Whakamaua ki Tina." Here you can see first-hand the challenges facing our country and indeed our planet as we attempt to deal with habitat loss, invasive species, over-exploitation of resources and a human population losing contact and interest in the natural world. Our bilingual conference theme also attests to the need for inclusiveness with all the human cultures that occupy the landscape and whose actions directly or indirectly affect the natural world. Like many countries, New Zealand is a place where primary production and industries dominate the economy, and often threaten conservation success, although it is also a place where some have also tried to redress the balance. Exactly how conservation can succeed in this greater society and sustain this success is the question of the age. I hope we can find some answers at our congress, and help ensure the political and financial will is there to implement the solutions.

New Zealand is a beautiful country and we encourage you to spend some time seeing our land and meeting our friendly people. For sheer majesty, nothing can surpass a visit to the Southern Alps or Fiordland in the South Island or the volcanic plateaux on the North Island. Our forests everywhere are full of endemic plants and animals that offer insights into the evolution of life on islands, and the perils such a pathway brings when humans alter the environment. On your travels you will see plenty of roads, housing estates, exotic plantations, and pastures where spectacular forests once grew, but you will also see large areas of protected conservation estate and impressive attempts to redress the balance, where invasive species have been removed, forests replanted and the land cherished for its wild values. *Haere mai.*

Cheers,

ames Briokie

James V. Briskie Chair, 25th International Congress for Conservation Biology

University of Canterbury Private Bag 4800, Christchurch 8020, New Zealand. www.canterbury.ac.nz



Dear Colleague,

On behalf of the Oceania section of the Society for Conservation Biology, we would like to welcome you to 2011 International Congress for Conservation Biology (ICCB) here in Auckland. As we are sure you are aware the Oceania region (comprising Australia, Melanesia, Micronesia, New Zealand and Polynesia), faces a great number of conservation challenges including threats from feral predators, pests and weeds; climate change; pollution; degradation of freshwater ecosystems; over-harvesting; disease; and land-clearing. As members of the Oceania section of the SCB, many of us are actively engaged in education, science and policy to help overcome these challenges. The opportunity to host an international conservation conference is a key avenue to achieving and promoting conservation success within, and beyond, the region.

The fundamental aims of conference, with the theme (*Te Whenua, Te Moana, Te Papa Atawhai Whakamaua ki Tina - Engaging Society in Conservation*), is to bring scientists, students, managers, decision-makers, writers and other conservation professionals from throughout the world together, to talk about experiences, to network, and to explore different scientific approaches, so that we can overcome the current and future challenges to the conservation of biodiversity.

This is the first time New Zealand has hosted an ICCB conference. New Zealand provides the perfect location to see first-hand the challenges facing conservation biology as we attempt to deal with habitat loss, changing farming practices, over-fishing, extinction, and a human population losing contact with the natural world. New Zealand offers examples of grass-roots conservation that have turned degraded land back to forest, of government agencies that have saved species on the brink of extinction, and of businesses that have actively engaged in biodiversity conservation.

We hope you enjoy the 25th International Congress of the Society for Conservation Biology, as we explore both the science of conservation, and how we can engage all aspects of society in conservation. We also ask that beyond this conference, if you are interested in getting active with the SCB Oceania section, to get in touch with us and become part of the growing SCB Oceania section.

Dr. James Watson Wildlife Conservation Society SCB – Oceania President

Dr. Carolyn Lundquist NIWA/Department of Conservation SCB – Oceania President-elect



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THE STAGE IS SET FOR YOU TO MAKE A DIFFERENCE. SHARE IDEAS, MEET COLLEAGUES, AND GET INVOLVED.



TUESDAY, 6 DECEMBER; 12:30 – 2:00PM Africa Section Meeting • Parnell Marine Section Meeting • Marlborough 2 Freshwater Working Group • Marlborough 3 Social Science Working Group • Epsom 3

WEDNESDAY, 7 DECEMBER; 12:30 - 2:00PM

Austral & Neotropical America Section Meeting • Parnell Oceania Section Meeting • NZ 4 Chapters Business Meeting • Epsom 3 Ecological Economics & Sustainability Science Working Group • Marlborough 1 Religion & Conservation Biology Working Group • Marlborough 2

THURSDAY, 8 DECEMBER; 12:30 - 2:00PM

Asia Section Meeting • Marlborough 3 Europe Section Meeting • Marlborough 2 North America Section Meeting • Marlborough 1



ICCB 2011

Local Organising Committee

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Jim Briskie, University of Canterbury

VICE CHAIRS

Carolyn Lundquist, National Institute of Water & Atmospheric Research Craig Morley, Waiariki Institute of Technology

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Ximena Nelson, Travel Awards Committee, Victoria University of Wellington Matt Kavermann, Student Representative, Lincoln University

> LOCAL ORGANISER Kerry South (South Events)

MASCOT

Kia Ora the Kakapo







The University of Canterbury is located in Christchurch, the largest city in New Zealand's South Island. The University offers world-class research, inspirational teaching, a vibrant campus environment and a great student lifestyle with students from around the world.

When established in 1873, Canterbury College, as the University was originally known, was only the second university in New Zealand. Housed in graceful stone buildings on a central city block, it was dependent for survival on rents from high country farms with which it had been endowed by the Canterbury Provincial Council.

It was set up on the Oxbridge model with one major difference: women students were admitted from the start. An early graduate, Helen Connon, became the first woman in the then British Empire to win honours.

For most of its first 100 years the University was situated in the centre of Christchurch (now the Arts Centre). By 1975 it had completed its move to a spacious purpose-built 76 hectare site in the suburb of Ilam, 7 km from the old city site. It comprises a central complex of libraries, lecture theatres, laboratories and staff accommodation surrounded by playing fields, woodlands and the renowned Ilam Gardens. On 1 January 2007 the neighbouring Christchurch College of Education, the second oldest teachers' training college in New Zealand, merged with the University and became UC's sixth College/School.

Canterbury offers undergraduate and postgraduate courses in some 50 disciplines, from accountancy to zoology. It has a number of specialist research centres and operates five major field stations at Kaikoura, Mt John (University Observatory), Cass, Westport and Harihari. Locally, six halls of residence provide board for up to 2000 students. Some 12,000 students are enrolled and each year about 3000 students graduate, 650 of them with higher degrees. The University has retained links with the old town site, now home to the Christchurch Arts Centre, using it as the starting point for graduation processions each year.

We have a vision of People Prepared to Make a Difference - *tangata tū*, *tangata ora*. Looking towards 2023, the 150th anniversary of our founding, the primary components of our strategy are to Challenge, Concentrate and Connect.

For more information see www.canterbury.ac.nz



SCB GROUP BOOTH DAYS

SCB is a global organization that provides many opportunities for personal and professional growth. SCB set up Group Booth Days so you can find your niche in SCB and learn which group best serves your interests and career goals. Meet group leaders, learn about group activities and join the group that is right for you!

REGIONAL SECTION BOOTH DAY Tuesday, 6 December

Learn about SCB's seven Regional Sections: Africa, Asia, Austral & Neotropical America, Europe, North America, Oceania, and Marin

CHAPTER BOOTH DAY Wednesday, 7 December

SCB Chapters make a difference around the world. Learn how and find the Chapter nearest to you so you can get involved at the local level.

WORKING GROUPS DAY Thursday, 8 December

SCB Working Groups are organized around topical interests. Come learn about SCB's four Working Groups: Freshwater, Social Science, Ecological Economics & Sustainability Science and Religion & Conservation Biology

SMITH FELLOWS DAY Friday, 9 December

There are few better ways to jump start your career in conservation biology than through a Smith Fellows Post-doctoral Fellowship. Come learn how you can apply for this once-in-a-lifetime opportunity!



Thank you!

The 25th International Congress for Conservation Biology would not have been possible were it not for the generous help of our volunteers. Their hard work has not gone unnoticed and we would like to recognise them here.

Rosalynn Anderson-Lederer Monica Awasthy Skylar Bee Ilse Corkery Elizabeth Heeg **Timothy Jones** Megan Kirkpatrick Kate McKenzie Abigail Powell Nicola Roberston Alice Ryan Vivitskaia Tulloch Rachael Allpfestein Christophe Amiot Mauricio Arias Luis Darcy Verde Arregoitia Achyut Aryal Kate Blackwell Abe Borker Lucy Bridgman Emma Carroll Anna Carter Kerry Charles Jimmy Choi Claire Cianciulli Kimberly Collins Meghan Collins Jen Conley Heather Constable Christina Cornett Esther Dale Claas Damken Liz Deakin

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All Moderators

.....

There are undoubtedly several individuals not listed here who contributed their time and effort to make this conference successful, including a long list of abstract reviewers. To anyone we may have missed: your hard work was greatly appreciated and we are glad you were a part of ICCB 2011!



We owe our gratitude to the following groups for their generous support.

Platinum



Ministry of Science and Innovation, New Zealand

Te Punaha Hiringa Whakaea

The Ministry of Science and Innovation (MSI) is the lead agency driving the science and innovation sector in New Zealand. The Ministry of Science and Innovation's investment and support programmes aim to build high-performing science and innovation systems that help transform New Zealand into a more diverse, technologically advanced, smart nation. http://www.msi.govt.nz/

Gold



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www.wiley.com/wiley-blackwell

Silver



Allan Wilson Centre

The Allan Wilson Centre for Molecular Ecology & Evolution, one of New Zealand's eight Centres of Research Excellence, advances knowledge of the evolution and ecology of New Zealand and Pacific plant and animal life and human history in the Pacific. We are a network of 100 researchers at seven institutions committed to securing the future of New Zealand's biodiversity and improving human and environmental health.

www.allanwilsoncentre.ac.nz/



Landcare Research

Our science drives innovation in New Zealand's management of terrestrial biodiversity and land resources. We work on projects ranging from local conservation through to national monitoring frameworks & data repositories for government. We collaborate extensively with overseas colleagues on research and provide specialist services, e.g. invasive species international ecogene DNA diagnostics. <u>www.landcareresearch.co.nz/</u>



New Zealand Aid Programme

The New Zealand Aid Programme is the New Zealand Government's international aid and development programme managed by the Ministry of Foreign Affairs and Trade. www.aid.govt.nz

N-IWA Taihoro Nukurangi



Taihoro Nukurangi

NIWA is New Zealand's leading environmental science and applied research service provider. From the top of the atmosphere to the bottom of the ocean, NIWA is focused on enhancing the benefits of New Zealand's natural resources.

www.niwa.co.nz



Rufford Small Grants Foundation

Rufford Small Grants for Nature Conservation (RSGs) are aimed at small conservation programmes and pilot projects. www.ruffordsmallgrants.org





Bronze







Department of Conservation

Society for Conservation Biology Marine Section

great student lifestyle with students from around the world.

conservation science, research and public policy.

www.conbio.org/Sections/Marine

University of Canterbury

Te Papa Atawhai

DOC has a leading role in conservation work that contributes to our prosperity, including: managing natural and historic heritage on roughly one third of New Zealand's land area, as well as marine environments; doing hands-on work with species and ecosystems; managing national parks, high country parks, forest parks, reserves, offshore islands, and historic sites; building and maintaining outdoor recreation facilities; working with tourism operators and others running businesses on public conservation areas; leading conservation research and science; sharing information and partnering with others including iwi, communities, non-government organisations, businesses, conservation boards, and central and local government; and advocating for the conservation of natural and historic heritage www.doc.govt.nz

The Marine Section of SCB provides a home for marine conservation biology in order to further marine

The University of Canterbury is located in Christchurch, the largest city in New Zealand's South Island. The University offers world-class research, inspirational teaching, a vibrant campus environment and a

NATIONAL GEOGRAPHIC National Geographic The National Geographic

The National Geographic Society is one of the world's largest nonprofit scientific and educational organizations. Founded in 1888 to "increase and diffuse geographic knowledge," the Society's mission is to inspire people to care about the planet. It reaches more than 400 million people worldwide each month through its official journal, *National Geographic*, and other magazines; National Geographic Channel; television documentaries; music; radio; films; books; DVDs; maps; exhibitions; live events; school publishing programs; interactive media; and merchandise. National Geographic has funded more than 9,600 scientific research, conservation and exploration projects and supports an education program promoting geographic literacy.

www.nationalgeographic.com



New Zealand Ecological Society

The New Zealand Ecological Society was formed in 1951 to promote the study of ecology and the application of ecological knowledge in all its aspects. Through its activities, the society attempts to encourage ecological research, increase awareness and understanding of ecological principles, promote sound ecological planning and management of the natural and human environment and promote high standards both within the profession of ecology by those practicing it, and by those bodies employing ecologists.

www.nzes.org.nz



University of Auckland, New Zealand

Founded in 1883, Auckland is now the country's largest university with 38,500 students. It is dedicated to its mission to nurture scholars who will contribute to society by advancing knowledge and imparting it to new generations of students. The University of Auckland has the reputation as New Zealand's flagship, research-led university, known for the excellence of its teaching, its research, and its service to its local, national and international communities.

www.auckland.ac.nz/uoa/



Additional support was provided by the following sponsors.

Other generous sponsors



Centre for Excellence for Environmental Decisions

The Ministry of Science and Innovation (MSI) is the lead agency driving the science and innovation sector in New Zealand. The Ministry of Science and Innovation's investment and support programmes aim to build high-performing science and innovation systems that help transform New Zealand into a more diverse, technologically advanced, smart nation. http://www.msi.govt.nz/



Forest & Bird

Forest & Bird is New Zealand's largest independent conservation organisation that works to preserve our natural heritage and native species. Originally formed to protect our native forests and birds, our role has since grown to include protection of all native species and wild places, – on land and in our oceans, lakes and rivers. www.forestandbird.org.nz

Hauraki Gulf Forum Tikapa Moang

Hauraki Gulf Forum

The Hauraki Gulf Forum promotes and facilitates integrated management and the protection and enhancement of the Hauraki Gulf. It is a statutory body under the Hauraki Gulf Marine Park Act 2000. Members are central and local government agencies and representatives of tangata whenua. It produces a triennial assessment of environmental state and organizational performance. www.arc.govt.nz/environment/coastal-and-marine/hauraki-gulf-forum



Kelly Tarlton's Underwater World

Opened in 1985, the original Underwater World was the vision of Kelly Tarlton - an extraordinary Kiwi adventurer, diver, explorer and inventor, who wanted to share his love of the ocean with others. Today, Kelly's vision has grown to become a world-class visitor attraction, offering a uniquely New Zealand Pacific and Southern oceans experience.

www.kellytarltons.co.nz



University of Auckland, Faculty of Science

Founded in 1883, Auckland is now the country's largest university with 38,500 students. It is dedicated to its mission to nurture scholars who will contribute to society by advancing knowledge and imparting it to new generations of students. The University of Auckland has the reputation as New Zealand's flagship, research-led university, known for the excellence of its teaching, its research, and its service to its local, national and international communities.

www.auckland.ac.nz/uoa/



U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service's mission is, working with others, to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. We are the only agency of the U.S. Government with that primary mission. <u>WWW.fws.qov</u>



WWF-New ZeAland

WWF-New Zealand is the local branch of the world's leading conservation organisation. We work to stop the degradation of the planet's natural environment and build a future in which people live in harmony with nature. This is achieved by working on the ground with local communities, and in partnership with government and business, using the best possible science to advocate change and effective conservation policy. <u>www.wwf.org.nz</u>



Last year, the SCB Georgia Chapter hosted an invasive species barbeque. SCB Chapters are fun. Come get involved!

Belong to an SCB Chapter or interested in getting involved at the Chapter level? Don't miss these exclusive Chapter Events!

CHAPTER BOOTH DAY

Wednesday, 7 December 9:45am-5pm at the Chapter Booth

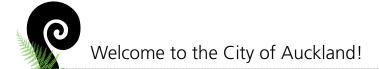
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CHAPTERS BUSINESS MEETING

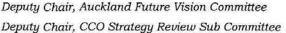
Wednesday, 7 December 12:30-2pm in Epsom 3 Bring your own lunch! RSVP to jessicadpratt@gmail.com

DIRECTLY ENGAGING SOCIETY IN CONSERVATION Thursday, 8 December 6:30-8pm in Marlborough 2

SCB CHAPTERS SOCIAL TO FOLLOW AT A LOCAL BREWPUB Thursday, 8 December 8-10pm



Office of the Deputy Mayor, Penny Hulse





Deputy Chair, CCO Strategy Review Sub Committee

As Deputy Mayor of Auckland, I take great pleasure in welcoming delegates to our city for the 25th International Congress for Conservation Biology.

New Zealand is one of the world's biodiversity hotspots. With native forests, three harbours and numerous islands on its doorstep, Auckland is endowed with a rich natural environment, readily accessible to residents and visitors alike. Among the natural highlights of the region are Auckland Council parks featuring open sanctuaries managed for conservation and recreation.

Auckland is a multicultural city that celebrates its Maori heritage and reflects its position in the South Pacific. New Zealanders are known for their hospitality and as a city, we welcome visitors from all over the world.

In addition to its natural environment, Auckland has a vibrant urban heart with many restaurants, bars and cultural experiences to be enjoyed, so I invite you to make the most of all that the city has to offer.

I wish you all the best for a successful conference and a rewarding and enjoyable stay while you are in Auckland.

Kind regards

PENNY HULSE DEPUTY MAYOR AUCKLAND COUNCIL



Welcome to the City of Auckland!



City of Auckland New Zealand www.aucklandnz.com

Welcome to Auckland. With a population of just over 1.3 million, or one third of New Zealand's total population, Auckland is by far the largest city in the country. Auckland lies between the Hauraki Gulf to the east, the low Hunua Ranges to the south-east, the Manukau Habour to the south-west, and the Waitakere Ranges to the west. Auckland's waterside location has fostered a strong love affair with the sea, earning the place the nickname of "City of Sails." The hills scattered throughout the city are mostly the remains of dozens of dormant volcanic cones. One of the most recent volcanos lead to the formation of Rangitoto Island, one of many islands in the Hauraki Gulf that now act as refuges for a wide range of endangered animals and plants threatened on the mainland by invasive species. Tiritiri Matangi Island is especially famous for its transformation (with the help of innumerable volunteers) from a barren pasture to a native forest full of native and endangered birds. It is well worth a visit!

On a cultural level, Auckland is home to a diverse array of people, especially from the South Pacific, whose cultures create a vibrancy to the central city. A walk down Queen Street in the central city will provide the diner with whatever their taste desires.

Drop by the ICCB 2011 Registration booth for more information on the city and a list of surrounding restaurants.

Welcome and enjoy your stay!



Practical Information

TELEPHONE

Country code for New Zealand: 64

Area code for Auckland city centre: (09)

- To place a call outside of New Zealand, dial 00 + country code + area code + local number
- To call an Auckland number from outside of city but within New Zealand you need to dial 09 + local number
- To receive a call from outside New Zealand, caller must dial country code (64) + area code (9)(note you do not use "0" in area code from outside country) + local number

EMERGENCY NUMBERS

Emergency services (Police, Ambulance, Fire) may be reached by dialling 111. There is no charge for this from a public phone or cell phone. Note that "911" and "999" numbers used for emergency services overseas are supposed to work in New Zealand as well, but best to use "111".

MEDICAL CARE

In case of emergency, dial 111. The nearest major hospital to the convention centre is:

- Auckland City Hospital
 - 2 Park Road

Grafton

(south of University of Auckland campus and beside Auckland Domain)

For enquiries ring: (09) 367 0000

CURRENCY, BANKS AND EXCHANGE

The unit of currency is the dollar, with coins of 10, 20, and 50 cents, and 1 and 2 dollar coins. Totals are rounded up or down to the nearest 10 cents.

You can visit any major bank for currency exchange. Currency exchange is also available at the airport. ATM ("Instant Tellers") are available throughout the city and most should allow you to withdraw money from your account back home but note that this usually involves a fee. Credit cards are widely accepted. Locals hardly use money and pay with "EFTPOS", a form of direct debit.

CLOTHING AND WEATHER

Although it is now early summer in the southern hemisphere, New Zealand has a rightful reputation as experiencing "4 seasons in one day!" Thus, be prepared for warm and sunny days (highs or 20-25 C), as well as cold and rain (15 C). Dress is generally casual, and shorts and t-shirt is accepted attire in most places, although note that some restaurants and bars will insist on more formal wear and appropriate foot-wear. Be prepared for both warm weather and cold and bring a light jacket. If you plan to travel further south or in the mountains, the weather can be even more variable and harsh.

ACCOMMODATION

SkyCity Hotel

Corner of Federal and Victoria Streets Auckland Telephone: +64 9 363 6000 FAX: +64 9 363 6383 Email: enquiries@skycity.co.nz Web: http://www.skycityauckland.co.nz

• Auckland City Hotel

157 Hobson Street Auckland Telephone: +64 9 925 0777 FAX: +64 9 925 0700 Email: info@achhobson.co.nz Web: http://www.achhobson.co.nz

• O'Rorke Hall

16 Mount Street University of Auckland Auckland Telephone: +64 9 373 7599 ext 87691 FAX: +64 9 373 7552 Email: accom@auckland.ac.nz

CHILDCARE AND BABYSITTING SERVICES

SCB is unable to offer on site care for children of delegates as we do not have licensed facilities available. For guests of the SkyCity and Grand Hotels, babysitting services can be obtained by booking through the concierge. Costs are ~\$16-20 per hour for a minimum of three hours and include a \$20 booking fee. Your booking can be made by contacting the concierge at 09 363 6280

Nanny services in the area can also be used for either day or evening care. One company willing to assist ICCB delegates with child care based at your accommodation or in a nanny's home is:

• Nannies On Demand Ltd

www.nanniesondemand.co.nz Contact: Trisha Donovan, Director <u>Tel:</u> +64 9 478 0253 <u>Mobile</u> +64 27 367 0603 Member of the International Au Pair Association

ACCESSIBILITY SERVICES

The conference venue is situated on two floors, with lifts (elevators) and escalators providing access between levels. Access to the venue is at street level through the main entrance on Federal Street. Toilets are disability accessible.



Finding your way around the Congress

• VOLUNTEERS:

Look for the green t-shirts

Volunteers can be easily identified by their green ICCB t-shirts. Please do not hesitate to ask them for assistance as they are here to help and direct you.

• CONTACT INFORMATION:

During the conference

The registration desk will be located in foyer outside of the New Zealand Room of SkyCity Convention Centre (level 5)

Before and after the conference

Kerry South South Events 154 Pine Avenue, Christchurch 2011@conbio.org 021 02477554

• CONGRESS VENUE

The ICCB 2011 scientific programme will take place at the SkyCity Convention Centre in the downtown of Auckland.

http://www.skycityauckland.co.nz/

Some additional meetings, short courses, and the Marine Think Tank are located on the nearby campus of the University of Auckland, and the conference hotels. Please refer to the schedule or visit the registration desk for venue/room information for specific meetings and events.

• REGISTRATION DESK HOURS

The registration desk will be located in foyer outside of the New Zealand Room of SKYCITY Convention Centre (level 5)

Monday, 5 December	2-7 pm
Tuesday, 6 December	7 am to 5:30 pm
Wednesday, 7 December	7:30 am to 4:30 pm
Thursday, 8 December	7:30 am to 4:30 pm
Friday, 9 December	7:30 am to 4:30 pm

• NEED A ROOM?

Need to book a room for an ICCB-related meeting? Please visit the registration desk to see if any spaces are available. Seating areas are available in the exhibit hall for conference delegates to meet and greet, catch up, or hold small informal meetings that may not necessarily require a specific booking.

• INFORMATION BOOTH

An information booth will be set up adjacent to the registration booth. An ICCB volunteer will be available at the registration desk to help with any conference-related enquiries.

• MESSAGE/JOB BOARD

A message board near the information booth will be available for conference participant use throughout the meeting. Participants may leave messages for colleagues to help facilitate meetings or get-togethers. This board may also be used to advertise research or conservation related employment opportunities, including graduate student openings. Please limit messages/ads to one piece of paper as we will not be able to accommodate or distribute multiple brochures or pamphlets on the message board.

WIRELESS ACCESS AND CYBER CAFÉ

The convention centre has wireless internet available. Please see registration desk for further information on how to access this service. Note the cost of internet is high in New Zealand and the ICCB has only purchased a limited amount of use per day so that we ask it be used only when necessary and for conference related purposes. Most hotels also provide internet access to their guests and we suggest you check with what is available to you.

• SPEAKER READY ROOM

The Speaker Ready Room is located in the Coromandel Room, on Level 5 of the SkyCity Convention Centre and will be staffed by a technician. Open times are:

Monday, 5 December	11 am to 8 pm
6 December - 9 December	8 am to 4:30 pm

• PRESS ROOM AND MEDIA

A press room will be available in Business Suite 1. This can be used for representatives of the press and media to conduct interviews and use as a base for writing and informal meetings.



Lunch and Dining Options

BREAKFAST

On your own, but may be included in your accommodation package. Please inquire at your hotel's information desk for more details.

COFFEE BREAKS

A morning coffee break will be held from 10-1030 am each day, and an afternoon coffee break from 4-430 pm each day. These are held in the exhibit hall and include coffee and/or tea and a light sweet.

<u>LUNCH</u>

Delegates who have registered and paid for lunches will be served "buffet style" in the exhibit hall (Auckland Room). For delegates who have not purchased lunch, we suggest selecting either one of the convention centre restaurants, or to head towards Queen Street (5 minute walk), where there are a large number of establishments.

<u>DINNER</u>

On your own, except for the final banquet, which will be held in the New Zealand room of the convention centre. A ticket is required for this event. The boat tour to Rangitoto Island also includes a dinner. A large number of dining options are available within walking distance of the convention centre; please see the registration desk or information booth for a list of possible places.

APPETISERS

Light appetisers will be served at the opening ceremony and poster session. Dinner is not provided at these events.



Transportation

HEADING BACK TO THE AIRPORT

Taxi and shuttle ranks are located outside the arrivals area at the international terminal and outside the luggage collection area at the domestic terminal. You can pre-book or just turn up at the terminal ranks – taxis and shuttles are always available.

Apart from catching a taxi, a regular 10-minute Airbus Express service is available to the airport for travellers from Auckland's CBD. This service starts at the city's waterfront Downtown Ferry Terminal, runs along the lower part of Queen Street, stops outside the Mt Eden train station and reaches airport in about an hour and a half (leave a bit early in case of heavy traffic). Simply hop on and buy your tickets directly from the drivers or book on-line at www.airbus. co.nz. Tickets cost about NZ\$16 one way... look out for the bright blue bus! Nearest stop near University of Auckland is #2, and nearest stop to SkyCity Convention Centre is #3 on Queen Street (about 5-10 minute walk). Note that the Auckland Airport has 2 terminals, a domestic terminal (for flights to other locations within New Zealand only) and an international terminal. Make sure you get off at the correct terminal (10-15 minute walk between terminals or free shuttle bus available if you make a mistake). Have a safe journey!

• TAXI

From airport to central city approximate cost >\$60-80. Several different taxi companies are at the airport stand, including Alert Taxis, Auckland Co-op Taxis, Corporate Cabs, and North Shore Taxis. You can pre-book a pick up from your hotel by contacting the company direct or by asking your hotel to help make a booking for you.

• SHUTTLE BUSES

"Super Shuttle" run shuttles from the airport to central city approximately cost ~\$33 for one person plus \$8 for each extra person together in the same group. You can pre-book on the company's website: <u>www.supershuttle.co.nz</u> or by ringing +64 9 522 5100.

CITY BUSES

Regular bus services connect the airport to the central city. A regular 10-minute Airbus service is available from the airport to Auckland's city centre (Queen's Street; about 2 blocks from convention centre). Simply hop on and buy your tickets directly from one of the drivers. Tickets cost about \$16 one way. For more information on public buses, contact the website: www.maxx.co.nz.

CAR RENTAL

Most of the major car rental agencies operate from Auckland Airport and/or have offices in the city centre. We suggest you contact your travel agent to arrange the best option for your needs or contact the rental agencies directly. Note that New Zealanders drive on the left side of the road.



Maori

English

People, titles, family		
Matua	Father	
Whaea/Mama	Mother	
Tuakana	Elder same sex sibling	
Teina	Younger same sex sibling	
Tuahine	Brother (from sister)	
Tungane	Sister (from brother)	
Koe	yourself	
Wahine	wife	
Tane	husband	
Tamaiti	child	
Tamariki	children	
Iwi	tribe	
Tangata	ancestor	
Maua	we/us (two people)	
Matou	we/us (three+ people)	
Koe	you (single)	
Korua	you two	
Koutou	you three+	
Ia	he/she/him/her	
Raua	they/them (two)	
Ratou	they/them (three+)	
Taua	we/us (you and I – two people)	
Tatou	we/us (all of us here)	
Tatou katoa	all of us	
Iwi	tribe	
Hapu	subtribe	
Whanau	extended family group	
Tangata	individual	
Io	creator	
Taku/toku	is (younger, elder person than yourself)	
Au/ahau	I/me	

Nature and Wods of Special Meaning

Tuna eel Waiata song Karakia prayer Mihi welcome Whanaungatanga sharing Whakapapa Maunga sacred hill Awa river Waka canoe Wai water Ahi fire Kai eat crayfish/lobster Koura Mate also means death, tragedy Inu water Kai food Hau wind Waka ancestral canoe

bus

car

Vehicles

Pahi Motoka

отока

Numbers Tahi

Rua Toru Wha Rima Ono Whitu Waru Iwa Tekau Rua tekau Toru tekau Kore Te tatau

Greetings and Feelings Haere ra

E noho ra

Kia ora Haere atu Tena koe Tena koutou katoa Tena korua Kia pai to ra Ka kite ano Kei te pehea koe?/ E pewhea ana koe? Kei te haere koe ki hea? Kei te pai/E pai ana Pai Ka nui te pai Kei te mauiui Kei te ngenge Kei te pau te hau Kei te wheru Kei te ora Kei te hiainu Kei te hiamoe Kei te pera tonu Heoi ano Kaore i te pai Taua ahua ano Kei raro au e putu ana Kei te hiakai Hia Mate

Places

Kirikiriroa Tamaki Tatahi Waho Toa one two three four five six seven eight nine ten twenty thiry zero counting

goodbye (to someone who is leaving) goodbye (from the person leaving to the person staying) hello get lost formal hello to one person formal hello to 3+ people formal hello to 2 people have a good day see you later

How are you? Where are you going? well fine Very well thank you sick/tired tired exhausted or out of breath weary, absolutely stuffed well thirsty sleepy just the same so so not well as per usual going under, can't cope hungry want want really bad

Hamilton Auckland beach outside shops

How to speak New Zenglish



New Zenglish

Beetroot Beyond the square Big smoke Biscuit Bits Bogan Bonnet Boot Bumbag



Capsicum Cheers Chemist Chilly bin Chip butty

College Coriander Cotton buds Crayfish Cutlery



Dear Diary Digestives Dodgy Duvet



Entrée Feed Flash Flat Flatmate

Football



Good on ya Gridiron Gumboots Handle Hokey pokey

Hoki

English

Beet Outside of the box Auckland Cookie small amounts Heavy metal rocker Hood of car Trunk of car Fannypack

Pepper (green, red, yellow) Thanks/goodbye Pharmacy Ice chest, cooler Fries between two slices of white bread with butter High school Cilantro Q-tips Lobster Silverware

Expensive Calendar Graham crackers Suspicious Comforter

Appetizer Meal Cool, expensive Apartment/house Roommate (but roommate does mean sharing a room) Soccer

Congrats American football Rubber boots Glass of beer Ice cream flavour with chunks of toffee Common fish served with fish & chips



Jersey Kia ora Kiwi

Kiwiburger Kumara



Lemonade Lolly Marae Motorway Nappy No worries Oz



Pavlova Petrol Pissed Return Rice Bubbles Rubbish Serviette Smash-up Spot on



Ta Take away Tarakihi

Tea

Telly Togs Toilet/Loo Tomato sauce Torch Tramping Trolley Trousers



University/Varsity Ute Wee Zed Sweater Hello/good day New Zealander / kiwifruit / endangered bird Burger with beetroot New Zealand yam

Sprite/7-up Candy Meeting house Freeway Diaper No problem Australia

Meringue dessert Gas Drunk Round trip Rice Krispies Garbage Napkin Car crash Exactly right

Thanks Take out food More expensive fish with fish & chips Dinner, also morning & afternoon tea Television Swimsuit Restroom, bathroom Ketchup Flashlight Hiking Shopping cart Pants

College Utility vehicle/truck Small or tiny Zee



Field Excursions

The field excursions are designed to allow delegates time to experience Auckland and learn about conservation efforts taking place in Aotearoa. Below is a listing of scheduled field excursions taking place before and after the Congress. Trips are designed to be cost neutral for the Meeting budget to allow you a low cost, tailored trip to enhance your visit to New Zealand!

One day trips

Tiritiri Matangi Island: 4th Dec, 8:30am-4:30pm

Cost: \$85

DEPARTURE LOCATION: 830am group meets at 360 Discovery Cruise kiosk (Pier 4 in Quay St at the bottom of downtown Auckland)

Tiritiri Matangi is one of the most successful conservation projects in the world. Unwanted predators have been eradicated, and the once-pastoral island has been replanted with native trees. Rare native birds and animals have been returned to its now-safe and restored habitats. As an open sanctuary you can visit Tiritiri Matangi and see some of New Zealand's most endangered birds in the wild, including takahe, kokako, saddleback/tieke and hihi or stitchbird. It is the best example of an established offshore island open sanctuary in New Zealand. *Information sourced from DOC and ARC

Waitakere Ranges and Muriwai Regional Parks: 4th Dec, 9am-5pm, Led by Forest & Bird Cost: \$42

DEPARTURE LOCATION: Please meet at 8:45am at SkyCity Bus Depot at 102 Hobson Street.

Cascade Kauri, Lake Wainamu and Fairy Falls are located in the northern part of the Waitakere Ranges and offer great places to explore. See giant Kauri trees, huge sand dunes and spectacular waterfalls. Walk through ancient forests and along picturesque streams. In the Cascade Kauri area you will discover excellent examples of large kauri, many over a hundred years old surrounding the Waitakere stream. This trip will also visit the Muriwai Regional Park which is home to one of only three mainland Takapu (gannet) colonies in New Zealand. The chicks hatch in November so it is the perfect time to visit! *Information sourced from DOC and ARC

Goat Island Marine Reserve: 5th Dec, 9am-6pm

Cost: \$60

DEPARTURE LOCATION: Please meet at 8:45am at SkyCity Bus Depot at 102 Hobson Street.

This day trip will take you to the first marine reserve established in New Zealand in 1975. It is 518 hectares in size. Explore the wonders of New Zealand marine life in an untouched kelp forest home of Snapper, Eagle rays and Blue mao maos. Glass bottom boat rides and snorkelling gear rentals will be available to hire on the day at an additional fee. Led by Auckland University, the day will include a visit to the field station, talks, and lunch. Please dress for the weather and bring a towel. Transport by bus included from SkyCity bus depot 102 Hobson Street.

Rangitoto Island: 10th Dec, 9am-5pm Cost: \$60

DEPARTURE LOCATION: 8:45am Meet group at Pier 2 at downtown Auckland ferry wharf

Rangitoto Island is the youngest and largest island in the Hauraki Gulf (~600 years old). This volcanic island is a public reserve and has the largest Pohutukawa forest in the world. This trip, led by the Department of Conservation, will focus on pest eradication and how the management of the islands is integrated with several stakeholders. There may be a demonstration of rodent detection dogs. Lunch and ferry transport included. Please dress for the weather and hiking.

Tawharanui Regional Park: 10th Dec, 9am-5pm Cost: \$42 DEPARTURE LOCATION: Please meet at 8:45am at SkyCity Bus Depot at 102 Hobson Street.

Set on a remote peninsula, 588-hectare Tawharanui Regional Park boasts some of the Auckland region's most beautiful white sand beaches, forest and shrubland remnants, coastal slopes, wetlands, saltmarshes, dunelands, retired pastureland and restoration plantings. The park is New Zealand's first integrated open sanctuary (mainland island) where farming, public recreation and conservation of native species combine. A key feature of the open sanctuary is a 2.7 km predator

proof fence which, along with trapping, poisoning and ongoing monitoring, protects 550ha of the park from exotic mammals. This protection has facilitated the successful reintroduction of 5 bird species, spectacular natural recolonisation by at least 3 others and population increases in resident birds, reptiles and invertebrates. On this field trip we will explore the park and discuss key issues, successes and challenges with staff and volunteer personal. We will also likely engage in a little volunteer work ourselves as a contribution towards this outstanding restoration project. Please bring appropriate footwear (good walking shoes or hiking boots), a rain jacket and suitable clothing for a day outdoors. Lunch, bus transport, and guides/guest speakers are included.

Multi-day trips

Island Conservation Field Trip: 1-4 Dec Cost: \$400

DEPARTURE LOCATION: 7am on Dec 2nd at Auckland International YHA after staying overnight, information from leader at check in on Dec 1

Invasive mammals are the biggest threat to much of New Zealand's wildlife that evolved in the virtual absence of mammals. The use of mammal pest-free islands and "mainland islands" is a major conservation strategy for many of the most vulnerable endemic species. Visit two cutting-edge conservation projects- Tiritiri Matangi Island and the Maungatautari Ecological Island - with local ecologists to meet some of New Zealand's most endangered wildlife and to discuss their ecological challenges and opportunities.

Poor Knights Islands: 10-11 Dec, 10:45am Cost: \$315 snorkel or \$415 dive

DEPARTURE LOCATION: Please meet at 10:45 am on Dec 10th at SkyCity Bus Depot (102 Hobson Street).

Converging warm water currents, a micro -climate and thousands of years of separation from the mainland have resulted in a unique biodiversity below and above the water line. Below the water, and stretching out a nearly a kilometre all around, the Poor Knights Islands are total Marine Reserve. Above, the Islands themselves are a designated Nature Reserve. -Dive Tutukaka Head up to Tutukaka by bus on Saturday the day after the main meeting ends- a late morning start will allow you a chance to sleep in before your next adventure! Once off the bus you are free to explore the area for the rest of the day. A local guide will be on hand to discuss the area and lead some of the day's activities. On Sunday you can choose from snorkelling or diving in the Marine Reserve. The trip includes one day of rental gear, transport to reserve, lunch on the boat, and one night's accommodation (2 people/room). Lunch and dinner on the 10th are not included while breakfast and lunch (on boat) on the 11th are.

New Zealand Volcanic Ecosystems: 10-12 Dec Cost: \$295

DEPARTURE LOCATION: 8:45am Meet group at Pier 2 at downtown Auckland ferry wharf, luggage stored prior to this by arrangement with leaders

New Zealand sits astride the Pacific "Ring of Fire" and vulcanism has shaped both the landforms and the biota. Take a tour through three indigenous ecosystems determined by past and present volcanic activity with local ecologists. In Auckland, visit the island of Rangitoto where Metrosideros dominant forest colonises relatively recent lava beds; in Rotorua visit ecosystems shaped by continuing geothermal activity; and at Tongariro visit ecological successions occurring on an active volcano. The group will gather in the morning (10th Dec) and walk to the Ferry terminal (0.5km) to take a ferry to Rangitoto Island (a shield volcano that erupted 600 years ago) for the day returning in the afternoon. Upon returning to Auckland, you will be transported to Rotorua spending the night at the Hot Rock backpackers. On the 11th Dec, we will visit the Whakarewarewa geothermal areas to see active geothermal ecosystems. At the end of this day we will travel to Turangi, staying overnight at Club Habitat. On the 12th, we will travel to Mt Ruapehu, a volcano that last had a minor eruption in the 1990's, visiting the National Park headquarters and taking a short walk. In the afternoon, we will travel back to Auckland where the trip will end around 5pm. Please pack walking shoes, a raincoat, and some warmer clothing. Accommodation is backpacker style with the night of the 12th NOT included. Breakfasts and lunches are provided in price but NOT dinners. An experienced ecologist will accompany the party throughout.



South Island Trips

Kaikoura Marine Conservation Field Trip: 11-13 Dec via Christchurch Cost: \$430

DEPARTURE TIME & LOCATION: Organised by email with leaders

Leaving on the morning of Sunday December 11th from Christchurch arranged transportation will take the group 2.5 hours north to Kaikoura-- an ex-whaling seaside township. Upon arrival the group will be taken on a guided peninsula walk to take in the spectacular views while hearing about some of New Zealand's conservation success stories (NZ Fur Seals) and an ambitious fledgling attempt to conserve the Hutton's Shearwater- one of the world's rarest birds. The guide will discuss local marine conservation measures including the local Rahui (MPA) as well as remark on historical and geological features of the peninsula. That evening a night time tour of the Kaikoura sky will "introduce you to the spectacular southern hemisphere night sky over New Zealand." On day two delegates will go out on a guided boat trip to swim with the dolphins (or simply watch) and possibly see other wildlife like albatross and whales. The second half of the day will include a guest speaker focusing on a local conservation issue. Accommodation will be backpacker style, two lunches and two breakfasts are provided, dinners are NOT included but can be obtained at accommodation site or from local restaurants or grocery store. There is an on-site kitchen. Departure is midday on Dec 13th.

Clarence River Rafting Trip: 11-15 Dec via Christchurch Cost: \$1250

DEPARTURE TIME & LOCATION: Organised by email with operator; 7am departure Christchurch or 10am Hanmer Spring

Join your fellow delegates on 5 days and 4 nights of bouncy, fun class 2 whitewater adventures. This fantastic expedition travels through the Molesworth Station and then between the Inland and Seaward Kaikoura ranges. A fully guided and catered trip with comfortable camping - this trip is suitable for folks with no rafting experience and a reasonable level of fitness. Included in this trip is: gourmet food and wine, all meals prepared, qualified experienced guides, all personal on-boat gear, all tents and camping gear, and transport to/from Christchurch or Hamner Springs. Departure from other locations is available by arrangement with Clarence River Rafting. Please note that it will take all day on Dec 15th to finish the trip. No accommodation on this night is included but can be organised through the tour company.

Special Offers, Book directly with operator

Guided tours by Ngati Whatua in Tamaki (Auckland)

http://tamakihikoi.aucklandnz.com/

Tamaki Hikoi offers guided walks around some of Tamaki (Auckland's) most notable heritage places, such as Maungawhau/Mt Eden (an extinct volcanic cone in the heart of the city which was shaped by Maori ancestors as a massive fortified village) and the Auckland Domain (a large public space surrounding the Auckland Museum and Wintergardens, where Maori and European heritage in Tamaki come together). Your guide will be from the local Ngati Whatua tribe.

Seabirds and Islands of the Outer Hauraki Gulf with Pterodroma Pelagics NZ: 3rd, 10th, & 11th December,

Cost: NZ\$250 per person (Reduced rates for ICCB delegates. Regular rate is NZ\$290pp.)

Join us on our Hauraki Gulf seabird tours to see a unique range of locally endemic seabirds. The Auckland marine environment is an internationally recognised region of high biodiversity value. Seabirds, as top predators, are key components of this ecosystem. The region boasts one of the highest diversities of seabirds in the world with over 80 species recorded for the wider Hauraki Gulf region. These include seabirds that breed here, breed elsewhere but forage and feed within the region's water, or are just passing through. Hauraki Gulf islands are vitally important refugia for seabirds. Seabird populations now rebounding in the wake of eradication programmes for introduced predators (from 1990). Twenty-three species of seabirds are confirmed breeding in the Hauraki Gulf: Cook's, Pycroft's, grey-faced and black petrels, Buller's, little, flesh-footed, fluttering and sooty shearwaters, fairy prion, white-faced storm petrel, common diving petrel, blue penguin, Australasian gannet, pied shag, and gulls and terns. We regularly see the recently rediscovered NZ storm petrel. We are actively involved in research in the Hauraki Gulf including seabird restoration projects, island surveys and innovative acoustic surveying as well as maintaining our database of at-sea observations.

To make the most of our day we head out from Leigh Harbour at 8AM. Leigh is 50mins north of Auckland on SH1. From Warkworth to Leigh allow a further 20mins. We can arrange transport for ICCB 2011 meeting delegates between Auckland downtown and Leigh Harbour. Book with Pterodroma Pelagics directly: Chris Gaskin; P. O. Box 686, Warkworth, 0941, NEW ZEALAND; Ph +64 (0)9 4226868; Mob +64 (0)21 668811; Email: info@nzseabirds.com; Website:www.nzseabirds.com

Silent Auction





ONE OF THE MANY AUCTION ITEMS: Two bottles of Tiki Wines in a wooden box. Tiki Wines is a single vineyard wine from NZ. Fruit is either certified sustainable or farmed organic.



BANKS PENINSULA CONSERVATION TRUST

The Banks Peninsula Conservation Trust is a charitable trust formed in 2001 to promote the conservation and enhance the indigenous biodiversity of the Banks Peninsula on the east coast of the South Island. See <u>www.bpct.org.nz</u> for more information.

SILENT AUCTION

TO HELP RAISE FUNDS AFTER THE DEVASTATING EARTHQUAKE IN CHRISTCHURCH

Help SCB's Oceania Branch Help The Banks Peninsula Conservation Trust

The Oceania Branch of the Society for Conservation Biology is holding a silent auction to raise funds after the devastating earthquake in Christchurch for the conservation project outlined below.

The Banks Peninsula Conservation Trust is a charitable trust, formed in 2001 as a non-profit organisation. Its goals are to promote the conservation and enhancement of indigenous biodiversity and sustainable land management on Banks Peninsula, near Christchurch in the South Island of New Zealand. The Trust manages and supports a range of conservation projects on Banks Peninsula, including large-scale trapping of introduced mammalian predators and maintaining predator-proof fences to protect threatened species, as well as supporting and promoting conservation covenants on private land. Predator-proof fences and stock-exclusion fences that the Trust maintains were damaged in the recent Canterbury earthquakes, and funding for other conservation projects in Canterbury is becoming scarce as people's effort and energy turns instead to rebuilding Christchurch. As such, the proceeds from the SCB Silent Auction will represent a significant contribution to a Canterbury conservation project administered by the Trust.

How the silent auction works

We are requesting interested participants to bring an item (or items) to the conference that they are willing to donate to the auction. These items will be on display throughout the conference. Underneath each gift will be a bidding card where a person will place their name and the amount that they bid for the item. At the end of the conference the person with the highest bid (over the reserve price – in some instances) will win the item for which they have bid. *The winners will be announced at the final poster session on* **8 December,** *so people can collect their items then or the following day.*

If you are coming from overseas, we suggest you bring something unique from your country, an item of clothing, e.g. a hat, coat, bag, etc, lightweight field equipment, or anything else you think that other conference participants would be willing to bid on. If you are from New Zealand, you could bring a book (maybe on New Zealand or about conservation), or something uniquely "New Zealand" that a visitor to our country could take back overseas to remind them of our unique corner of the world.

Items for the Silent Auction will be on display in the Exhibition area and you can drop them off at the registration desk when you arrive.



ECO FRIENDLY ICCB 2011

There is no doubt that holding a conference uses resources and creates an environmental impact. Indeed, most of you had to fly to Auckland to attend the conference. Nonetheless, the Local Organizing Committee has endeavored to minimise this impact as much as possible.

Our venue, SkyCity (including hotel and casino) has focused on energy efficiency for the last 4+ years and achieved over 10% reduction in water, gas and electricity consumption in that period despite increased use from the Rugby World Cup. In the Convention Centre itself, the kitchen and back of house lights have all been renewed with programmable motion control, achieving an energy saving of 56% across this area during quiet periods. Unoccupied areas such as fire escapes and stairways are only 25% lit when empty giving further energy savings. In the hotel rooms, most shower-heads are energy efficient, which saves thousands of litres of water every day. Recycling has been increased to 30% by weight, including glass, cardboard and paper. Most catering is done using crockery and not with disposable food-ware. Efficiencies in car park lighting won an award last year as new technology cut power consumption by over half yet lighting improved as a result. Lighting of the Sky Tower was recently audited and delivered a 78% energy saving. Finally, a solar hot water on the roof provides preheated water into the water heaters, saving around 2% of site gas energy consumption. Further efficiencies in power use are being sought and reviewed on a regular basis.

SkyCity is our main caterer for the conference. In making menu choices, we have emphasised use of local produce and sustainable food choices as much as possible. Buffet lunches were chosen over box lunches to maximise menu options while minimising waste from lunch packaging. We have made similar requests for all other caterers for the conference, from field trips to social events.

ECO-FRIENDLY ICCB PRODUCTS

- Congress bags were not produced for this conference after consulting with a large number of attendees at previous conferences, it was decided that many of us have a large number of bags from previous conferences and another one was not needed. Thus, we have asked attendees to bring their own, and if they have extra, to donate them to other attendees.
- Minimal printing of abstracts to minimise the amount of paper used, hard copies of the abstract books were produced only upon request. Instead, all attendees received the abstracts on a USB stick, which was created using bamboo.
- Re-usable water bottle to minimise the use of water glasses, and the future purchase of disposable plastic water bottles, we have produced a high quality re-usable water bottle for every attendee. This bottle also celebrates the 25th anniversary of the SCB and we hope that is will also be kept as a souvenir of this major milestone. The bottle was produced through the generous support of the Rufford Foundation and we thank them for their support.

AND OF COURSE THERE IS SCB'S CARBON OFFSET PROGRAMME!





ICCB 2011 carbon offset project WILD ROSE

CONSERVATION SITE

To offset carbon emissions caused by travel to ICCB, from 2010-2013 the Society for Conservation Biology has invested in a project to sequester carbon into grassland soils in southern Alberta.

SCB has entered into an agreement with the Alberta Conservation Association (ACA) and the Alberta Fish

and Game Association (AFGA) to assist in the purchase and management of the Wild Rose Conservation Site, a 390-ha property south of Lethbridge on the Milk River Ridge. This acquisition was motivated by numerous conservation goals because the Wild Rose Conservation Site has been degraded over the years by heavy cattle grazing. The photo above is of ICCB Chair Mark Boyce (U of Alberta) at the WRCS.

Restoration and protection of native fescue grassland is a primary end goal of this purchase. The area is very important for biodiversity preservation as well; containing more threatened and endangered species than anywhere in Alberta. Nature Conservancy Canada and other partner organizations were involved in the purchase and ultimate transfer of ownership to ACA and AFGA.

The total purchase price was approximately \$768,000. SCB's investment is in the carbon that will be sequestered during the recovery of this native prairie during the next 20 years. Our estimate is that SCB's investment of \$50,000 during the next 5 years will yield sequestration and long-term storage in the soil for less than \$6 tonne-1 of CO2 equivalents.

HISTORY OF SCB'S CARBON FEE PROGRAM

Climate scientists unanimously agree that human activities, especially emission of carbon dioxide and other greenhouse gases, are altering the earth's climate in ways that will profoundly affect our lives. Over 95% of SCB's contribution to global warming derives from jet fuel burned to take people to our annual meeting. Each passenger on a fully-booked London-New York flight, for instance, is responsible for about 1.2 tons of carbon.

At the 2006 Board of Governors meeting in San Jose, California, USA, the decision was made to take responsibility for the carbon impacts of travel to our Annual Meetings. By becoming 'carbon neutral,' we will neutralize the effect of our greenhouse gas emissions, so that our activities no longer contribute to global warming.

The first Annual Meeting to be offset was the 2007 Meeting in Port Elizabeth, South Africa. A small voluntary fee was voluntarily added to each attendee's registration fee to offset the carbon of the overall travel to the meeting. 98% of attendees voluntarily paid an extra \$20 on their registration to offset their carbon emissions. The money was invested at the Baviaanskloof Megareserve, where invasive and degraded vegetation will be replaced with Elephant Bush (*Portulacaria afra*), a plant known to sequester large amounts of carbon. SCB is the first professional organization to take responsibility for the carbon footprint of its meetings.



A Glimmer of Hope

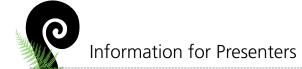
cutting-edge science and bold solutions to tough environmental problems

Go to www.conservationmagazine.org to get your FREE trial issue.

ICCB General Schedule

DEC 2-4 MON. DEC 5 <u>TUE. DEC 6</u> WED. DEC 7 THUR. DEC 8 FRI. DEC 9 Anouncements: 8:25 Plenary Sessions: 8:30 to 9:30 Award ceremonies: 9:30 to 10:00 <u>Room: NZ 1-4</u> 3:25 A.M. - 12:30 Pre-Congress Pre-Congress Morning Coffee Break: 10:00 to 10:30, Auckland Room Activities: Activities: International International Marine <u>Marine</u> Concurrent Sessions Conservation Conservation and Symposia Think Tank <u>Think Tank</u> 10:30 to 12:30 (Dec. 2-5) (Dec. 2-5) Workshops & Workshops & Short Courses Short Courses (Dec. 3-5) (Dec. 3-5) Lunch & Workshops 12:30 to 14:00 Exhibitor Set-up 12:00 to 17:00 Auckland Room Concurrent Sessions and Symposia 14:00 to 16:00 Registration <u>Open 14:00</u> <u>to 19:00</u> 14:00 -18:30 N.Z. Foyer Afternoon Coffee Break: 16:00 to 16:30, Auckland Room Sessions Sessions Members Sessions 16:30 to 17:30 16:30 to 18:30 Meeting 16:30 to 18:30 & Awards Ceremony <u>Break</u> 16:30 to 18:30 Student/Board <u>Plenary</u> 18:00 to 19:00 18:00 to 19:00 <u>New Zealand 1</u> NZ 1-4 <u>Student</u> Poster Session Final Reception Networking 18:30 to 20:30 <u>& Dinner</u> Event Auckland Room 18:30 to 24:00 SCB Sections Opening 18:30 to late <u>Room: NZ 1-4</u> Reception Ceremony <u>Empire Tavern</u> Evening <u>19:00 to 20:00</u> and Reception <u>Workshops</u> <u>NZ Foyer</u> Rangitoto Island *19:00-21:00* 19:00 onwards Dinner Cruise Film Evening <u>NZ 1-4</u> 18:45 to 22:00 20:00 to 21:30 <u>NZ 1-4</u> Evening Workshops

Saturday, Dec. 10th and Sunday, Dec. 11th: Post-congress workshops, short courses, and field trips



Presenters

THE SPEAKER READY ROOM IS LOCATED IN THE COROMANDEL ROOM, ON LEVEL 5 OF THE SKYCITY CONVENTION CENTRE.

<u>Users of Macintosh computers:</u> If possible, please bring along your adapter for connecting to a PC.

SYMPOSIUM AND CONTRIBUTED PRESENTATIONS

<u>About:</u> Oral presentation rooms will be equipped with a computer and a data projector.

<u>Timing</u>: Full-length contributed oral presentations are limited to fifteen (15) minutes: twelve (12) minutes for presenting and three (3) minutes for questions. Time will be strictly enforced by session moderators to keep concurrent sessions in synchrony.

At least one day before your presentation: Be aware that your presentation must be transferred to a central computer from which they will be sent to the presentation rooms. Presentations will NOT be uploaded in the individual session rooms. We ask that you check-in at the speaker ready room at least the day before your presentation to confirm that your talk has been received.

How to save your file: The conference will be using the standard 4 x 3 format for powerpoint slides. Please save your oral presentation to a USB stick (preferred), CD, or DVD. Presentation file names should include your day of presentation, room number, specific time of presentation (in 24 hour format), and your surname as illustrated in the following example: Dec6_Epsom3_1045_Jones.

<u>How to submit your presentation</u>: Proceed to the Ready Room and a technician will be available to help you load your presentation. The room will be open for uploading presentations from 11am-8pm on Dec 5. and 8 am to 430 pm Dec 6-9.

SPEED PRESENTATIONS

About: In the first hour of the session, speakers will be given four (4) minutes each to present their key ideas and results. In the second hour, presenters will station themselves at designated tables where they can interact with people who are interested in learning more about their work. The speed presentation room will be equipped with a computer and a data projector.

<u>Timing</u>: The 4-minute time limit will be strictly observed. A count-time timer with a short alarm (at the 4-minute mark) will be at the podium to help keep speakers on track.

<u>How to save your file:</u> The conference will be using the standard 4 x 3 format for powerpoint slides. Please save your speed presentation to a USB stick (preferred), CD, or DVD. Presentation file names should include your day of presentation, room number (all speed presentations are in Epsom1&2), specific time of presentation (in 24 hour format), and your surname as illustrated in the following example: Dec6_Epsom1&2_1034_Smith.

<u>How to submit your presentation:</u> (See instructions above for oral presentations)

POSTER PRESENTATIONS

<u>About:</u> There will be one dedicated poster session on Thursday, 8 December from 1830 (630 pm) to 2030 (830 pm) in the Auckland Room on Level 4 of the convention centre. Presenting authors are requested to attend this session to take advantage of opportunities to discuss their work with Congress participants.

To allow presenters the opportunity to talk to other presenters, authors of even numbered posters are asked to stand by their poster during the first hour (630-730 pm), and authors of odd numbered posters in the second hour (730-830 pm). Drinks (cash bar) and a light snack will be served. Please note that your poster should be limited to the size of a rectangle 0.6 m wide by 1.2 m tall (portrait orientation) in order to fit appropriately on the poster board.

Posters should be removed by noon, Friday, December 9.



Moderators

Each session will have one moderator and one volunteer. Moderators are responsible for keeping time during oral and speed sessions, in order to ensure synchrony between sessions. Please arrive at your session a little early to check all speakers are present. Start session on time even if it appears that not everyone is there yet.

Oral sessions

Oral talks are limited to 15 minutes: 12 minutes for the presentation, and 3 minutes for questions. The moderator will introduce the speaker and be provided with two time cards. The first card is to be shown to the presenter after 10 minutes have elapsed (to let the speaker know there are 2 minutes left for presenting and 3 for questions), and the second at 12 minutes (to let the speaker know the question period should begin). The moderator will stand up after 14 minutes have elapsed, giving the speaker 1 minute to wrap up all presentation material or to finish questions. Please have the speaker repeat questions to the audience as it is not always possible for the audience to hear the question if they are behind the person asking the question.

- Have at least one question ready for each talk. For the benefit of those sitting further back, be sure that speakers repeat questions from the audience, especially those from front rows.
- Announce all cancelled talks and post notices on the door of the meeting room. You can use the time from a cancelled talk for questions or discussion but please do NOT move the programme forward when a paper is cancelled.
- Please keep track of all cancelled talks on the paper list provided to you in the room and give it to the volunteer at the end of the session.

<u>Symposia</u>

The symposia organiser will act as moderator for their session, according to their symposium schedule.

Speed sessions

Moderators must keep strict time during the presentation portion of the speed sessions, to ensure each speaker receives 4 minutes of presentation time. Moderators will introduce the speaker. When the speaker begins, the moderator shall start the timer that counts down from 4 minutes, with a short alarm after 4 minutes have elapsed. The moderator will then introduce the next speaker. There will be no question period during the presentation portion of a speed session. After all the speed session presenters have given their talks, they will be seated at a designated table in the room. Audience members may freely visit these tables to engage in Q&A and discussion with the presenters.

It can be difficult for audience members to recognize and locate a speaker. A systematic approach to assigning tables is useful. For example, the first speaker could be assigned to Table 1 in the front, right corner of the room and then the others assigned in a clockwise pattern from there. Audience members may freely visit these tables to engage in Q&A and discussion with the presenters. Please strongly encourage the audience to stay for this portion of the session. To encourage circulation during the discussion session, announce when 20 and 40 minutes have elapsed.

Absentee presenters and cancelled papers

Moderators are asked to note any absentee presenters from their session, using the form provided in the session room. This form may be given to the registration desk after the session is complete. You can use the time from a cancelled talk or absentee presenter to discuss earlier talks, but please do not move the programme forward.



Special events by day

MONDAY, 5 DECEMBER

Board of Governors Student Reception
 18:00 to 19:00, New Zealand Room 1

Meet the Board of Governors at SkyCity Convention Centre! A student networking session before the opening ceremony to catch up with old friends and make some new ones, as well as meet the Society's Board of Governors. Light refreshments provided. Pre-registration is required. Please check in at registration desk for location.

Opening Ceremony & Reception 19:00-2100; New Zealand Room

Meet fellow delegates and reunite with old friends here, at the first official event of the Congress. A reception to include light hors d'oeuvres and refreshments will conclude the evening. The reception is free for registered attendees. You must register for this event in order to obtain a complimentary ticket. You may also purchase guests tickets to this event.

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TUESDAY, 6 DECEMBER

<u>SCB Sections Reception</u> 19:00 to 20:00 New Zealand Foyer

Celebrate and get to know SCB's seven regional Sections at this sensational section social! This special reception presents a rare opportunity to meet members from every SCB Section in one place at one time! Mix and mingle with members from the Africa, Asia, Austral and Neotropical America, Europe, Marine, North America, and Oceania Sections in a fun and relaxing environment! Introduce yourself to the Section presidents, find out what SCB's Sections are up to, join a Section that best suits your interests and talents, and have a good time with your fellow ICCB attendees!

<u>National Geographic Film Premier</u>: Hunt for the Shadow Cat 20:00 to 21:30, New Zealand Room

Big Cat tracker Boone Smith joins Panthera scientists in the rain forests of Belize and Brazil's Pantanal to collar and film the iconic jaguar. Looking for elusive females, the team sees firsthand how hard they are to find, what threats they face, and -- with the help of motion-sensing trail cams and National Geographic's specially-designed Crittercams -- how they spend their days when they don't know anyone is watching.

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WEDNESDAY, 7 DECEMBER

<u>Student Networking Reception</u>

18:30 – Late, The Empire Tavern Garden Bar (137 Victoria Street West)

A social evening of networking with like-minded students from around the world. Conservation-themed entertainment, one compimentary drink and nibbles will be provided. Pre-registration is required and ticket price is \$10. Walking directions: Turn left on Victoria Street West when leaving Federal Street (which runs between Casino and Convention Centre) and walk ~250m to the corner of Victoria and Nelson Street. The Empire Tavern is on the northeast corner. The Garden Bar is in the back of the pub.

Evening Boat Cruise and Dinner to Rangitoto Island 19:00 – 22:00, Meet at Ferry Terminal, 99 Quay Street at 19:00

Head out of the Waitemata Harbour to enjoy an evening cruise to Rangitoto Island. This is a wonderful opportunity to see a conservation project in action as the last of the pests have recently been eradicated. Pohutakawa trees should be in full bloom and the birds, including parakeets, will be making a spectacle of themselves. This short island stop will allow you to stretch your legs and will be followed by a buffet dinner on board the boat. One drink is included and then a cash bar will be available. The ferry terminal is a 15min walk from the SKYCITY convention centre. Ticket price \$68.



THURSDAY, 8 DECEMBER

<u>Student, Learn over Lunch with Plenary Speakers and Smith Fellows</u> 12:45 to 13:45, New Zealand Room 1

Chat with the Plenary Speakers and Smith Postdoctoral Fellows at an informal "bring your own" lunch session. A great opportunity to learn more about how they got into conservation and perhaps pick up some tips for your own career in conservation. Pre-registration is required. Please note that NO lunch is included.

<u>SCB Members Meeting, 25th Anniversary Video, Student Award Ceremony, Poster Award Ceremony, and</u> <u>Young Woman in Conservation Biology Award Ceremony</u> Thursday, 8 December 16:30-18:30 New Zealand Room

Don't miss the most important meeting of the year for SCB members and discover the winners of the student award presentations, the poster presentation, and the Africa Section's Young Woman in Conservation Biology ! Come help decide the future direction of SCB while celebrating the Society's 25th Anniversary.

Not a member? Come find out what we're all about at the Members' Meeting! We'd love to get to know you and for you to see what makes SCB the best society for conservation professionals in the world!

<u>SCB Chapters: Directly Engaging Society in Conservation</u> Thursday, 8 December 18:30-20:00pm Marlborough Room 2 (Social to follow at local brewpub)

SCB, through its subgroups, effects societal change at multiple levels. One of these subgroups, SCB Chapters, conducts on-the-ground scientific conservation by directly engaging with individuals and communities personally affected by biodiversity issues and ecological concerns. This symposium-style workshop will highlight Chapter activities around the globe and provide the opportunity for current Chapter members or those interested in joining or starting an SCB Chapter to network and learn from our combined experiences working in our local communities.

Poster Session and Drinks
 18:30 to 20:30, Auckland Room

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FRIDAY, 9 DECEMBER

Final banquet and 25th Anniversary Celebration

18:30 to 24:00, New Zealand Rooms. Bar opens at 18:30, seating at 19:00

Join us to celebrate SCB's 25th Anniversary at the final ICCB 2011 anniversary event! The celebration is free for registered attendees, but you must register for this event in order to obtain a complimentary ticket. You may also purchase guests tickets to this event. Our entertainment for the final evening consist of a 1 hour performance with 25 band members, dancers, drummers, and costume people. They are the best multicultural Pacific dance group in NZ and the Pacific. Their drummers are often seen at sports games and at Pasifika festivals all around the Pacific and New Zealand. After the dance performance their band will entertain us with a variety of songs, from all walks of the Pacific as well as Palagi songs and reggae. This is island music at its best so come dressed in your best sulu, lavalava, sarong, island shirt, and island attire (no formal clothes allowed)!!! So come for a party to remember.



Pre and Post Congress Short Courses

Full details and abstracts are listed in the scientific portion of the program. All short courses will be held at the University of Auckland campus (Owen G. Glenn Building) and include lunch and tea breaks.

On December 2-5, check-in desk location will be in the Foyer outside Owen Glen 260-098. On December 10th, check-in desk location will be in Deceima Glenn Function Room (OGG 260-310).

PRE-CONGRESS

- Planning & Monitoring the Effectiveness of Conservation Projects
 9:00-17:00 Dec 3-5; \$100
 Organizer(s): K. Didier, Wildlife Conservation Society; Vinaya Swaminathan, Foundations of Success; W. Cross,
 Rainforest Alliance
- <u>The Role of the Social Sciences in Conservation Planning</u> 9:00-17:00 Dec 4; \$30
 Organizer(s): Tara Teel and MJ Manfredo, *Colorado State University*
- Introducing Biomimicry: Innovation Inspired by Nature, Conservation Inspired by Technology 9:00-17:00 Dec 4; \$30
 Organizer(s): Sam Stier and Megan Schuknecht, *The Biomimicry Institute*
- Integrating cultural values into protected area design and management 9:00-17:00 Dec 4-5; \$75
 Organizer(s): Mark Infield, Fauna and Flora International; J. Ruru, Faculty of Law University of Otago; E. Drani, The Cross-Cultural Foundation of Uganda
- Basing conservation decisions on the best available evidence; Why and how to conduct systematic reviews 9:00-17:00 Dec 4-5; \$65 Organizer(s): Rosaline Cannessa, Department of Geography, University of Victoria, Geomemes
- <u>How to question experts</u> 9:30-16:30 Dec 5; \$30 **Organizer(s):** Mark Burgman, *University of Melbourne*
- <u>The Zonation v3 conservation prioritization framework and software</u> 9:00-18:00pm Dec 5; \$30 **Organizer(s):** Atte Moilanen and L Meller, *University of Helsinki*

POST-CONGRESS

- <u>Modelling Habitat Connectivity and Network Analysis for Conservation</u> 9:00-18:00 Dec 10; \$30
 Organizer(s): Eric Treml, University of Queensland; S. Kininmonth, Australian Institute of Marine Science
- <u>Involving People in Conservation</u> 9:00-15:00 Dec 10; \$35
 Organizer(s): A. Bath, MJ Barraganpaladines, and Vesna Kerezi; *Memorial University*
- <u>Protected Area Tools (PAT) for ArcGIS 10: Custom Tools that Support Conservation Design</u> 9:00-17:00 Dec 10; \$30
 Organizer(s): Dr. Steven R. Schill, *The Nature Conservancy*; Dr. George T. Raber, *University of Southern Mississippi*



 Introduction to Structured Decision Making: A two-day course for managers 9:00-17:00 Dec 10-11; \$60
 Organizer(s): Donna Brewer, United States Fish and Wildlife Service; M. Runge, United States Geological Survey; Eve McDonald-Madden, CSIRO Ecosystem Sciences and University of Queensland

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Pre and Post Congress Workshops

The following workshops require pre-registration and the payment of an additional fee. Fees include lunch/tea breaks with the exception of half day workshops that only include one tea break.

On December 2-5, check-in desk location will be in the Foyer outside Owen Glen 260-098. On December 10th, check-in desk location will be in Deceima Glenn Function Room (OGG 260-310).

PRE-CONGRESS

- Building a global network for application of proposed IUCN Ecosystem Red List categories and criteria
 9:00-17:00 Dec 5; \$30
 Organizer(s): Jon Paul Rodriguez, Instituto Venezolano de Investigaciones CientÁficas
- <u>Compensation and rehabilitation in conservation-induced resettlement policies</u> 8:45-12:45 Dec 5; \$30
 Organizer(s): Assistant Prof Lai Ming Lam, Osaka University and University of Adelaide
- Merging conservation and maths: Bayesian networks for improved decision-making about biodiversity and conservation under uncertainty*
 9:00-17:00 Dec 5; \$30
 Organizer(s): Dr Sandra Johnson, Dr Samantha Low-Choy and Prof Kerrie Mengersen, *Queensland University of Technology*
- <u>Urban bird conservation: for birds and people*</u> 8:45-12:45 Dec 5; \$30
 Organizer(s): Robert Kwak and J Louwe Kooijmans, VBN Birdlife Netherlands
- Data Basin: Online mapping and analysis tools for conservation science, practice, and policy* 13:00-17:00 Dec 5; \$30
 Organizer(s): Tosha Comendant and James Strittholt, *Conservation Biology Institute*

POST-CONGRESS

• <u>Conserving the largest salmon in the world: Challenges and opportunities to protect taimen as threats escalate</u> <u>throughout northern Eurasia</u>

12:30-14:00 Dec 9, Marlborough 3; Dec 10 at Auckland University Organizer(s): Peter Rand, *Wild Salmon Center*; CE ZImmerman, *USGS Alaska Science Center*, S.Weiss; *University of Graz*

 <u>Science, Politics and Engagement: Tackling Conservation Conflicts in the 21st Century*</u> 9:00-17:00 Dec 10; \$30
 Organizer(s): S. Redpath, University of Aberdeen; A. Dickman, University of Oxford; A. Evely, University of Aberdeen





THINK TANK FOCUS GROUPS

- Implications of environmental change to Antarctic ecosystems
 3 days: Dec 2,3,4 2011
 Facilitator(s): Vonda Cummings, Ed Butler (v.cummings@niwa.co.nz)
- The role of prioritisation in Marine Protected <u>Area designation</u>
 1 day: Dec 4, 2011
 Facilitator(s): Jez Bird (jez@birdlifepacific.org.fj)
- Improving the Effectiveness of Community-Managed Marine Protected Areas for Biodiversity Conservation, Fisheries Management and Climate Change Adaptation
 3 days: Dec 2,3,4 2011
 Facilitator(s): Rebecca Weeks (rweeks@wcs.org)
- <u>Big Ocean Network: A Research Agenda for</u> <u>Large-Scale MPAs</u>

3 days: Dec 2,3,4, 2011 Facilitator(s): Randall Kosaki (randall.kosaki@ noaa.gov)

 Pelagic ecosystems and the management of MPAs 2 days: Dec 2,3, 2011 Facilitator(s): Lance Morgan (lance@mcbi.org), Sara Maxwell

1st International Marine Conservation Think Tank Friday-Monday, 2-5 December, 2011

Owen G. Glenn Business Building University of Auckland

The Society for Conservation Biology Marine Section hosted 10 marine themed focus groups ('Think Tanks'), designed to address marine conservation issues of special concern for the southern hemisphere. The meetings were held on 2-5th December at the University of Auckland. Special events included a happy hour spotlight on the Hauraki Gulf sponsored by the Hauraki Gulf Forum and Forest & Bird, and a second happy hour spotlight on the Southern Ocean and Ross Sea Region, sponsored by WWF New Zealand. Think Tank delegates concluded with a reception at Kelly Tarlton's sponsored by NIWA, and a public forum and panel discussion at the Auckland Museum sponsored by Pew's Global Ocean Legacy.

- Deep-sea coral research to enhance conservation 1.5 days: Dec 2 & 3am, 2011 Facilitator(s): Di Tracey (d.tracey@niwa.co.nz)
- Steps to success in research and management of bycatch and other marine conservation issues

 day: Dec 4, 2011
 Organizer(s): Liz Slooten, Steve Dawson (liz. slooten@otago.ac.nz)
- <u>Science requirements for effective High Seas</u> governance

1.5 days: Dec 3pm and 4, 2011 **Facilitator(s):** Malcolm Clark (m.clark@niwa. co.nz), Matt Dunn, and Jeff Ardron

 <u>Advancing databases for global biodiversity</u> <u>assessments</u>
 1.5 days: Dec 3 (P.M. only) and Dec 4, 2011 Facilitator(s): Mark Costello (m.costello@)

auckland.ac.nz)

• <u>Ocean governance in Aotearoa New Zealand:</u> <u>the need for an integrated, ecosystem-based</u> <u>approach</u>

2 days: Dec 3,4, 2011 **Facilitator(s):** Michael McGinnis (mike.mcginnis@ vuw.ac.nz)



Opening Ceremony/*Powhiri* and Reception Monday, 5 December, 7:00 P.M. to 9:00 P.M. New Zealand Room, Level 5, SkyCity Convention Centre

OPENING POWHIRI/CEREMONY STARTS AT 7:00 P.M.

DRINKS AND LIGHT SNACK TO FOLLOW AROUND 7:30 P.M.

Meet fellow delegates and reunite with old friends here, at the first official event of the Congress.

The Congress will begin with a traditional Maori welcome, termed a *powhiri*. The *powhiri* begins when a representative (*Kaumatua*) from *Ngati Whatua o Orakei* (the local *iwi* or tribe) gives a traditional welcome and *karakia* (blessing) followed by a *waiata* (song) from him and his supporters. A representative then speaks on behalf of the conference delegates followed by a *waiata* sung by him and the entire assembly (yes, you need to sing as well!). A small group of dignitaries from the conference then engage in a *hongi* (traditional greeting) with the *Ngati Whatua o Orakei* representatives. To conclude the ceremony, a group of *tane* (warriors) and *wahine* (women) will entertain us with a *kapa haka* (lively action song).

A reception to include light hors d'oeuvres and refreshments will conclude the evening. The reception is free for registered attendees but you must register for this event in order to obtain a complimentary ticket.



RUFFORD SMALL GRANTS FOR NATURE CONSERVATION (RSG) ARE AIMED AT SMALL CONSERVATION PROGRAMMES AND PILOT PROJECTS



The Rufford Small Grants Foundation has supported in excess of

1,000 projects in over 120 countries....

WE INVITE YOU TO JOIN US

Projects (from top left): Pablo Garcia Borboroglu, Gandhiv Kafle, Olga A Folatova, Paola Sarela Pozo Infuentes, and Sergey Gaschak .

Registered charity number 1117270

Plenary Speakers

Tuesday, December 6, 8:30-9:30 A.M., NZ Rooms 1-4 Thomas Lovejoy



Dr. THOMAS LOVEJOY University Professor, George Mason University

Biodiversity Chair, The Heinz Center for Science, Economics and the Environment

THE CONSERVATION HORIZON

Conservation Biology will be a bit over three decades old as the nations of the planet meet for Rio + 20 in June. Various measures such as the Third Global Biodiversity Outlook (GBO3) indicate biodiversity loss is accelerating even as very important science based conservation initiatives are put into place. Looking ahead what are the most important priorities for conservation, conservation science and, indeed, for humanity?

ABOUT THOMAS LOVEJOY

Thomas Lovejoy is an innovative and accomplished conservation biologist who coined the term "biological diversity". He served as President of the Heinz Centre from 2002-2008. Before assuming this position, Lovejoy was the World Bank's Chief Biodiversity Advisor and Lead Specialist for Environment for Latin America and the Caribbean as well as Senior Advisor to the President of the United Nations Foundation. In 2010 he was elected University Professor in the Department of Environmental Science and Policy at George Mason University (initially he will devote 50% of his time to the Heinz Centre). Spanning the political spectrum, Lovejoy has served on science and environmental councils under the Reagan, Bush, and Clinton administrations. At the core of these many influential positions are Lovejoy's seminal ideas, which have formed and strengthened the field of conservation biology. In the 1980s, he brought international attention to the world's tropical rainforests, and in particular, the Brazilian Amazon, where he has worked since 1965. Lovejoy also developed the now ubiquitous "debt-for-nature" swap programmes and led the Minimum Critical Size of Ecosystems project. He also founded the television series Nature, the popular long-term series on public television. In 2001, Lovejoy was awarded the prestigious Tyler Prize for Environmental Achievement. In 2009 he was the winner of BBVA Foundation Frontiers of Knowledge Award in the Ecology and Conservation Biology Category. In 2009 he was appointed Conservation Fellow by the National Geographic. Lovejoy holds B.S. and Ph.D (biology) degrees from Yale University.

Plenary Speakers



Tuesday, December 6, 6:00-7:00 P.M., NZ Rooms 1-4 Mick Clout



Dr. MICK CLOUT Professor of Conservation Ecology, University of Auckland

BIRD CONSERVATION IN NEW ZEALAND: PROGRESS AND PROBLEMS

New Zealand had a unique endemic avifauna, which was devastated by human settlement and subsequent introductions of invasive mammalian predators. In the past few decades, good progress has been made with the eradication of invasive mammals from many offshore islands and their management at mainland sites, aiding the recovery of several threatened bird species. However, significant problems remain, including the threat of reinvasions by invasive mammals and the need for ongoing intensive management of some threatened bird populations. Progress in the first decade of the 21st century will be reviewed and challenges for the future considered, using examples from past and current research.

ABOUT MICK CLOUT

Professor Mick Clout is a vertebrate ecologist. He has published widely in applied ecology and conservation and has conducted and supervised research on the ecology of New Zealand vertebrates for several years. His main fields of research are the ecology and conservation of native birds, and the behaviour and management of invasive mammals. Early work, carried out when he was with the New Zealand DSIR Ecology Division, included research on the effects of plantation forestry on birds and the role of birds as seed dispersers. More recent research has included work on the conservation of kakapo and other threatened species, and a range of studies on the behaviour and management of invasive mammals. Mick Clout led the IUCN/SSC Invasive Species Specialist Group from 1994 to 2009, has chaired the Kakapo Recovery Group since 1995, and is Director of the Centre for Biodiversity and Biosecurity at the University of Auckland. Mick was the recipient of the RSNZ Charles Fleming Award for Environmental Achievement in 2007, and the IUCN Sir Peter Scott Award in 2008. He was elected as a Fellow of the Royal Society of NZ in 2010.



Wednesday, December 7, 8:30-9:30 A.M., New Zealand Rooms 1-4 Mike Walker



Professor Michael Walker

School of Biological Sciences, University of Auckland

HE TIROHANGA Ā MUA, HE KITENGA MĀ MURI LOOKING BACK TO LOOK FORWARD

This address argues that the critical challenge facing conservation in Aotearoa-New Zealand (A-NZ) arises from world view differences between the Māori and European colonisations of A-NZ roughly 800 and 200 years ago. The Māori world view treats humanity as a non-special creation that is related to the non-human species and environments in a hyper-extended and interdependent family. By contrast, the predominantly Christian world view in A-NZ treats humanity as a special creation with dominion over non-human species and environments. Despite these philosophical differences, Maori and European colonisations each initiated a round of unrestrained exploitation of the biota causing die-down of easily obtained resources, extinctions, and ongoing environmental modification. The consequences for the Māori population of the misuse of the available biological resources included environmental and economic decline, land abandonment, internal migration, and warfare. Māori had recovered by the time of Captain Cook through better management of their own environmental impacts and use of the native biota but were then adversely affected by the environmental impact of colonisation from England and Europe. Today, Māori and non-Māori largely agree on the need for conservation of the remaining biota and environments but are suspicious of each others' motives in conservation because of their different origins and histories in A-NZ. I suggest the Treaty of Waitangi provides the only effective foundation and the greatest opportunity for collaboration between Māori and non-Māori not only in conservation of our native species but also in their ability to flourish into the future.

ABOUT MIKE WALKER

Professor Michael Walker (*Whakatohea*) studies the behaviour of animals in space and time with a particular focus on the magnetic sense, its mechanism, and its use in long-distance navigation by animals. Mike's work of greatest relevance to this Congress has been his role in explaining science to Maori and explaining to scientists the implications of Māori perspectives for conservation and environmental management. Mike is: a former member of the Boards of two Crown Research Institutes (Manaaki Whenua Landcare Research; Te Pu Ao GNS Science); a Fellow and former member of the Council of the Royal Society of New Zealand; a Fellow of the Royal Institute of Navigation in London; and was the founding Joint Director of Nga Pae o te Maramatanga, Aotearoa New Zealand's Maori Centre of Research Excellence. He was made an Officer of the New Zealand Order of Merit in 2009 and received the Prime Minister's Supreme Award for Sustained Tertiary Teaching Excellence in 2011.



Thursday, December 8, 8:30-9:30 A.M., New Zealand Rooms 1-4 Richard Hobbs



Dr. Richard Hobbs University of Western Australia, Perth, Western Australia

CONSERVATION IN PRODUCTION LANDSCAPES: CAN WE HAVE OUR CAKE AND EAT IT TOO?

How well prepared is conservation biology to provide guidance to help conserve the world's biodiversity in the Anthropocene? Increasing evidence suggests that humanity's impacts on ecosystems are pervasive, and yet much conservation theory and practice has been based on a view of the world in which human activities and conserved nature are separated as much as possible. In this view, the world is categorized into protected and unprotected areas, habitat and nonhabitat, production land and conservation land. Although these categories may still be appropriate in some instances, the scale of the human enterprise and the impacts of climate and land-use change, amongst other global drivers, mean that a radical rethink of conservation approaches may be needed. This is most obvious in the areas of the world taken up for production of food and fiber and for human settlements. Here, alteration and fragmentation of the landscape is obvious with, often, little of the pre-existing ecosystem remaining. In these landscapes, multiple trends are coalescing to present new conundrums for conservation. The majority of the world's growing human population will soon be urban. This growing population, declining amounts of good arable land and other forces are leading to a crunch in terms of human food security. Conflicting priorities for growing food and fuel are becoming common. Conserving biodiversity thus has to happen in an increasingly volatile and unpredictable biophysical and social environment. So, how does conservation biology respond to these new challenges? Do we simply retreat to the barricades and hang on to existing approaches, or are new approaches and paradigms needed? Can we have our cake and eat it too?

ABOUT RICHARD HOBBS

Originally from Scotland, Richard spent three years in California and has been in Western Australia since 1984, working with CSIRO and at Murdoch University before joining the University of Western Australia in 2009 where he leads the Ecosystem Restoration Group. His particular interests are in vegetation dynamics and management, invasive species, ecosystem restoration, conservation biology and landscape ecology. He has several long-term ecological studies underway including a 28 year study of California grassland dynamics. He is the author of over 300 scientific publications, many magazine articles and other publications, and author/editor of 18 books. He serves or has served in executive positions in a number of learned societies and on numerous editorial boards and is currently Editor in Chief of the journal Restoration Ecology. He was elected to the Australian Academy of Science in 2004, is an ISI Highly Cited Researcher and was awarded the Ecological Society of Australia Gold Medal in 2010. His current research focuses on "Intervention ecology: managing ecosystems in the 21st century". **Plenary Speakers**

Friday, December 9, 8:30-9:30 A.M., New Zealand Rooms 1-4 Dee Boersma



Dr. P. Dee Boersma

Deptartment of Biology, University of Washington, and the Wildlife Conservation Society, Seattle, Washington, USA

THE ROLE OF NATURAL HISTORY IN CONSERVATION: A CASE STUDY OF MAGELLANIC PENGUINS

Natural history and a species breeding biology can provide insight into conservation. For nearly 30 years we have intensively studied the largest breeding colony of Magellanic penguins in the world at Punta Tombo, Argentina. Penguins are recent to Punta Tombo. None colonized the area until the mid-1920's and by the 1980's their population was in decline. Over a 20 year period their population declined over 1%/yr at Punta Tombo. The rise and fall of a population reflects environmental conditions both on and off the breeding ground. Land use changes allowed penguins to colonize the area but shifts in their breeding distribution northward is likely because their prey is farther north. Their distribution is moving northward, not southward, contrary to climate warming predictions. Climate variation has a strong influence on Magellanic penguin breeding biology. Egg laying has shifted about 3 days later per decade, reproductive success is altered by rainfall, and foraging distance has lengthened. Magellanic reproductive success is determined by how far they must travel to find food for their chicks making them sentinels of the marine environment. Penguins and other seabirds can be useful tools in understanding petroleum pollution, fish abundance, fisheries management, and climate variation.

ABOUT DEE BOERSMA

Dubbed the "Jane Goodall of penguins" by the New York Times, Dee Boersma studies penguins and other sea birds and uses this research to promote understanding of human impact on marine ecosystems. Dr. Boersma considers penguins "marine sentinels," sounding the alarm on environmental threats to ocean ecosystems. For more than 25 years, she has been the director of the Wildlife Conservation Society's study of Magellanic penguins at Punta Tombo, Argentina, home of the world's largest colony of Magellanic penguins. A small group of researchers under the direction of Dr. Boersma follow individual penguins, monitor the colony, and develop the data needed to plan effective conservation efforts. Dr. Boersma holds the Wadsworth Endowed Chair in Conservation Science at the University of Washington. She is also the founder and executive editor of Conservation Magazine - an award winning publication dedicated to conservation science. Dr. Boersma was the recipient of a 2009 Heinz Foundation award for achievements leading toward a cleaner, greener and more sustainable world, a recipient of a 2010 Fulbright fellowship to study wildlife videography in New Zealand, and she was recently named one of the Nature Conservancy's "Conservation Heroes of the last 50 years."



BRAVO New Zealand...

but you're not the only winners this year.

SCB celebrates the high flyers of Conservation

SCB's Distinguished Service Awards honors those who have made outstanding contributions to the field of conservation biology. The Edward T. LaRoe III Memorial Award recognizes the innovative application of science to resource management and policy. And the Early Career Conservationist Award celebrates achievements of young conservation professionals.

Distinguished Service Awards

Patricia Majluf Tuesday, 6 December 9:30-10am - NZ 1-4

William Laurance Wednesday, 7 December 9:30-10am – NZ 1-4

Richard Primack Friday, 9 December 9:30-10am - NZ 1-4

Early Career Conservationist Award Michael Mascia Wednesday, 7 December 9:30-10am – NZ 1-4

Edward T. LaRoe III Award Brian John Huntley Thursday, 8 December 9:30-10am - NZ 1-4

SCB Student Award Winners, Outstanding poster presentation, and Young Woman in Conservation Biology Award YWCB: Leela Hazzah Thursday, 8 December 4:30-6:30pm - NZ 1-4



2011 SOCIETY FOR CONSERVATION BIOLOGY AWARDS

The Society for Conservation Biology (SCB) is pleased to honour five individuals for their outstanding contributions to advancing the science and practice of conserving Earth's biological diversity. Recipients of the 2011 awards were nominated by members of SCB, selected by the Awards Committee, and approved by the Board of Governors. The awards will be presented during morning plenary sessions throughout the meeting.

EDWARD T. LAROE III MEMORIAL AWARD

The Edward T. LaRoe III Memorial Award recognises the innovative application of science to resource management and policy by scientists.

The 2011 LaRoe awardee is **Brian John Huntley**. Professor Huntley is Emeritus Professor at the University of Cape Town, South Africa and Research Associate at the Centre of Excellence for Invasion Biology at the University of Stellenbosch. He was given the award for his visionary and dynamic leadership in transforming the biodiversity and ecosystem management arenas in South Africa and Southern Africa.

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DISTINGUISHED SERVICE AWARD

SCB's annual Distinguished Service Award recognises outstanding contributions to the field of conservation biology. Three recipients will receive the 2011 award.

<u>William Laurance</u> is the Distinguished Research Professor in the School of Marine and Tropical Biology at James Cook University, Australia, and the Australian Laureate Prince Bernhard Chair in International Nature Conservation. He was given the award for his outstanding contributions to tropical conservation science and policy.

<u>Patricia Majluf</u> is the Director of the Center for Environmental Sustainability at Cayetano Heredia University, Peru. She was given the award for her leadership in marine wildlife conservation and for the inspiration she provides to marine conservationists across the globe.

<u>Richard Primark</u> is a Professor in the Department of Biology at Boston University. He was given the award for his extraordinary contribution to conservation education worldwide through his textbooks in English, and 27 locally-adapted textbooks in other languages.

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EARLY CAREER CONSERVATIONIST AWARD

The Early Career Conservationist Award is for achievement by professionals early in their careers (no more than 10 years since leaving school).

The 2011 awardee is **Michael Mascia**, a Senior Social Scientist in the Conservation Science Program at the World Wildlife Fund, in recognition of his extraordinary contributions to international biodiversity conservation policy and practice through the development, mobilization, and application of social scientific knowledge.

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YOUNG WOMAN IN CONSERVATION BIOLOGY AWARD

This SCB Africa Section award incentivizes young African women professionals in conservation biology by recognizing remarkable achievements, dedication and impact on African conservation on the ground. The 2011 awardee is **Leela Hazzah**, a young Egyptian conservation biologist working on human-wildlife conflict in East Africa for more than a decade. Her most outstanding work, on the underlying motivations for lion killing and potential solutions in Maasailand Kenya, has also been awarded a Jordan Prize for African Studies.



2011 SOCIETY FOR CONSERVATION BIOLOGY STUDENT AWARDS FOR BEST ORAL PRESENTATION

The 2011 ICCB is proud to honour 12 student finalists during the Society for Conservation Biology Student Award Programme. These finalists were chosen from a pool of over 100 student abstracts, and will be presented in a two part session on Tuesday December 6th from 10:30 A.M. to12:30 P.M. and 4:30-5:30 P.M. in Marlborough Room 2. Awards will be presented during the Member's Meeting on Thursday December 8th from 4:30-6:30 P.M.

2011 FINALISTS

<u>Sara Kross:</u>

It's a vine life: conservation and pest control through translocation of threatened falcons

Helen Nathan: Advance, invading hordes: an experimental island invasion.

<u>Michel Ohmer</u>: Host-pathogen disease dynamics between New Zealand's threatened frogs (*Leiopelma* spp.) and the fungal pathogen, *Batrachochytrium dendrobatidis* (Bd)

<u>Luke Powell</u>: Effect of forest age and burn history on the recovery of avian capture rates: when is secondary tropical rainforest no longer a barrier?

<u>Anja Skroblin</u>: Informing management: the determinants of distribution for the purple-crowned fairywren Malurus coronatus, a threatened riparian specialist

<u>Ayesha Tulloch</u>: Prioritising species for monitoring conservation actions: accounting for benefits, costs and uncertainty of management outcomes

John Wilson: Incorporating connectivity in endangered species reintroduction site selection

<u>Rebecca Wood</u>: Taxonomy, population genetics and conservation of the Critically Endangered Southern Bent-wing Bat (*Miniopterus schreibersii bassanii*)

Takuya Iwamura: How robust are biodiversity hotspots to climate change?

<u>Chrystal Mantyka-Pringle</u>: Interacting effects between climate change and habitat loss on biodiversity: a systematic review and meta-analysis

Rocio del Carmen Ponce-Reyes: The decline of Mexico's cloud forests because of climate change

Ana Sequeira: Predicting how the world's largest fish will fare under climate change

12 Great Students, 4 Prestigious Awards



Meet the future of conservation as 12 student award finalists present their research

SCB Student Presentations and Competition

Tuesday, 6 Dec. 10:30 A.M. to 12:30 P.M.; 4:30 to 5:30 P.M. Marlborough Room 2

Special thanks to Wiley-Blackwell for sponsoring the SCB Student Awards

Awards will be presented at the Members' Meeting on 8 Dec.





Student Activities

Special appreciation to the ICCB Student Events Committee

for making these events happen!

MEET THE BOARD OF GOVERNORS AT SKYCITY CONVENTION CENTRE

MONDAY, 5 DECEMBER 6:00 PM - 7:00 PM NEW ZEALAND ROOM 1

A student networking session before the opening ceremony to catch up with old friends and make some new ones, as well as meet the Society's Board of Governors. Light refreshments provided. Pre-registration is required. Please check in at registration desk for location.

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STUDENT NETWORKING EVENT

WEDNESDAY, 7 DECEMBER 6:30 PM - LATE THE EMPIRE TAVERN GARDEN BAR (137 VICTORIA STREET WEST)

A social evening of networking with like-minded students from around the world. Conservation-themed entertainment, one compimentary drink and nibbles will be provided. Pre-registration is required and ticket price is \$10.

Walking directions: Turn left on Victoria Street West when leaving Federal Street (which runs between Casino and Convention Centre) and walk ~250m to the corner of Victoria and Nelson Street. The Empire Tavern is on the northeast corner. The Garden Bar is in the back of the pub.

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STUDENT LUNCHEON WITH THE PLENARY SPEAKERS

THURSDAY, 8 DECEMBER 12:45 PM - 13:45 PM NEW ZEALAND ROOM 1

Chat with the Plenary Speakers and Smith Postdoctoral Fellows at an informal "bring your own" lunch session. A great opportunity to learn more about how they got into conservation and perhaps pick up some tips for your own career in conservation. Pre-registration is required. Please note that NO lunch is included.



Lunchtime and Evening Workshops

Full abstracts are listed with each workshop in the Scientific Programme

TUESDAY, 6 DECEMBER

 <u>Workshop 17:</u> Silent Crisis or Unspoken Solution? Protected Area Downgrading, Downsizing, and Degazettement

12:30 to 14:00, Marlborough 1

Organizer(s): Michael Mascia and Sharon Pailler, WWF-US

• <u>Workshop 15</u>: Understanding the impact of illegal wildlife trade in the Asia-Pacific region on conservation

12:30 to 14:00, New Zealand 1 Organizer(s): Simon Nemtzov, *Israel Nature and Parks Authority*

Workshop 9: Participating in a conference: some advice for new-comers

12:30 to 14:00, New Zealand 2

Organizer(s): Malcolm Hunter and Aram Calhoun, *University of Maine*

 <u>WORKSHOP 10:</u> Supercharge your science 19:00 to 21:00, Epsom 3 Organizer(s): William Laurance, James Cook University; Corey Bradshaw, University of Adelaide

• <u>WORKSHOP 16</u>: IUCN SSC/WCPA taskforce workshop: Consolidating the criteria for assessing site-level biodiversity

conservation significance

19:00 to 21:00, Parnell Room

Organizer(s): Thomas Brooks, NatureServe

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WEDNESDAY, 7 DECEMBER

• <u>Workshop 11</u>: The publication process for SCB's journals

12:30 to 14:00, New Zealand 2

Organizer(s): Erica Fleishman, John Muir Institute of the Environment, University of California

THURSDAY, 8 DECEMBER

 <u>Workshop 12:</u> The Value of Ecological Economics for Wildlife Conservation
 12:30 to 14:00, New Zealand 2
 Organizer(s): Brian Czech, US Fish and Wildlife

Service; John Peet, Sustainability Aotearoa New Zealand

- <u>Workshop 22:</u> Adaptive management for managing biodiversity in a changing world
 12:30 to 14:00, New Zealand Room 4
 Organizer(s): E. McDonald-Madden, T.G. Martin
- <u>Workshop 21: SCB Chapters: Directly Engaging</u> <u>Society in Conservation</u>
 18:30 to 20:00, Marlborough 2 (Social to follow at local brewpub)
- Workshop 19: Engaging Local Communities in Science-based Conservation: Successes and Lessons Learned in Papua New Guinea
 18:00 to 20:00, Marlborough 1

Organizer(s): Lisa Dabek, *Woodland Park Zoo*; B. Beehler, *Conservation International*; A. Krockenberger, *James Cook University*, Z. Wells and K. Kuna, *Tree Kangaroo Conservation Program*

• Workshop 13 (Discussion Group): Engaging NASA in the Definition and Development of Conservation Applications

18:00 to 20:00, Parnell Room

Organizer(s): John Musinsky, Conservation International; Woody Turner and Allison Leidner, NASA Applied Sciences Program; Sarah Burgess-Herbert, NASA Applied Sciences Program / AAAS S&T Policy Fellowship

FRIDAY, 9 DECEMBER

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• WORKSHOP 14 (DISCUSSION GROUP): Best practice principles for planning and implementing conservation actions in Indigenous and Traditional communities 12:30 to 14:00, Marlborough 1

Organizer(s): Alana Grech and Bob Pressey, ARC Centre of Excellence for Coral Reef Studies, James Cook University; Helene Marsh, James Cook University

• <u>WORKSHOP 20:</u> Conserving the largest salmon in the world: Challenges and opportunities to protect taimen as threats escalate throughout northern Eurasia 12:30 to 14:00, Marlborough 3

> Organizer(s): Peter Rand, *Wild Salmon Center;* CE ZImmerman, *USGS Alaska Science Center,* S.Weiss; *University of Graz*

Biodiversity Asia 2012 Science, Policy and Governance



The 2nd Asia Regional Conference of the Society for Conservation Biology – Asia Section August 7–10, 2012: Bangalore, India



Key dates

October 30, 2011 Deadline for symposium proposal

March 1, 2012 Registration opens

April 30, 2012 Deadline for abstract submission Biodiversity Asia 2012 is an international conference that aims to highlight the urgency of biodiversity conservation in Asia and showcase the advances made in research and conservation of Asia's rich biodiversity. It is being organised ahead of the 11th Conference of the Parties of the UN Convention on Biological Diversity (CBD) to be held in India in October 2012, and will bring together researchers, policy makers, managers, students, teachers, practitioners and activists.

For more visit www.biodiversityasia2012.org Contact: scbasiasecretariat@atree.org ATREE, Royal Enclave, Sriramapura, Jakkur Post, Bangalore 560 064, Karnataka. Telephone: +91-80-23635555 Fax : +91-80-23530070







Hunt for the Shadow Cat National Geographic Film Premier

TUESDAY, DECEMBER 6TH, 20:00 TO 21:30, NEW ZEALAND ROOM

A five mInute introduction from National Geographic will precede the film.

Big Cat tracker Boone Smith joins Panthera scientists in the rain forests of Belize and Brazil's Pantanal to collar and film the iconic jaguar. Looking for elusive females, the team sees firsthand how hard they are to find, what threats they face, and -- with the help of motion-sensing trail cams and National Geographic's specially-designed Crittercams -- how they spend their days when they don't know anyone is watching.



Enric Sala, diving with a green turtle off Cocos Island, Costa Rica. Sala leads National Geographic's Pristine Seas project, which aims to find, survey and help protect the last healthy and undisturbed places in the ocean. Get a grant from National Geographic Society

Each year, National Geographic supports hundreds of projects to help us explore, understand, and care for our planet. The Society's Mission Programs houses groundbreaking conservation projects and an Explorer's Program that supports research and field work in traditional and emerging fields from biology to social media and mobile technology.

WWW.NATIONALGEOGRAPHIC.COM/FIELD/GRANTS-PROGRAMS



Final Banquet

Friday, 9 December, 6:30 P.M. to 12:00 A.M. New Zealand Room, Level 5, SkyCity Convention Centre

DRINKS START AT 6:30 PM ON THE LEVEL 5 PROMENADE SEATING AT 7:00 PM IN THE NEW ZEALAND ROOM

Kia Orana, Bula, Aloha, Maeva, Manava, Talofa lava, Mālō e lelei, Fakaalofa atu, Ko na mauri and Alo!

Join us to celebrate SCB's 25th Anniversary at the final ICCB 2011 event! The celebration is free for registered attendees, but you must register for this event in order to obtain a complimentary ticket. Dinner provided and cash bar available.

We have a full roster of entertainment to celebrate this special anniversary of the SCB and the last evening of the conference. First, Professor Mac Hunter will provide us with a personal journey of the history of the Society for Conservation Biology. This promises to be an entertaining talk for old and young members alike. This will be followed by performances by the 25 band members, drummers and dancers of the "Drums of the Pacific." They are the best multicultural Pacific dance group in New Zealand and the Pacific. Their drummers are often seen at sports games and festivals all around the Pacific and New Zealand. After the dance performance their band will entertain us with a variety of songs, from all walks of the Pacific as well as Palagi songs and reggae.

This is island music at its best so come dressed in your best sulu, lavalava, sarong, island shirt, and island attire (no formal clothes allowed)!

Come for a party to remember!



ABOUT DR. MALCOLM 'MAC' HUNTER

Libra Professor of Conservation Biology, Department of Wildlife Ecology, University of Maine

Mac earned his B.S. in wildlife science at the University of Maine in 1974 then went to Oxford University as a Rhodes Scholar where he received his D. Phil. in Zoology. Since joining the University of Maine faculty in 1978 he has pursued research on a wide range of organisms and ecosystems - birds, plants, mammals, amphibians, lakes, streams, peatlands, grasslands, and especially forests. His publications include six books: "Wildlife, forests, and forestry," "Fundamentals of conservation biology," Maintaining biodiversity in forest ecosystems," "Amphibians and reptiles of Maine," "Problem solving in conservation biology and wildlife management," and "Saving the Earth as a career." His interests are also geographically broad; he has worked in over 30 countries, mainly in Africa and the Himalayas. He has served in many public service roles for various state and national government agencies and international conservation groups. Since 1988 he has been a life member of the Society for Conservation Biology and attended every annual meeting, and he has been a member of the editorial board of Conservation Biology since 1993. In 2001-2003 he served as President of SCB and in 2007 he received SCB's Distinguished Service Award for leading the internationalization of SCB and his contributions to ecosystem management.





BOOTH # LISTING OF EXHIBITORS

16	Biotrack Ltd.
18	Landcare Research
19	New Zealand Centre for Conservation Medicine
21	National Geographic
22	University of Cambridge, Conservation Evidence
23	Wiley-Blackwell
24	Wiley-Blackwell
30	Advanced Telemetry Systems
31	University of Canterbury
32	Forest & Bird
33	Hauraki Gulf Forum
34	WWF - New Zealand
35	Conservation Leadership Program
36	University of Queensland (ARC Centre for Environmental
	Decisions & National Environmental Research Program)
37	AUT University
38	Cambridge University Press
39	Trevor Penfold Photography
40	Roberts & Company Publishers
41	Funding Information Service
42	Goodnature
43	Zealandia/ Maungatautari Ecological Island Trust
44	CSIRO Publishing

*ALL EXHIBITS ARE LOCATED IN THE AUCKLAND ROOM EXHIBIT HALL

Exhibitors



Exhibitors

Exhibitor Move-In: Monday December 5, Noon - 5pm Exhibitor Move-Out: Friday, December 9, 2:00 pm

EXHIBIT HALL HOURS AUCKLAND ROOM

Tuesday, December 6 Wednesday, December 7 Thursday, December 8 Friday, December 9

9:45 am-5:00 pm 9:45 am-5:00 pm 9:45 am-8:00 pm 9:45 am-2:00 pm

Booth Numbers and Exhibitor Descriptions

ADVANCED TELEMETRY SYSTEMS

BOOTH 30

Advanced Telemetry Systems (ATS) offers innovative and reliable wildlife tracking products designed for researchers world-wide. We manufacture over 400 models of custom VHF transmitters, receivers/dataloggers with advanced DSP technology, and GPS collars or loggers. NEW AT ATS: Iridium satellite collars, programmable archive tags and more. Visit www.atstrack. com today to get a same day quote and personalized project consultations.

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AUT UNIVERSITY

BOOTH 37

BOOTH 16

AUT is New Zealand's youngest university, yet our history in society-relevant education is more than a century old. Today's world needs scientists that make a positive contribution to society. At AUT's School of Applied Sciences we have particular strengths in conservation biology, marine biology, molecular genetics, G.I.S. and evolutionary biology.

www.aut.ac.nz

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Biotrack designs and manufactures highly regarded wildlife tracking devices. With our research and conservation background we can advise and supply the optimal equipment from our wide range of technologies. How can our tools help your conservation research? Come and talk to us about Radio tracking, Acoustic, Archival and GPS/Satellite solutions. www.biotrack.co.uk

CAMBRIDGE UNIVERSITY PRESS

BOOTH 38

Cambridge University Press advances learning and research worldwide. We provide a wealth of knowledge in all our subject areas, especially Conservation and Ecology. We are currently printing the most exciting titles in Conservation, Ecology, and Evolution! Please visit the Cambridge University Press booth to receive a special 20% discount on all our titles. www.cambridge.org/knowledge

CONSERVATION LEADERSHIP PROGRAM

BOOTH 35

The Conservation Leadership Programme promotes the development of future conservation leaders and provides them with the capacity to address the most significant conservation issues of our time. Supported by the CLP, these emerging leaders are conserving the world's most threatened species, sites and habitats, while engaging local communities in the process. www.conservationleadershipprogramme.org



Visit the **Society for Conservation Biology** booth next to registration

There's more to SCB than meets the eye. Chapters, Sections, Working Groups, oh my! Come see what SCB can do for you. Dedicated to advancing the science and practice of conserving the Earth's biological diversity, SCB is a global community of conservation professionals with more than 6,000 members world-wide and representatives from over 140 countries. Stop by the booth to join an SCB Group, browse our award-winning publications, renew your membership, and get to know the best society for conservation professionals in the world! www.conservationbiology.org

CSIRO PUBLISHING

CSIRO PUBLISHING operates as an independent science and technology publisher with a global reputation for quality products and services. Our internationally recognised publishing programme covers a range of scientific disciplines, including agriculture, the plant and animal sciences, and environmental management. Our product range includes journals, books, magazines and CD-ROMS.

www.publish.csiro.au

FOREST & BIRD

BOOTH 32 Forest & Bird is New Zealand's largest independent conservation organisation that works to preserve our natural heritage and native species. Originally formed to protect our native forests and birds, our role has since grown to include protection of all native species and wild places, - on land and in our oceans, lakes and rivers. www. forestandbird.org.nz

FUNDING INFORMATION SERVICE

The Funding Information Service provides information about funding and scholarships to the community. If you are after a grant for your project or a scholarship for your studies, make sure you check out FIS' online databases BreakOut and FundView. BreakOut lists over 3500 scholarships and grants for individuals, and FundView lists over 1000 funding opportunities for community groups and for your projects. www.fis.org.nz

GOODNATURE

BOOTH 42

BOOTH 41

BOOTH 44

Goodnature is a world leading research and development company creating targeted, humane automatic control tools for introduced pest species. Following rigorous independent ethics trials, the Goodnature traps have achieved the highest Class A standard for humaneness for the targeted species as set out in the National Animal Welfare Advisory Committee's guidelines. Goodnature is focused on continued development of a complete suite of tools for international biodiversity management. www.goodnature.co.nz

HAURAKI GULF FORUM



The Hauraki Gulf Forum promotes and facilitates integrated management and the protection and enhancement of the Hauraki Gulf. It is a statutory body under the Hauraki Gulf Marine Park Act 2000. Members are central and local government agencies and representatives of tangata whenua. It produces a triennial assessment of environmental state and organizational performance.

www.arc.govt.nz/environment/coastal-and-marine/hauraki-gulfforum

LANDCARE RESEARCH

BOOTH 18

Our science drives innovation in New Zealand's management of terrestrial biodiversity and land resources. We work on projects ranging from local conservation through to national monitoring frameworks and data repositories for Government. We collaborate extensively with overseas colleagues on research, and provide specialist services, e.g. Invasive Species International and EcoGene DNA diagnostics. http://www.landcareresearch.co.nz

NATIONAL GEOGRAPHIC SOCIETY

BOOTH 21

The National Geographic Society is one of the world's largest nonprofit scientific and educational organizations. Founded in 1888 to "increase and diffuse geographic knowledge," the Society's mission is to inspire people to care about the planet. It reaches more than 400 million people worldwide each month through its official journal, National Geographic, and other magazines; National Geographic Channel; television documentaries; music; radio; films; books; DVDs; maps; exhibitions; live events; school publishing programs; interactive media; and merchandise. National Geographic has funded more than 9,600 scientific research, conservation and exploration projects and supports an education program promoting geographic literacy. For more information, visit www.nationalgeographic.com. www.nationalgeographic.com

NEW ZEALAND CENTRE FOR CONSERVATION MEDICINE **BOOTH 19** The New Zealand Centre for Conservation Medicine aims to facilitate trans-disciplinary collaborative research on wildlife health in support of biodiversity conservation and biosecurity. We strive to be a recognised, credible resource for the wildlife research community and to enable significant contributions in the field of conservation medicine. Our primary research focus is to enhance understanding of wildlife health from an ecological perspective including its connections with environmental, domestic animal and human health. In support of this we include on-going research to establish baseline data required for wildlife health and disease risk assessments. Through our partnerships with government and non-government agencies, research institutions, universities and community groups we encourage innovation and pooling of resources to enhance the individual efforts of each group. www.conservationmedicine.co.nz

ROBERTS & COMPANY PUBLISHERS

BOOTH 40

BOOTH 39

Roberts and Company introduces Kareiva and Marvier's Conservation Science: Balancing the Needs of People and Nature. John Fanshawe (SCIENCE) says they "have crafted a book that combines sound argument with practical examples...putting the tools of argument into the hands of the next generation of conservation scientists and on-the-ground practitioners." www.roberts-publishers.com

TREVOR PENFOLD PHOTOGRAPHY

Trevor Penfold, wildlife and nature photographer, aims to raise awareness of the importance of using the environment in a sustainable way – not only for our benefit, but for all species. He focuses on capturing images that viewers can connect with - whether on an emotional, artistic or intellectual level. www.trevorpenfold.com

UNIVERSITY OF CAMBRIDGE, CONSERVATION EVIDENCE BOOTH 22 Conservation Evidence is a free, authoritative information resource designed to support decisions about how to maintain and restore global biodiversity. We summarise evidence about the effects of conservation interventions and publish new evidence in an online journal. At ICCB 2011 we are launching our new website design. www.conservationevidence.com

BOOTH 31

BOOTH 36

BOOTHS 23 & 24

BOOTHS 34

UNIVERSITY OF CANTERBURY

The University of Canterbury is the host institution for ICCB 2011. When established in 1873, Canterbury was only the second university in New Zealand. It now offers undergraduate and postgraduate courses in 50 disciplines, from accountancy to zoology. Some 12,000 students are enrolled and each year about 3000 students graduate, 650 of them with higher degrees. Apart from the city campus, the University of Canterbury also operates 5 field stations that provide opportunities for teaching and research in the environmental sciences and conservation biology.

www.canterbury.ac.nz

UNIVERSITY OF QUEENSLAND

ARC Centre for Environmental Decisions & National Environmental Research Program)

The Centre for Biodiversity and Conservation Science at the University comprises two major organisations with significant sponsors. The Australian Research Council's Centre of Excellence for Environmental Decisions (CEED) has Nodes at the University of Queensland, Melbourne University, Australian National University. RMIT, the University of Western Australia and has strong association with the CSIRO, plus five international universities/agencies. The National Environmental Research Program, under the auspices of the Department of Sustainability, Environment Water, Population and Communities, also has nodes at the University of Queensland, Melbourne University, Australian National University, RMIT and the University of Western Australia.

www.uq.edu.au

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WWF-NEW ZEALAND

WWF-New Zealand is the local branch of the world's leading conservation organisation. We work to stop the degradation of the planet's natural environment and build a future in which people live in harmony with nature. This is achieved by working on the ground with local communities, and in partnership with government and business, using the best possible science to advocate change and effective conservation policy.

www.wwf.org.nz

Exhibitors



ZEALANDIA &

BOOTHS 43

MAUNGATAUTARI ECOLOGICAL ISLAND TRUST ZEALANDIA, the world's first fully-fenced urban wildlife sanctuary, provides a safe haven for some of New Zealand's most endangered native animals - tuatara: a living dinosaur and the last of its line; little spotted kiwi: a bird that looks and behaves like a mammal; giant wēta; saddleback, hihi and dozens more. The result is a forest full of song not heard on the mainland for 100 years. Today ZEALANDIA encompasses not only the fenced sanctuary, but also a state of the art multi media exhibition, café, retail store and function spaces. It plays host to around 90,000 visitors a year. ZEALANDIA is managed by the Karori Sanctuary Trust. All proceeds from membership, general admission, café and store sales go directly towards our ongoing conservation, eco-restoration and advocacy work. This exhibit booth will be shared by the Maungatautari Ecological Island Trust. www.visitzealandia.com



Manava Manava Aloha Talofa lava Bula Mālō e lelei Fakaalofa atu Ko na mauri

Kia Orana

Alo!





Our entertainment for the final evening consists of a <u>2 performances</u> with 25 band members, dancers, drummers, and costumed performers

They are one of the <u>best multicultural Pacific</u> <u>dance groups</u> in NZ and the Pacific. Their drummers are often seen at sports games (Vodaphone Warriors) and at Pasifika festivals all around the Pacific and New Zealand

After the last dance performance their band will entertain us with a variety of songs, from all walks of the Pacific as well as Palagi songs and reggae

This is island music at its best. <u>Come dressed</u> in your best sulu, lavalava, sarong, island shirt, and island attire !!!





So come for a party to remember! Meke!!!

Society for Conservation Biology International Congress for Conservation Biology

Congress Schedule





















Poster Session

Evening Events



Late Afternoon

Welcome to the 25th

SCB International Congress for Conservation Biology!



The official mascot for the 25th ICCB, *Kia Ora* the Kakapo, is excited to welcome you to wonderful New Zealand!

Kia has been around the world (check out the photos on his Facebook page) and is happy to be back home in his native New Zealand. Look for him throughout the conference or better yet, meet him at the SCB Booth.

The Kakapo is a flightless and nocturnal parrot native to New Zealand. Critically endangered, it has little defense against predators introduced to New Zealand like cats, rats, ferrets and stoats. Today, the Kakapo is kept and closely monitored on two predator-free islands.





Opening Ceremony/Powhiri and Reception

Monday, 5 December, 7:00 P.M. to 9:00 P.M. New Zealand Room, Level 5, SkyCity Convention Centre

OPENING POWHIRI/CEREMONY STARTS AT 7:00 P.M.

DRINKS AND LIGHT SNACK TO FOLLOW AROUND 7:30 P.M.

Meet fellow delegates and reunite with old friends here, at the first official event of the Congress.

The Congress will begin with a traditional Maori welcome, termed a *powhiri*. The *powhiri* begins when a representative (*Kaumatua*) from *Ngati Whatua o Orakei* (the local *iwi* or tribe) gives a traditional welcome and *karakia* (blessing) followed by a *waiata* (song) from him and his supporters. A representative then speaks on behalf of the conference delegates followed by a *waiata* sung by him and the entire assembly (yes, you need to sing as well!). A small group of dignitaries from the conference then engage in a *hongi* (traditional greeting) with the *Ngati Whatua o Orakei* representatives. To conclude the ceremony, a group of *tane* (warriors) and *wahine* (women) will entertain us with a *kapa haka* (lively action song).

A reception to include light hors d'oeuvres and refreshments will conclude the evening. The reception is free for registered attendees but you must register for this event in order to obtain a complimentary ticket.



K	Iuesday, December b	nber b						Schedule	schedule at a glance
Epsom 3	Epsom 1&2	Marlborough 1	Marlborough 2	Marlborough 3	New Zealand 1	New Zealand 2	New Zealand 3	New Zealand 4	Parnell
8:25 - 10:00 A.M	Ξ		Plena	Plenary: Thomas Lovejoy, The Conservation Horizon Awards Ceremony: Patricia Majluf <i>New Zealand Rooms</i>	The Conservation Ho : Patricia Majluf nd Rooms	rrizon			
				Coffee Break: 10:00-10:30 A.M., Auckland Room	10:30 A.M., Auckla	nd Room			
10:30 A.M 12;30 P.M	30 P.M		-						
Symp. 4 Integrating behavioral & conservation biology	Symp. 5 Response of biosphere to global change	Contr. Sess. Environmental politics & policy	Student Award Presentations	Contr. Sess. Biogeography	Symp. 3 Engaging Society to conserve tropical forests	Symp. 1 Adaptive conservation planning	Contr. Sess. Restoration Ecology	Symp. 2 Science behind large landscape connectivity initiatives	Contr. Sess. Adaptive management & monitoring
SCB Social Science Working Group Meeting		WS 17 Protected area downgrading, downsizing, & degazettement	SCB Marine Section Meeting	SCB Freshwater Working Group Meeting	WS 15 Impact of illegal wildlife trade in Asia-Pacific	WS 9 Participating in a conference: Advice for new-comers	Marine Think Tank Lunch Session (1)		SCB Africa Section Meeting
2:00 P.M 4:00 P.M	N.A C								
Contr. Sess. Spatial ecology & conservation	Speed Sess. Wildlife biology & management	Symp. 10 Climate change case studies	Symp. 9 Prioritising & evaluating conservation projects	Contr. Sess. Biogeography	Symp. 7 Participatory marine spatial planning	Symp. 8 Urban bird conservation	Contr. Sess. Restoration Ecology	Symp. 6 Human decision- making in conservation	Contr. Sess. Adaptive management & monitoring
				Coffee Break: 4:00-4:30 P.M., Auckland Room	:30 P.M., Auckland	Room			
4:30 P.M 5:30 P.M. Contr. Sess. Sp Spatial ecology & conservation	0 P.M. Speed Sess. Conservation politics	Contr. Sess. Communication, outreach, and education	Student Award Presentations	Contr. Sess. Social Science	Contr. Sess. Landscape Ecology	Contr. Sess. Population Dynamics	Contr. Sess. Restoration Ecology	Contr. Sess. Conservation genetics & medicine	Contr. Sess. Sociology & Psychology
				Break:	Break: 5:30-6:00 P.M.				
6:00 P.M 7:00 P.M.) P.M.		Plenary: Mick (Plenary: Mick Clout , Bird Conservation in New Zealand: Progress and Problems <i>New Zealand Rooms</i>	nservation in New Zealand: <i>New Zealand Rooms</i>	Progress and Probler	su		
7:00 P.M. Onwards WS 10 Supercharge your science	ards				SCB Sections Reception 7:00 P.M. to 8:00 P.M. New Zealand Foyer		National Geographic Film Premier Hunt for the Shadow Cat 8:00 P.M. to 9:30 P.M. New Zealand Rooms	l m Premier <i>v Cat</i> P.M. Jms	WS 16 IUCN SSC/WCPA taskforce workshop on consolidating criteria
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Morning session: 8:25 A.M. to 10:00 A.M., New Zealand Rooms 1-4

Announcements 8:25-8:30

PLENARY SESSION 8:30-9:30

The Conservation Horizon

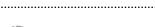
Thomas Lovejoy, University Professor, George Mason University & Biodiversity Chair, The Heinz Center for Science, Economics and the Environment

Conservation Biology will be a bit over three decades old as the nations of the planet meet for Rio + 20 in June. Various measures such as the Third Global Biodiversity Outlook (GBO3) indicate biodiversity loss is accelerating even as very important science based conservation initiatives are put into place. Looking ahead what are the most important priorities for conservation, conservation science and, indeed, for humanity?

AWARD CEREMONY

9:30-10:00

Patricia Majluf is the Director of the Center for Environmental Sustainability at Cayetano Heredia University, Peru. She was given the award for her leadership in marine wildlife conservation and for the inspiration she provides to marine conservationists across the globe.





COFFEE BREAK 10:00 to 10:30 Auckland Room



Late morning session: 10:30 A.M. to 12:30 P.M.

<u>SY 4: INTEGRATING BEHAVIORAL AND CONSERVATION BIOLOGY</u>

Epsom Room 3

Tuesday, December 6, 10:30 to 12:30 ORGANIZER(S): Saltz D, Ben-Gurion University of the Negev; Berger-Tal O, Ben-Gurion University of the Negev; Linklater

WL, Victoria University of Wellington

Conservation behavior is a new interdisciplinary field targeted at improving our ability to prevent biodiversity loss by applying principles and practice from behavioral biology. Numerous studies have demonstrated that behavior is relevant to conservation biology and that ignoring behavior may lead to failure of management programs. While the field has been rapidly developing among behavioral ecologists (including a new book "A primer of conservation behavior", and a new conservation behavior framework published in "Behavioral Ecology", most conservation practitioners, while intuitively aware of the importance of animal behavior, rarely employ behavior in their management plans. Indeed, the subject of using animal behavior in conservation management has not been a subject for a symposia or workshop in previous SCB meetings. If behavioral biologists worked more closely with wildlife managers, behavior could be successfully integrated within an adaptive management framework for conservation planning. The symposium's goals are to elucidate the principles of conservation behavior, present case studies of successful applications of animal behavior in conservation programs, inspire new linkages between the disciplines, and, finally, explore our understandings of human behavior in a conservation context.

- 10:30 Animal behavior in conservation: are we stalled? Saltz D*, Ben Gurion University
- 10:45 Integrating animal behavior and conservation biology: a conceptual framework Berger-Tal, O*, Mitrani Department of Desert Ecology, Ben-Gurion University of the Negev; Saltz, D, Mitrani Department of Desert Ecology, Ben-Gurion University of the Negev
- 11:00 Integration of behavioural and conservation biology the New Zealand experience Bell, BD*, Director & Associate Professor
- 11:15 Applied sensory ecology: strategies to repel and attract birds using visual cues Fernandez-Juricic, E*, Purdue University
- 11:30 Conservation on African Landscapes: Can Understanding Wildlife Behavior Make Human Behavior Sustainable? Rubenstein, DI*, Princeton University
- 11:45 Human behavioral ecology and conservation collaborative A.P.E.S. required Linklater, WL*, Centre for Biodiversity and Restoration Ecology, Victoria University of Wellington; Gavin, M, School of Geography, Environment and Earth Sciences, Victoria University of Wellington; MacDonald, EA, Museum of New Zealand, Te Papa Tongarewa; Monfort, TL, School of Psychology, Victoria University of Wellington

Discussion follows last presentation until end of session

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SY 5: MODELLING THE RESPONSE OF THE BIOSPHERE TO GLOBAL CHANGE Epsom Rooms 1&2 Tuesday, December 6, 10:30 to 12:30

ORGANIZER(S): Tim Newbold and Jorn Scharlemann, UNEP World Conservation Monitoring Centre

Biodiversity continues to be lost at an unprecedented rate, with associated declines in ecosystem function and the provision of ecosystem services. In order to meet the new targets for reducing the rate of biodiversity loss set in Nagoya, Japan, we urgently need models that project how the biosphere will respond to future changes and, through effects on the provision of ecosystem services, how changes in the biosphere will impact human well-being and the economy. There are many possible approaches to projecting changes in the biosphere, from statistical models that relate observed patterns of biodiversity and species composition to environmental variables, to process-based models that try to capture the ecology underlying observed patterns from theory and empirical evidence. In this symposium, we would bring together ecologists, at the cutting-edge of ecological modelling,

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Landcare Research

Manaaki Whenua

Tuesday

employing different approaches including: process-based modelling of global vegetation patterns and ecosystem service provision; and statistical modelling of species distributions, patterns of species richness and functional trait diversity. The symposium will facilitate discussion of the different ways in which we can project future changes in the biosphere. The topic is timely and will be of interest to most conservation biologists, particularly those involved in assessments like the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES).

10:30 Modelling the response of the biosphere to global change (symposium keynote)

Newbold, **T**^{*}, UNEP-WCMC & Microsoft Research; **Harfoot**, **M**, UNEP-WCMC & Microsoft Research; **Tittensor**, **D**, UNEP-WCMC & Microsoft Research; **Purves**, **D**, Microsoft Research; **Scharlemann**, **J**, UNEP-WCMC

- 11:00 Implications of process-based modelling for biodiversity conservation in a changing world Prentice, IC*, Macquarie University and Imperial College
- 11:15 Modelling global dynamics of species distributions in a rapidly changing world Jetz, W*, Yale University; LaSorte, FA, Yale University; Guralnick, RP, University of Colorado, Boulder; McPherson, JM, Calgary Zoo
- 11:30 Are species distribution models useful tools for predicting climate change impacts? Leathwick, J*, Department of Conservation
- 11:45 Forecasting Consequences of Global-change Scenarios for Persistence of Compositional Diversity a Top-down Modelling Approach Ferrier, S.*, CSIRO Ecosystem Sciences; Harwood, T.D., CSIRO Ecosystem Sciences; Williams, K.J., CSIRO Ecosystem Sciences
- 12:00 Modelling ecosystem structure and function over the 21st century Harfoot, M*, UNEP-WCMC & Microsoft Research; Newbold, T, UNEP-WCMC & Microsoft Research; Purves, D, Microsoft Research; Scharlemann, J, UNEP-WCMC; Tittensor, D, UNEP-WCMC & Microsoft Research

Discussion follows last presentation until end of session

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• <u>CS 3: ENVIRONMENTAL POLITICS AND POLICY</u> Marlborough Room 1 Tuesday, December 6, 10:30 to 12:30

- 10:30 Is triage feasible in species conservation? The sirenia case study Marsh, H*, James Cook University
- 10:45 Applying Shark Attack Policy Responses to Carnivore Conservation Strategies Neff, Christopher*, University of Sydney
- 11:00 European Bird Declines: Assessing the Importance of Land Use Change in Africa

Small, R.*, Department of Geography, University of Cambridge; Adams, W., Department of Geography, University of Cambridge; Atkinson, P., British Trust for Ornithology; Hewson, C., British Trust for Ornithology; Sutherland, W., Department of Zoology, University of Cambridge; Vickery, J., Royal Society for the Protection of Birds

11:15 Linking environmental policy and conservation of ecosystem services – evaluating social and ecological controls in an agricultural ecosystem

Kelly Garbach^{*}, University of Calfornia Davis, Departments of Envirnomental Science & Policy, Plant Sciences; Alejandra Martínez-Salinas, CATIE Center for Tropical Agriculture Research and Higher Education; Mark Lubell, University of Calfornia Davis, Department of Envirnomental Science & Policy; Fabrice A.J. De Clerck, CATIE Center for Tropical Agriculture Research and Higher Education; Valerie T. Eviner, University of Calfornia Davis, Department of Plant Sciences

11:30 Nothing new under the increasingly hot sun: challenges and success in mainstreaming climate change adaptation in local municipalities
 Decaying 1* Nelson Mandela Materiality Conding P.M. Nelson Mandela Materiality University

Pasquini, L*, Nelson Mandela Metropolitan University; Cowling, R.M., Nelson Mandela Metropolitan University; Ziervogel, G., University of Cape Town

- 11:45 Global Conservation Agreements and a Political Ecology of Carbon Offshoring Davidsen, C*, University of Calgary
- 12:00 Excluding stakeholders from decision-making: implications for conservation policy in low-income nations Liles, MJ*, Department of Wildlife and Fisheries Sciences, Texas A&M University; Peterson, TR, Department of Wildlife and Fisheries Sciences, Texas A&M University
- 12:15 Mechanisms of Accelerated Human Population Growth at Protected Area Edges Bean, WT, University of California, Berkeley; Burton, AC, Alberta Biodiversity Monitoring Institute; Brashares, JS*, University of California, Berkeley; Wittemyer, G, Colorado State University

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STUDENT AWARD PRESENTATIONS

Marlborough Room 2 Tuesday, December 6, 10:30 to 12:30

- 10:30 It's a vine life: Conservation and pest control through translocation of threatened falcons Kross, SM*, School of Biological Sciences, University of Canterbury; Tylianakis, JM, School of Biological Sciences, University of Canterbury; Nelson, XM, School of Biological Sciences, University of Canterbury
- 10:45 Advance, invading hordes: an experimental island invasion Nathan, HW*, University of Auckland; Clout, MN, University of Auckland; Murphy, EC, Department of Conservation; MacKay, JWB, University of Auckland
- 11:00 Host-pathogen disease dynamics between New Zealand's threatened frogs (*Leiopelma* spp.) and the fungal pathogen, *Batrachochytrium dendrobatidis* (Bd)

Ohmer, ME*, Department of Zoology, University of Otago; **Speare, R,** Anton Breinl Centre for Public Health and Tropical Medicine, James Cook University; **Herbert, SM,** Department of Zoology, University of Otago; **Bishop, PJ,** Department of Zoology, University of Otago

11:15 Effect of Forest Age and Burn History on the Recovery of Avian Capture Rates: When is Secondary Tropical Rainforest No Longer a Barrier?

Powell, LL*, School of Renewable Resources, Louisiana State University; **Stouffer, PC,** School of Renewable Resources, Louisiana State University; **Johnson, EI,** School of Renewable Resources, Louisiana State University

11:30 Informing management: the determinants of distribution for the Purple-crowned Fairy-wren *Malurus coronatus* coronatus, a threatened riparian specialist

Skroblin, A*, Research School of Biology, Australian National University; **Legge, S,** Australian Wildlife Conservancy, Mornington Wildlife Sanctuary

11:45 Prioritising species for monitoring conservation actions: accounting for benefits, costs and uncertainty of management outcomes

Tulloch, Ayesha*, The Ecology Centre, School of Biological Sciences, University of Queensland; Chades, Iadine, CSIRO Ecosystem Sciences, EcoSciences Precinct; Wilson, Kerrie, The Ecology Centre, School of Biological Sciences, University of Queensland; Possingham, Hugh, The Ecology Centre, School of Biological Sciences, University of Queensland

- 12:00 Incorporating Connectivity in Endangered Species Reintroduction Site Selection Wilson, JW*, North Carolina State University; Fay, JP, Duke University; Haddad, NM, North Carolina State University
- 12:15 Taxonomy, population genetics and conservation of the Critically Endangered Southern Bent-wing Bat (*Miniopterus schreibersii bassanii*)

Wood, RE*, Genetics Department, The University of Melbourne, Victoria, Australia; Appleton, BA, Genetics Department, The University of Melbourne, Victoria, Australia

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• <u>CS 5: BIOGEOGRAPHY</u> Marlborough Room 3

Tuesday, December 6, 10:30 to 12:30

- 10:30 Propagation of *Tetrapleura tetraptera* (Schum. & Thonn.) Taub. Using Tissue Culture Akinyele, A.O.*, University of Ibadan, Nigeria; Maradesa, B.O., University of Ibadan, Nigeria
- 10:45 Biodiversity, biogeography and protected areas in highly threatened portion of the Brazilian Cerrado
 Mariana Napolitano e Ferreira*, Universidade de São Paulo, Departamento de Ecologia; Cristiano de Campos Nogueira, Universidade de Brasília; Vania R. Pivello, Universidade de São Paulo, Departamento de Ecologia; Paula H Valdujo, Universidade de São Paulo; Debora Silvano, Universidade de São Paulo; Luis F Silveira, Universidade de São Paulo; Ana Paula Carmignotto, Universidade Federal de São Carlos
- 11:00 Vicariance and endemism in a Neotropical savanna hotspot: distribution patterns of Cerrado squamate reptiles Nogueira, Cristiano*, Universidade de Brasília; Ribeiro, Síria, Faculdades Integradas do Tapajós; Costa, Gabriel, Universidade do Rio Grande do Norte; Colli, Guarino, Universidade de Brasília
- 11:15 Managing the risks of vertebrate pest incursions in Australia Cassey, P*, University of Adelaide; Bomford, M, Invasive Animals Cooperative Research Centre; Henderson, W, Invasive Animals Cooperative Research Centre
- 11:30 Complementarity as a strategy for ecorregional priorization Koleff, P. *, The National Commission for Knowledge and Use of Biodiversity ; Urquiza-Haas, T., The National Commission for Knowledge and Use of Biodiversity
- 11:45 Nature's Last Stand: Protecting Remote Areas Critical to Conserving Biodiversity McInturff, Alex*, Stanford University; McCauley, Douglas, Stanford University, Hopkins Marine Station; Micheli, Fiorenza, Stanford University, Hopkins Marine Station

12:00 Hunting for solutions to problems of predator management in UK Redpath, S.M.*, ACES, Aberdeen University

12:15 Maintaining Marine Population Connectivity in Multi-Species Conservation Treml, EA*, University of Queensland; Riginos, C, University of Queensland; Possingham, H, University of Queensland

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<u>SY 3: ENGAGING SOCIETY TO CONSERVE IMPERILED TROPICAL FORESTS</u>

New Zealand Room 1

Tuesday, December 6, 10:30 to 12:30

ORGANIZER(S): Laurance, W. F., James Cook University; Sodhi, N. S., National University of Singapore

How can scientists distill real-world complexity into effective strategies for educating society and promoting forest conservation? This is a pressing challenge for conservation biologists working on tropical forests, the world's most biologically rich ecosystems. These forests face myriad environmental threats and exist in a complex socio-political landscape that is constantly in flux. The dangers to tropical forests are manifold. They are being cleared, burned, fragmented, logged, and overhunted at alarming rates, with climate change an increasingly serious peril. In addition, the causes of forest disruption are changing, with economic globalization and industrial activities replacing small-scale farmers and forest conservation. These are emerging from international carbontrading, from eco-certified forest products, from efforts to combat illegal trade in timber and wildlife products, and from boycotts of multinational corporations with poor environmental records. Given such dynamism, there is a dire need for conservation biologists to engage the general public, business leaders, and decision makers, while devising and promoting effective conservation strategies. This symposium will bring together some of the world's most prominent biologists whose efforts have transcended traditional science to promote the conservation of imperiled tropical forests to a global audience.

- 10:30 Assaulting avarice: combating World Growth International and its anti-environmental allies Laurance, William F.*, *James Cook University*
- 11:00 The Conservation Imperative in Twenty-first Century Amazonia Lovejoy, Thomas E*, George Mason University, Heinz Center
- 11:15 Out on a Limb: Using Education as a 'Hook' to Inspire Tropical Forest Conservation Lowman, MD*, North Carolina State University
- 11:30 Connecting the General Public to the Science of Saving Tropical Species Pimm, SL*, *Duke University*
- 11:45 Harnessing Technological and Social Trends for Conservation: There's an App for That! Koh, LP*, ETH Zurich (Swiss Federal Institute of Technology Zurich)
- 12:00 Engaging society in the design of conservation programmes Agni Boedhihartono*, James Cook University; Jeffrey Sayer, James Cook University
- 12:15 Utilizing Australia's wet tropics rainforests and ecotourism to educate tourists about major threats to rainforests, such as climate change Turton, SM*, School of Earth & Environmental Sciences, James Cook University, Cairns, Australia

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• SY 1: ADAPTIVE CONSERVATION PLANNING: RATIONALE AND REQUIREMENTS FOR ADJUSTMENT OF CONSERVATION DESIGNS TO FIT THE REAL WORLD New Zealand Room 2 Tuesday, December 6, 10:30 to 12:30 ORGANIZER(S): Pressey, R.L., James Cook University

The process of conservation planning involves sequential transitions between stages. In one of these, regional conservation designs on paper or computer screens must be turned into local actions on the ground or in the water. Inevitably, this requires regional designs to change to accommodate unforeseen data, constraints and opportunities at local scales. We must move from one-off exercises in regional design to approaches that allow designs to evolve and so strengthen links to implementation. But adaptive planning presents conceptual, technical, policy and institutional challenges that we have only begun to understand. This symposium will address these challenges and describe case studies of adaptive planning in different parts of the world. The symposium is highly relevant to the meeting theme "Engaging society in conservation". Adaptive conservation planning must involve people whose activities are constrained by conservation actions to ensure that local knowledge is incorporated and costs to communities are minimized and benefits maximized. This is an emerging topic in conservation science not covered in previous SCB meetings. Adaptive planning is essential if plans are to become reality, and both policy and institutional arrangements must change to accommodate an adaptive approach. Adaptive planning is highly relevant to private land and to community-managed inshore marine waters. Both settings are extensive in the Asia-Pacific regions encompassing the meeting venue.

Pressey, R.L.*, James Cook University; Mills, M., James Cook University; Weeks, R., Wildlife Conservation Society 11:00 Applying adaptive conservation planning to conserve biodiversity and improve livelihoods in Africa Philip Muruthi*, African Wildlife Foundation ; Helen Gichohi, African Wildlife Foundation ; David Williams, African Wildlife Foundation ; Jef Dupain, African Wildlife Foundation 11:15 Complementing Community-Based Marine Management Initiatives With Strategic Planning to Meet Local- And National-Scale Objectives In Fiji Jupiter, SD*, Wildlife Conservation Society Fiji Country Program; Mills, M, ARC Centre for Excellence for Coral Reef Studies, James Cook University; Pressey, RL, ARC Centre for Excellence for Coral Reef Studies, James Cook University 11:30 Do we need another plan? G Lipsett-Moore*, The Nature Conservancy; S Cowell, Independent Consultant 11:45 How do we know its working? The importance of action effectiveness measures for adaptive management and an examination of how it's done within one NGO Didier, K*, Wildlife Conservation Society; Duda, L., Wildlife Conservation Society; Strindberg, S, Wildlife Conservation Society; Johnson, A, Wildlife Conservation Society; Watson, J, Wildlife Conservation Society 12:00 Improving plan implementation: blurring the distinction between spatial prioritization and strategic conservation planning Game, E.T.*, The Nature Conservancy; Groves, E.T., The Nature Conservancy Discussion follows last presentation until end of session **CS 8: RESTORATION ECOLOGY** New Zealand Room 3 Tuesday, December 6, 10:30 to 12:30

10:30 The plan of the day: managing the dynamic transition from regional-scale conservation design to local-scale

- 10:30 Determining Native Fauna Occupancy in Unmined Jarrah Forest in South-western Australia Triska, MT*, University of Western Australia; Craig, MD, University of Western Australia and Murdoch University; Hobbs, RJ, University of Western Australia; Pech, R, Landcare Research; Stokes, V, Alcoa; Hardy, G, Murdoch University
- 10:45 The conservation management of the kakapo: Flogging a dead parrot?
 Ron Moorhouse*, Department of Conservation; Daryl Eason, Department of Conservation; Jo Ledington, Department of Conservation; Graeme Elliott, Department of Conservation; Deidre Vercoe, Department of Conservation
- 11:00 Translocation of Island Scrub-Jays to Santa Rosa Is., California: an Opportunity for Proactive Species Management and the Restoration of an Insular Ecosystem Sillett, TS*, Smithsonian Institution; Royle, JA, USGS Patuxent Wildlife Research Center; Chandler, R, USGS Patuxent

Wildlife Research Center; Bakker, VJ, James Madison University; Kéry, M, Swiss Ornithological Institute; Morrison, SA, The Nature Conservancy

11:15 North African Houbara Bustard restoration program: restocking and maintaining species ecological and behavioural functions

Hingrat, Y*, RENECO Wildlife Consultants; Hardouin, L, Emirates Center for Wildlife Propagation; Robet, A, MNHN, Paris; Lacroix, F, RENECO Wildlife Consultants

- 11:30 Experimental reintroduction of a macropod into an environment with predators; comparing their habitat use during the establishment phase to post establishment.
 Kemp, LF*, The University of Adelaide; Carthew, S, The University of Adelaide; Johnston, G, University of South Australia
- 11:45 Carbon and Biodiversity: SCB's Adaptive Management Experience in a South African Biodiversity Hotspot Abrams, RW*, Long Island University; Powell, M, Ecological Capital Restoration Pty
- 12:00 How can regulating livestock and wildlife herbivory help conservation? Treydte, A.C.*, University of Hohenheim
- 12:15 Evaluation of assisted colonization strategies under climate change for a rare, fire-dependent plant Regan, HM*, Biology Department, University of California Riverside; Syphard, AD, Conservation Biology Institute; Franklin, J, School of Geographical Sciences and Urban Planning, Arizona State University; Swab, R, Biology Department, University of California Riverside; Flint, AL, United States Geological Survey; Flint, LE, United States Geological Survey; Zedler, PH, Nelson Institute for Environmental Studies, The University of Wisconsin, Madison

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conservation action

<u>SY 2: THE SCIENCE BEHIND LARGE LANDSCAPE CONNECTIVITY INITIATIVES</u>

New Zealand Room 4

Tuesday, December 6, 10:30 to 12:30

ORGANIZER(S): Paul Beier, Northern Arizona University; Sam Cushman, USDA Forest Service Rocky Mountain Research Station; Kenyon Fields, Wildlands Network

There is a growing consensus that success in conservation depends on cooperation between governments, NGOs, businesses, indigenous groups, and private landowners. To conserve biodiversity in the face of habitat fragmentation, climate change, and socio-political dispassion or outright obstruction, cooperative conservation initiatives are springing up globally, implementing strategies that engender broader participation. Inherent in these efforts are two needs: to inspire people with a grand vision which overcomes the limited appeal and reach of local conservation campaigns; and to ground this vision in rigorous, science-based analyses. This symposium explores a key scientific issue in connectivity and corridor design, namely how to estimate the resistance of a landscape to wildlife movement, gene flow, and connectivity of abiotic processes. We illustrate how these estimates produce detailed habitat linkage designs in large landscapes. This symposium continues tomorrow afternoon as (SY18), which illustrates practical applications of these approaches to support initiatives on four continents.

- 10:30 Mini-keynote: The science behind large landscape connectivity initiatives Beier, Paul*, Northern Arizona University
- 10:45 Functional Connectivity and the Resistance Surface
 Spear, SF*, The Orianne Society; Balkenhol, N, Leibniz-Institute for Zoo and Wildlife Research; Fortin, M-J, University of Toronto; McRae, BH, The Nature Conservancy; Scribner, K, Michigan State University
- 11:00 Using telemetry and genetics to estimate functional resistance Cushman, S.A*, U.S. Forest Service
- 11:15 Estimating resistance to gene flow for multiple habitat types Wang, Ian*, *Harvard University*
- 11:30 Quantifying resistance of landscape characteristics to gene flow Graves, Tabitha*, Northern Arizona University; Beier, Paul, Northern Arizona University; Royle, Andy, US Geological Survey, Patuxent Wildlife Refuge; Kendall, Katherine, US Geological Survey, Northern Rocky Mountain Science Center
- 11:45 Resistant kernel modeling of landscape connectivity at multiple scales: a case study involving marbled salamanders in central Massachusetts, USA

McGarigal, Kevin*, University of Massachusetts; Compton, Brad, University of Massachusetts; Cushman, Sam, USDA Forest Service, Rocky Mountain Research Station; Whiteley, Andrew, University of Massachusetts; Gamble, Lloyd, US State Department

12:00 Use of land facets to design linkages for climate change Brost, BM, Northern Arizona University; Beier, P*, Northern Arizona University

Discussion follows last presentation until end of session

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<u>CS 10: ADAPTIVE MANAGEMENT AND MONITORING</u>
Parnell Room Room
Tuesday, December 6, 10:30 to 12:30

- 10:30 Mongoose management and recoveries of endemic vertebrates on Amami-oshima Island, Japan Watari, Y*, Japan Forest Technology Association; Nagumo, S, The International University of Kagoshima; Kubo, S, The International University of Kagoshima; Yamada, F, Forestry and Forest Product Research Institute; Abe, S, Ministry of the Environment; Fukasawa, M, The University of Tokyo
- 10:45 Measuring effectiveness of law enforcement in reducing threats to wild tigers and their prey: improving the interpretation of patrol-based data

Stokes, EJ*, Wildlife Conservation Society; Burn, RW, University of Reading; Underwood, FM, University of Reading

11:00 Evaluating Law Enforcement Through Independent Measures; Surveying Snares in Seima Protection Forest, Eastern Cambodia

O'Kelly, H.J.*, Imperial College London, Centre for Environmental Policy & Division of Biology, Wildlife Conservation Society - Global Conservation Program; Milner-Gulland, E.J., Imperial College London, Centre for Environmental Policy & Division of Biology; Rowcliffe, J. M., Institute of Zoology, Zoological Society of London; Durant, S.M., Institute of Zoology, Zoological Society of London; Stokes, E. J., Wildlife Conservation Society - Global Conservation Program

11:15 Behavioural responses of endangered North Island kokako to alien, local and mixed-dialect duets – implications for translocation success

David Bradley*, Department of Biological Sciences, School of Science and Engineering, University of Waikato, New Zealand; **Laura Molles**, Department of Ecology, Faculty of Agriculture and Life Sciences, Lincoln University, New Zealand; **Joseph Waas**, Department of Biological Sciences, School of Science and Engineering, University of Waikato, New Zealand

11:30 Linking raptors and biodiversity as a potential tool for conservation

Burgas, D*, Bird Ecology Unit, Department of Biosciences, University of Helsinki; Byholm, P, Bird Ecology Unit, Department of Biosciences, University of Helsinki

11:45 Changes in village bushmeat hunting: a case study from rural Gabon

Coad, L, University of Oxford; **Schleicher, J***, University of Cambridge; **Marthews, T.,** University of Oxford; **Milner-Gulland, E.J.**, Imperial College London; **Manica, A.**, University of Cambridge; **Balmford, A.**, University of Cambridge; **Abernathy, K.A.**, University of Stirling

12:00 Conservation status of three primate species (*Callicebus ornatus, Saimiri sciureus albigena* and *Aotus brumbackii*) at Colombian Llanos

Carretero-Pinzón, X.*, Departamento de Biología, Facultad de Ciencias, Pontificia Universidad Javeriana, Bogotá, Colombia ; **Ruíz-García, M.,** Departamento de Biología, Facultad de Ciencias, Pontificia Universidad Javeriana, Bogotá, Colombia

12:15 Gender, Pregnancy and Individual Identification in Giant Panda Populations using Fecal Near Infrared Reflectance Spectroscopy (FNIRS).

Vance, CK*, Biochemistry, Molecular Biology, Entomology and Plant Pathology, Mississippi State University; Kouba, AJ, Memphis Zoological Society; Holtvoigt, A, Memphis Zoological Society; Nei, YG, Institute of Zoology, Chinese Academy of Sciences; Wei, FW, Institute of Zoology, Chinese Academy of Sciences; Willard, ST, Biochemistry, Molecular Biology, Entomology and Plant Pathology, Mississippi State University

Lunch Activities: 12:30 P.M. to 2:00 P.M.

 <u>SCB Section and Working Group Meetings</u>, 12:30 to 14:00 Africa, Parnell Room Marine, Marlborough Room 2 Freshwater Working Group, Marlborough Room 3 Social Science Working Group, Epsom 3

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• Workshop 17: Silent Crisis or Unspoken Solution? Protected Area Downgrading, Downsizing, and Degazettement 12:30 to 14:00, Marlborough 1

Organizer(s): Michael Mascia and Sharon Pailler, WWF-US

Conservation policy assumes that national parks and protected areas (PAs) are permanent fixtures on the landscape, but recent research demonstrates that PA downgrading, downsizing, and degazettement (PADDD) is widespread. Conservative estimates reveal more than 580 instances of PADDD, totalling approximately 500,000 km², in 58 countries across Africa, Asia, and Latin America and the Caribbean. Though PADDD can – in theory – advance conservation ends through more efficient allocation of conservation assets and more effective forms of resource governance, empirical evidence suggests that PADDD is rarely "pro-conservation." This workshop will (a) describe patterns, trends, and causes of PADDD; (b) explore the implications of PADDD for biodiversity conservation and climate change mitigation/REDD; and (c) introduce PADDDDtracker.org, a participatory (crowd-sourcing) website for monitoring historic and proposed PADDD globally.

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Workshop 15: Understanding the impact of illegal wildlife trade in the Asia-Pacific region on conservation
 12:30 to 14:00, New Zealand 1

Organizer(s): Simon Nemtzov, Israel Nature and Parks Authority

The primary threat to biodiversity remains the destruction of important natural habitats, and so the primary response must remain to safeguard these places. But how do we know where these places are? Over the last decade, great advances have been made to answer this, both from theory, with the emergence of the sub-discipline of systematic conservation planning, and from practice, with extensive application of methods to identify important sites (IBAs, IPAs, AZE, KBAs, etc). Now, the IUCN World Commission on Protected Areas and Species Survival Commission have convened a joint taskforce (http://www.iucn.org/biodiversity_and_protected_areas_taskforce), an objective of which is to consolidate the criteria for such assessment of biodiversity conservation significance at the site level. Operating through a series of technical taskgroups and regional workshops, the taskforce will produce recommendations to the 2012 World Conservation Congress. The location of the 25th ICCB in Christchurch, New Zealand, provides a unique opportunity for the taskforce to convene such a regional workshop, focused on seeking input from an Oceania-specific perspective. The ultimate objective of this component of the IUCN taskforce's work is the establishment of a global standard for site conservation significance -- a key tool for engaging society in conservation at all levels from local and indigenous communities, through national governments, up to the international level of companies and treaties.

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 Workshop 9: Participating in a conference: some advice for new-comers 12:30 to 14:00, New Zealand 2

Organizer(s): Malcolm Hunter and Aram Calhoun, University of Maine

This workshop will provide advice to participants, especially students, on the fine art of attending a conference and making effective presentations. Topics to be covered will include: posters (how to fit 5,000 words into a square meter), oral presentations (how to fit 5,000 words into 15 slides), and networking (how to fit 5,000 words into a beer). In other words, we will take a light-hearted look at some ways to make attending a conference an enjoyable and productive experience. The session will be presented by two of the authors of "Saving the Earth as a Career: Advice on becoming a conservation professional"

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• MARINE THINK TANK LUNCH SESSION 12:30 to 14:00, New Zealand 3 Tuesday, December 6

- 12:30 Future Ocean Governance in [Aotearoa] New Zealand: Linking Science to Policymaking McGinnis, Michael Vincent*, Institute of Policy Studies, School of Government, Victoria University of Wellington
- 12:45 Implementing the New Zealand Marine Protected Areas Policy a case study from the South Island West Coast Don Neale*, *Dept of Conservation*
- 13:00 Marine Protected Area planning in the Ross Sea region, Antarctica, under a Systematic Conservation Planning framework

Sharp, BR*, New Zealand Ministry of Fisheries

13:15 What 20 Years of Science & Management Can Tell Us About Dolphin-Watch Tourism: The Bay of Islands as a Case Study

Constantine, R.*, University of Auckland



Early afternoon session: 2:00 P.M. to 4:00 P.M.

<u>CS 12: SPATIAL ECOLOGY AND CONSERVATION</u> Epsom Room 3

Tuesday, December 6, 14:00 to 16:00

- 14:00 Patterns of local resource use by the Waorani in Yasuní National Park, Amazonian Ecuador Papworth, SK*, Imperial College London; Slocombe, K, University of York; Bunnefeld, N, Imperial College London; Milner-Gulland, EJ, Imperial College London
- 14:15 Modeling highway crossing patterns of red wolves along US 64, North Carolina

Proctor, Christine, Dept. of Fish and Wildlife Conservation, Virginia Tech; **Kelly, Marcella**, Dept. of Fish and Wildlife Conservation, Virginia Tech; **Vaughan, Michael***, Dept. of Fish and Wildlife Conservation, Virginia Tech; **Esson, Thomas**, Dept. of Fish and Wildlife Conservation, Virginia Tech; **Trent, J. Andrew**, Dept. of Fish and Wildlife Conservation, Virginia Tech

14:30 Integrating species conservation landscape models into setting management priorities for Nam Kading National Protected Area, Lao PDR.

Rasphone, A*, Wildlife Conservation Society Laos; **Bryja, G,** Wildlife Conservation Society ; **Hallam, C,** Wildlife Conservation Society Laos; **Johnson, A,** Wildlife Conservation Society Laos

14:45 Reintroducing a migratory raptor to the edge of its former range: are we just feeding a sink? Smith, DHIV*, Centre for Conservation Research, Calgary Zoo; Everest, T, Centre for Conservation Research, Calgary Zoo; Moehrenschlager, A, Centre for Conservation Research, Calgary Zoo

15:00 Climate influences on dispersal and survival of northern fur seal pups Lea, M-A*, IMAS, University of Tasmania; Sterling, JT, National Marine Mammal Lab, AFSC, NOAA; Bond, N, JISAO, University of Washington; Melin, S, National Marine Mammal Lab, AFSC, NOAA; Ream, RR, National Marine Mammal Lab, AFSC, NOAA; Gelatt, T, National Marine Mammal Lab, AFSC, NOAA

- 15:15 Optimal allocation of environmental water to maximise frog, plant and waterbird conservation benefits Linke, S*, Griffith University, Brisbane, Australia; Januchowski, S, Griffith University, Brisbane, Australia; McMahon, J, Griffith University, Brisbane, Australia; Olley, J, Griffith University, Brisbane, Australia; Turak, E, NSW DECC, Sydney, Australia; Blakey R, NSW DECC, Sydney, Australia; Possingham HP, University of Queensland, Brisbane, Australia
- 15:30 Massive losses of intertidal mudflats in East Asia detected by remote sensing Murray, NJ*, University of Queensland; Clemens, R, University of Queensland; Fuller, RF, University of Queensland

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• <u>SPEED 11: WILDLIFE BIOLOGY & MANAGEMENT</u> Epsom Rooms 1&2 Tuesday, December 6, 14:00 to 16:00

14:00 Nest boxes: a successful management tool for the conservation of the Mediterranean storm petrel at Benidorm Island (Spain).

Sanz-Aguilar, A*, Biometry and Population Biology Group, Centre d'Ecologie Fonctionelle et Evolutive (CEFE-CNRS) ; Libois, E, Biometry and Population Biology Group, Centre d'Ecologie Fonctionelle et Evolutive (CEFE-CNRS) ; Minguez, E, Serra Gelada Natural Park (Alicante, Spain); Oro, D, Population Ecology Group (IMEDEA, CSIC-UIB); Pradel, R, Biometry and Population Biology Group, Centre d'Ecologie Fonctionelle et Evolutive (CEFE-CNRS) ; Gimenez, O, Biometry and Population Biology Group, Centre d'Ecologie Fonctionelle et Evolutive (CEFE-CNRS)

- 14:04 Saving the last population of the globally threatened Grey-necked Picathartes, *Picathartes oreas*, in West Africa Atuo, F. A*, A. P. Leventis Ornithological Research Institute,; Ivande, S. T, A. P. Leventis Ornithological Research Institute,; Wala, Z. J, A. P. Leventis Ornithological Research Institute,
- 14:08 Habitat Preference Of An Elusive Bird Species Sokoke Pipit (*Anthus sokokensis*) In Zaraninge Coastal Forest, Tanzania

Modest, RB*, Sokoine University of Agriculture; Muganda, M, Sokoine University of Agriculture; Kitegile, A, Sokoine University of Agriculture; Sabuni, C, Sokoine University of Agriculture

- 14:12 Assessment of Giant Panda Corridors: Species Occupancy, Corridor Effectiveness and Corridor Restoration Fang Wang*, Peking University; Hao Wang, Peking University; Dajun Wang, Peking University; William Mcshea, Smithsonian Conservation Biology Institute; Sheng Li, Smithsonian Conservation Biology Institute
- 14:16 Habitat-Related Breeding Success and Abundance in Burrow-Nesting Seabirds: A Predictive Modelling Approach Whitehead, Amy*, Landcare Research; Lyver, Phil, Landcare Research; Jones, Chris, Landcare Research; MacLeod, Catriona, Landcare Research; Pairman, D, Landcare Research; Te Tapatoru a Toi
- 14:20 Analysis of Food and Feeding Aiding Conservation of Asian Elephant in Manas National Park, Assam, India Saikia, B.P.*, Centre for Animal Ecology and Wildlife Biology, Department of Zoology, Gauhati University, Assam, India
- 14:24 Return of *Rhinoceros unicornis* in Manas National Park of India Rathin Barman, Wildlife Trust of India; Bhaskar Choudhuri, Wildlife Trust of India; Phulmoni Boro, Wildlife Trust of India; NVK Ashraf, Wildlife Trust of India; Vivek Menon*, Wildlife Trust of India
- 14:28 Developing an adaptive management framework for the conservation of an endangered amphibian Pollard, CJ*, The University of Newcastle; Stockwell, MP, The University of Newcastle; Garnham, JI, The University of Newcastle; Pickett, EJ, The University of Newcastle; Clulow, J, The University of Newcastle; Mahony, MJ, The University of Newcastle
- 14:32 The role of scent and olfaction in the critically endangered Kakapo (Strigops habroptilus) Gsell, A.C.*, Massey University, Auckland, NZ; Brunton, Dianne, Massey University, Auckland, NZ; Hagelin, Julie, Swarthmore College, USA; Goodwin, Tom, Hendrix College, USA
- 14:36 Effectiveness of the bird repellents on the endemic New Zealand parrot Nestor notabilis Orr-Walker L, Kea Conservation Trust; Adams N*, Unitec Institute of Technology; Roberts L, Unitec Institute of Technology; Kemp J, Department of Conservation
- 14:40 Role of Free-Ranging Mammals in the Deposition of *Escherichia coli* into a Texas Floodplain Parker, ID*, Texas A&M University; Lopez, RR, Texas A&M University; Padia, R, Texas A&M University; Gallagher, M, Texas A&M University; Karthikeyan, R, Texas A&M University; Cathey, JC, Texas A&M University; Silvy, NJ, Texas A&M University; Davis, DS, Texas A&M University
- 14:44 Behavioral determinants of pathogen transmission in wild Ugandan chimpanzees Rushmore, Julie*, University of Georgia; Matamba, Leopold, University of Georgia; Stumpf, Becky, University of Illinois, Urbana-Champaign; Altizer, Sonia, University of Georgia
- 14:52 Significance of recovery experiment for morphological variables in some fresh water algae Hit Kishore Goswami, Rtd Professor, 24, Kaushalnagar, Misrod, Bhopal MP India; Dushma Das Guru*, Department of Botany, Ranchi Women's College, Ranchi Jharkhand, India
- 14:56 Ecological effects on the seroprevalence of *Leptospira* spp. and ectoparasite load in black-tailed prairie dogs (*Cynomys ludovicianus*) in Chihuahua, Mexico.
 Montiel, A.*, UNAM; Atilano, D., UNAM; Ceballos, G., UNAM; Acosta, R., UNAM; Montiel, G., UNAM; Suzan, G., UNAM

Discussion follows last presentation until end of session

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• SY 10: CLIMATE CHANGE CASE STUDIES: USING HISTORICAL DATA TO PREDICT FUTURE RESPONSES Marlborough Room 1 Tuesday, December 6, 14:00 to 16:00

ORGANIZER(S): Toni Lyn Morelli, U.C. Berkeley

As managers and policymakers look to enable biological systems to adapt to anthropogenic climate change, and thus conserve biodiversity, scientists struggle to understand exactly how changes are affecting populations and ecosystems. The need for baseline data is apparent, but such data are scarce. In this symposium, researchers will present the latest sources of historical data and their use to reveal patterns in biological responses to climate change. Examples that will be discussed include museum specimens, genetic samples, long-term animal census data, forest and fire history, palentological research, and citizen science. Through these presentations we will show that there are untapped opportunities to capitalize on existing datasets for conserving species and understanding response to global change. We will close the symposium with a discussion of how better to utilize and synthesize existing data in a way that optimizes their use in conservation.

14:00 Keynote address: Historical resurveys: challenges in revisiting the past to quantify ecological change and project the future

Beissinger, SR*, Museum of Vertebrate Zoology, U.C. Berkeley; **Thorne, J.H.,** Information Center for the Environment, U.C. Davis; **Santos, MJ,** Museum of Vertebrate Zoology, U.C. Berkeley; **Morelli, TL,** Museum of Vertebrate Zoology, U.C. Berkeley

- 14:30 Identifying climate change refugia and population extinctions using landscape genetic analysis and occupancy modeling of historical and resurvey data Morelli, TL*, U.C. Berkeley
- 14:45 Investigating the response of animals to temperature shifts at a variety of temporal scales Smith, Felisa A.*, University of New Mexico; Murray, Ian W., University of New Mexico
- 15:00 Assessing species vulnerability to climate change: use of breeding bird survey data to develop distribution models and predictions for the 21st century

Maggini, R*, Swiss Ornithological Institute, Sempach, Switzerland; Lehmann, A, Climatic Change and Climate Impacts, Institute for Environmental Sciences, University of Geneva, Switzerland; Zimmermann, NE, Swiss Federal Research Institute WSL, Birmensdorf, Switzerland; Bolliger, J, Swiss Federal Research Institute WSL, Birmensdorf, Switzerland; Foppen, R, European Bird Census Council, Beek-Ubbergen, the Netherlands; Schmid, H, Swiss Ornithological Institute, Sempach, Switzerland; Beniston, M, Climatic Change and Climate Impacts, Institute for Environmental Sciences, University of Geneva, Switzerland; Zbinden, N, Swiss Ornithological Institute, Sempach, Switzerland

15:15 Current trends in French bats population highlights by old heterogenous data

Kerbiriou, C*, Conservation des Espèces, Restauration et Suivi des Populations, UMR 7204 MNHN-CNRS-UPMC, 61 rue Buffon, Paris, France ; Julien, JE, Conservation des Espèces, Restauration et Suivi des Populations, UMR 7204 MNHN-CNRS-UPMC, 61 rue Buffon, Paris, France ; Marmet, J, Conservation des Espèces, Restauration et Suivi des Populations, UMR 7204 MNHN-CNRS-UPMC, 61 rue Buffon, Paris, France ; Robert, A, Conservation des Espèces, Restauration et Suivi des Populations, UMR 7204 MNHN-CNRS-UPMC, 55 rue Buffon, Paris, France ; Lemaire, M, Muséum d'histoire naturelle de Bourges, Les Rives d'Auron, Allée René Ménard, 18000 Bourges; Arthur, L, Muséum d'histoire naturelle de Bourges, Les Rives d'Auron, Allée René Ménard, 18000 Bourges; Lois, G, NatureParif, 84, Rue de Grenelle 75007 ; Couvet, D, Conservation des Espèces, Restauration et Suivi des Populations, UMR 7204 MNHN-CNRS-UPMC, 55 rue Buffon, Paris, France

15:30 Subjective decisions and uncertainty in species distribution models

Baumgartner, JB*, School of Botany, The University of Melbourne; **Regan, TJ,** School of Botany, The University of Melbourne; **Wintle, BA,** School of Botany, The University of Melbourne; **Elith, J,** School of Botany, The University of Melbourne

Discussion follows last presentation until end of session

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• <u>SY 9: PRIORITISING AND EVALUATING BIODIVERSITY PROJECTS</u> Marlborough Room 2 Tuesday, December 6, 14:00 to 16:00

ORGANIZER(S): Cullen, R, Lincoln University, NZ; White, P, University of York, UK

The importance of careful targeting of effort to conserve biodiversity, and of evaluating biodiversity projects to determine their effectiveness and cost effectiveness. Funds available for biodiversity projects are scarce. Choices must be made on how to use limited resources most effectively. These decisions should be based on clear and measurable objectives for achievement. Biodiversity projects should be evaluated to determine if use of scarce resources has achieved the objective (effectiveness), and if the projects achieve the objective at lower cost than alternative uses of the resources (cost effectiveness). Failure to set and pursue clear objectives, consider expected outcomes and cost when selecting projects, and evaluate biodiversity projects results in the inefficient use of resources and less overall conservation progress than could be achieved. Project selection and evaluation methods are used patchily by biodiversity project providers and researchers. The goals of this symposium are to inform the audience of the paramount importance of project selection and evaluation; explain the range of selection and evaluation methods

available; examine their relative merits and where they are best applied; and debate how to overcome the hurdles to adoption and continuation of project selection and evaluation methods. Benefit will be an enhanced understanding of how biodiversity projects can be selected and managed to deliver better-targeted, and more cost-effective gains.

14:00 Prioritising and Evaluating Biodiversity Projects

Cullen, R*, Lincoln University; WHITE, PA, University of York

14:15 Prioritising threat management for global biodiversity conservation

Tara Martin*, CSIRO Sustainable Ecosystems; Josie Carwardine, CSIRO Sustainable Ecosystems; Trudy O'Conner, The Wilderness Society; Sarah Legge, Australian Wildlife Conservancy; Brendan Mackey, Australian National University; Hugh Possingham, University of Queensland

14:30 Factors influencing the cost, effectiveness and efficiency of conservation White PCL*, University of York; Laycock HF, University of York; Smart JCR, Aarhus University; Raffaelli DG, University of York; Moran D, Scottish Agricultural College

- 14:45 Using functional diversity to prioritize biodiversity projects Perry, Neil*, University of Western Sydney
- 15:00 Operational methods for prioritization of new protected areas, habitat maintenance, habitat restoration, and biodiversity offsetting

MOILANEN, A*, University of Helsinki

15:15 People, Production and Biodiversity Protection: Bringing it all Together Margules, C.*, Conservation International; Kirkman, A, Conservation International

Discussion follows last presentation until end of session

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• <u>CS 15: BIOGEOGRAPHY</u> Marlborough Room 3

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Tuesday, December 6, 14:00 to 16:00

- 14:00 Results of the International Wildlife Crossing Infrastructure Design Competition Robert Ament*, Montana State University - Western Transportation Institute; Anthony Clevenger, Montana State University - Western Transportation Institute; Angela Kociolek, Montana State University - Western Transportation Institute
- 14:15 The impact of urbanization on pathogens of North American wild felids Carver, S*, Colorado State University; Bevins, SN, Colorado State University; Lappin, MR, Colorado State University; Crooks, KR, Colorado State University; VandeWoude, S, Colorado State University
- 14:30 Most species could be discovered before they go extinct Costello, M J*, University of Auckland; Wilson, S J, Trinity College Dublin; Houlding, S, Trinity College Dublin
- 14:45 Improving multicriteria rating systems for setting conservation priorities Maguire, LA*, Nicholas School, Duke University
- 15:00 Estimating the turnover of Hemipteran assemblages from the phylogeny of their host plants: a tool for conservation planning?

Nipperess, DA*, Macquarie University; Beattie, AJ, Macquarie University; Faith, DP, Australian Museum; Kitching, RL, Griffith University; Hughes, L, Macquarie University

- 15:15 Phylogeography of the brachyotis group of rock-wallabies identifies two regions to focus conservation management in northern Australia
 Potter, S*, The University of Adelaide; Eldridge, MDB, Australian Museum; Taggart, DA, Conservation Ark, Royal Zoological Society of South Australia; Cooper, SJB, South Australian Museum
- 15:30 Giving Equal Conservation Priority to Ecosystems Protects Low Levels of Biodiversity Redding, DW*, Manchester Metropolitan University; Marsden, S, Manchester Metropolitan University
- 15:45 Collaborative Assessment of Extinction Risk of the Largest Avifauna in the World Luis Miguel Renjifo*, Pontificia Universidad Javeriana; Juan David Amaya, Pontificia Universidad Javeriana; María Fernanda Gómez, Pontificia Universidad Javeriana; Jorge Ivan Velázquez, Stonny Brook University

• <u>SY 7: PARTICIPATORY MARINE SPATIAL PLANNING: SHARED APPROACHES AND EXPERIENCES</u> New Zealand Room 1 Tuesday, December 6, 14:00 to 16:00 *ORGANIZER(S):* Natalie Ban, James Cook University

Escalating issues of climate change, pollution, coastal population density, and the expansion of offshore activities are increasingly

highlighting the need for comprehensive methods for ocean/coastal use management. As a result, marine spatial planning (MSP) is gaining momentum as an effective means to support coastal and marine human uses while protecting sensitive ecosystems. In recent years, countries such as the Netherlands, Philippines, United States, and Australia have begun implementing MSP to reduce user conflicts, meet commitments to biodiversity conservation, and promote the sustainable and economically efficient use of marine/coastal resources. Following this year's theme of 'Engaging Society in Conservation', a critical component frequently lacking in MSP is the human dimension - such as participatory approaches, the use of local knowledge, or methods to minimize socioeconomic impacts. Without stakeholder involvement, MSP is less likely to produce sustainable and positive outcomes for society as well as the environment. Drawing on the panelists' international experience, this symposium will discuss findings and lessons learned on critical topics such as stakeholder needs assessment, interpreting policy and science to stakeholders, successful collaboration amongst diverse stakeholder groups, innovative human use data collection methods and tools, socioeconomic impact evaluation methods, and planning tools to effectively engage stakeholders in decision-making.

14:00 A framework, methods and tools for integrating social considerations in marine spatial planning Ban, NC*, *James Cook University*

14:30 The Chagos/BIOT MPA: A cautionary case study on marine spatial planning Davies, TK*, *Imperial College London*

14:45 Incorporating zone effectiveness into marine zoning in Fiji

Azusa Makino*, Australian Research Centre of Excellence for Environmental Decisions, School of Biological Sciences, University of Queensland, Australia; Carissa J. Klein, Australian Research Centre of Excellence for Environmental Decisions, School of Biological Sciences, University of Queensland, Australia; Maria Beger, Australian Research Centre of Excellence for Environmental Decisions, School of Biological Sciences, University of Queensland, Australia; Stacy Jupiter, Wildlife Conservation Society, Fiji Country Program ; Hugh P. Possingham, Australian Research Centre of Excellence for Environmental Decisions, School of Biological Sciences, University of Queensland, Australia

15:00 Analysing spatial behaviour to understand the costs of protected areas to artisanal fishers at Lake Alaotra, Madagascar

Wallace, APC*, Centre for Environmental Policy & Division of Biology, Imperial College London, UK; Jones, JPG, Bangor University, Wales; Milner-Gulland, EJ, Centre for Environmental Policy & Division of Biology, Imperial College London, UK; Young, RP, Durrell Wildlife Conservation Trust, Jersey, Channel Islands; Nicholson, E, Centre for Environmental Policy & Division of Biology, Imperial College London, UK

15:15 Bayesian decision networks applied to management of multiple stressors in coral reefs Ban, S*, ARC Centre of Excellence for Coral Reef Studies

15:30 The role of decision support tools in marine spatial planning Centre I. Shillinger* Stanford University: Melisce M. Foley, Stanford University: Frin P.

George L. Shillinger*, Stanford University; Melissa M. Foley, Stanford University; Erin Prahler, Stanford University; Matthew Armsby, Stanford University; Heather M. Coleman, Pacific Marine Analysis and Research Association

Discussion follows last presentation until end of session

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SY 8: URBAN BIRD CONSERVATION: CONNECTING THE WORLDS OF CONSERVATION, WILDLIFE EDUCATION AND URBAN SUSTAINABILITY New Zealand Room 2

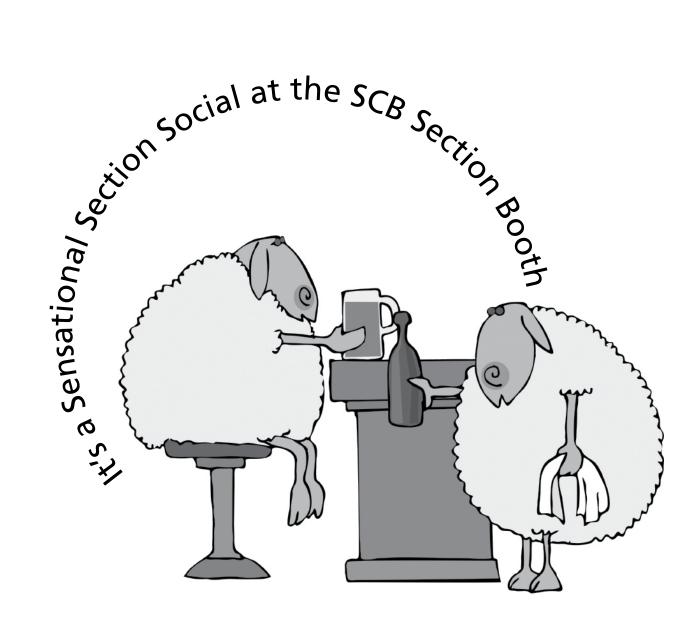
Tuesday, December 6, 14:00 to 16:00

ORGANIZER(S): Robbert Snep, Wageningen University & Research center

This symposium is directly linked to the congress theme 'Engaging society in conservation' because the focus is on: i) BIRDS: among the species groups most highly experienced and preferred by all people worldwide (not only conservationists) . ii) CITIES: with human society getting more and more urbanized (more than 50% of world population lives in cities since 2007), conservation where people live and work is urgently needed to restore the link between humans and nature. Cutting edge science will be presented on the ecology and conservation of, and education opportunities for, birds in city environments. What is the impact of urbanization on birds, how do birds survive in and adapt to urban habitats, what opportunities do birds provide for wildlife experience and conservation by citizens and business people? This symposium will bring together top scholars in the field of urban ornithology and urban bird conservation. Key note speaker is the leading urban bird expert Dr. John Marzluff, editor of the standard book 'Avian ecology and conservation in an urbanizing world'. The symposium organization is a cooperation between Birdlife Netherlands and the Dutch Wageningen University Research center. Already for a long time, the Netherlands are among the most highly urbanized countries in the world. From their urban experience, the symposium organizers recognize how putting attention on urban birds may contribute to get society more engaged in conservation.

14:00 Understanding the Connections between Birds and People in Urban Areas Informs Conservation Marzluff, JM*, University of Washington

14:30 Lessons from the Mississippi River Twin Cities Landbird Monitoring Program: Using citizen scientists to further migration research in an urban flyway.
 Blair, RB*, University of Minnesota; Homayoun, TZ, University of Minnesota



Tuesday, 6 December 7:00-8:00 P.M., New Zealand Foyer

Celebrate and get to know SCB's seven regional Sections at this sensational section social!

This special reception presents a rare opportunity to meet members from every SCB Section in one place at one time! Mix and mingle with members from the Africa, Asia, Austral and Neotropical America, Europe, Marine, North America, and Oceania Sections in a fun and relaxing environment! Introduce yourself to the Section presidents, find out what SCB's Sections are up to, join a Section that best suits your interests and talents, and have a good time with your fellow ICCB attendees!

Tuesday

- 14:45 Urban ecology in New Zealand: challenges and opportunities van Heezik, Y.M.*, University of Otago
- 15:00 A new way of promoting wildlife conservation among Dutch municipalities: benchmarking urban bird habitats Sierdsema, H.*, SOVON Dutch Centre for Field Ornithology; Louwe Kooijmans, L.H., Birdlife Netherlands; Kwak, R.G.M., Birdlife Netherlands
- 15:15 Predation in urban environments: are cities really safer for birds? Fernandez-Juricic*, Purdue University
- 15:30 Involving the business sector in conservation with (bird) habitat development at business districts and industrial areas

Snep, RPH*, Alterra - Wageningen UR; **Louwe Kooijmans, J,** Birdlife Netherlands; **WallisDeVries, MF,** Butterfly Conservation Netherlands

Discussion follows last presentation until end of session

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• <u>CS 18: RESTORATION ECOLOGY</u> New Zealand Room 3 Tuesday, December 6, 14:00 to 16:00

- 14:00 Invasive ants drive ecosystem responses to fire in New Caledonia, an international Biodiversity Hotspot Berman, M*, CSIRO-CES, Charles Darwin University, University of Montpellier 2; Andersen, AN, CSIRO-CES; Austin, CM, Charles Darwin University; Gaucherel, C, Institut Francais de Pondichery
- 14:15 Forest management plan to restore foraging habitat of endangered species Golden eagle Lehima T* Graduate School of Science and Technology Nijagta University: Selvijima T. Graduate School

Ishima, T*, Graduate School of Science and Technology, Niigata University; Sekijima, T, Graduate School of Science and Technology, Niigata University

14:30 Managing habitat for endangered species: Carnaby's black-cockatoo, food resources and time since last fire Valentine, LE*, WA State Centre of Excellence for Climate Change, Woodland and Forest Health; Wilson, BA, Department of Environment and Conservation, Bentley; Stock, WD, School of Natural Sciences, Edith Cowan University; Fleming, PA, Veterinary and Biomedical Sciences, Murdoch University; Hardy, GEStJ, Biological Sciences and Biotechnology, Murdoch University; Hobbs, RJ, School of Plant Biology, University of Western Australia

14:45 Repair and Recovery of Damaged Nature

Kareiva, P., The Nature Conservancy; Jones, H.*, UC Santa Cruz; Marvier, M., Santa Clara University; Fuller, E., The Nature Conservancy; Zavaleta, E., UC Santa Cruz

15:00 Listening and learning: kiwi conservation through calls

Digby, AP*, Victoria University of Wellington; **Bell, BD,** Victoria University of Wellington; **Teal, PD,** Victoria University of Wellington

15:15 Saving wide ranging species: cheetah and wild dog

Auckland; Murphy, E, Dept of Conservation

Durant, SM*, Zoological Society of London/Wildlife Conservation Society; **Purchase, N,** Zoological Society of London/Wildlife Conservation Society; **Ogada, M,** Zoological Society of London/Wildlife Conservation Society; **Woodroffe, R,** Zoological Society; **Woodroffe, R,** Zoologic

- 15:30 Striving for advances in stoat, feral cat and rodent control Eason, CT*, Lincoln University; Blackie, H, Lincoln University; MacMorran, D, Connovation Ltd; Shapiro, L, Connovation Ltd; Conole, D, University of Auckland; Rennison, D, University of Auckland; Brimble, M, University of
- 15:45 Using next-generation sequencing to investigate the diet of an endangered landsnail: a detective story
 Boyer, S*, Lincoln University, Ecology Department; Wratten, SD, Bio-Protection Research Centre, Lincoln University;
 Holyoake, A, Bio-Protection Research Centre, Lincoln University; Cruickshank, RH, Lincoln University, Ecology Department;
 Abdelkrim, J, University of Otago

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SY 6: HUMAN DECISION-MAKING IN CONSERVATION AND NATURAL RESOURCE MANAGEMENT: UNITING TOP-DOWN AND BOTTOM-UP APPROACHES New Zealand Room 4 Tuesday, December 6, 14:00 to 16:00

ORGANIZER(S): Emily Nicholson, Nils Bunnefeld, E.J. Milner-Gulland, Imperial College London

Human behaviour and decision-making are intrinsic parts of conservation and natural resource management (NRM). Both top-down management decisions and the bottom-up responses of local resource users directly affect management effectiveness. Management Strategy Evaluation (MSE) provides a framework for including top-down and bottom-up behaviour and accounting for uncertainty in management using models. MSE was developed in fisheries but holds potential for application beyond, in particular in conservation. A much-needed extension of MSE is more explicit incorporation of resource user behaviour, including

incentives for complying with rules, and effects of management such as displacement of harvesting to other areas or activities. We bring together researchers from conservation, NRM and fisheries, to present cutting-edge work on human decision-making at multiple levels. We cross disciplinary boundaries to identify ways forward in research and its effective application. We begin with a keynote on the potential for including top-down and bottom-up decisions in MSE beyond fisheries, followed by the latest fisheries research, current terrestrial applications, including resource user behaviour, and how MSE has influenced real-world management. The symposium is directly relevant to the meeting theme: "Engaging society in conservation" requires conservation scientists to include human behaviour directly in decision-making processes as stakeholders and as part of the system.

- 14:00 Integrating fisheries approaches and household utility models for improved resource management Milner-Gulland, E.J.*, *Imperial College London*
- 14:15 MSE in fisheries: current state of the art and what is to come Fulton, EA*, CSIRO Marine and Atmospheric Research
- 14:30 Taking MSE to terrestrial wildlife management: linking modelling, monitoring and management Chee, YE*, University of Melbourne; Wintle, BA, University of Melbourne
- 14:45 The role of human decision-making for the sustainability of trophy hunting Nils Bunnefeld*, Imperial College London
- 15:00 Data-poor management of African lion hunting: how to set quotas when the population size is unknown Edwards, CTT*, Imperial College London; Bunnefeld, N, Imperial College London; Balme, G, Panthera; Milner-Gulland, EJ, Imperial College London
- 15:15 Modelling the behaviour of local resource users: grazing, the environment, and institutions McAllister, RRJ*, CSIRO Ecosystem Sciences
- 15:30 MSE in Fisheries: Broadening the scope from single species approaches Dichmont, Cathy*, CSIRO Marine and Atmospheric Research

Discussion follows last presentation until end of session

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• <u>CS 20: ADAPTIVE MANAGEMENT AND MONITORING</u> Parnell Room Tuesday, December 6, 14:00 to 16:00

14:00 Coffee habitat complexity influences black-throated blue warbler use of Jamaican coffee farms: implications for an ecosystem service

Campos, BR*, Humboldt State University; Johnson, MD, Humboldt State University

- 14:15 Exploring benefits of interactions between vultures and famers through multi-agent modelling Dupont, H*, CNRS; Bobbe, S, Centre Edgar Morin; Sarrazin, F, CNRS
- 14:30 A framework for assessing the vulnerability of Australia's elapid snakes to climate change Cabrelli, AL*, *Macquarie University*; Hughes, L, *Macquarie University*
- 14:45 Optimal survey effort for threatened species during environmental impact assessments Garrard, GE*, University of Melbourne; McCarthy, MA, University of Melbourne; Bekessy, SA, University of Melbourne; Wintle, BA, University of Melbourne
- 15:00 The Wildlife Picture Index: Monitoring Biodiversity in Mongolia

 Townsend, SE*, ZSL/Wildlife Ecology & Consulting; Galtbalt, B, Steppe Forward Program/ZSL; Myagmar, M, Steppe

 Forward Program/ZSL; Baillie, JEM, Zoological Society of London
- 15:15 Gaps on pronghorn conservation in Mexico List, R*, Instituto de Ecologia Universidad Nacional Autónoma de México; Valdés, M, Instituto de Ecologia Universidad Nacional Autónoma de México; Zarza, H, Instituto de Ecologia Universidad Nacional Autónoma de México

15:30 Advances in Species Recognition and Small Animal Monitoring Blackie, H.M.*, Centre of Wildlife Management and Conservation, Lincoln University; Woodhead, I., Lincoln Ventures Limited; Diegel, O., Creative Industries Research Institute, Auckland University of Technology; MacMorran, D., Connovation Ltd; Eason, C., Centre of Wildlife Management and Conservation and Connovation Ltd

15:45 Initial steps toward a U.S. Biodiversity Observation Network Leidner, AK*, AAAS Science & Technology Policy Fellow, Earth Science Division, NASA Headquarters, Washington, DC, USA; Howie, SL, NatureServe, 4001 Discovery Drive, Suite 2110, Boulder, CO, USA; Geller, GN, NASA Ecological Forecasting Program and Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, USA



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<u>CS 22: SPATIAL ECOLOGY AND CONSERVATION</u>

Epsom Room 3

Tuesday, December 6, 16:30 to 17:30

- 16:30 Impacts of the expansion of sugarcane on freshwater communities in biodiversity hotspots Schiesari, L*, University of Sao Paulo
- 16:45 Acacia trees as a keystone resource for insectivorous desert-dwelling bats Hackett, TD*, University of Bristol; Korine, C, Ben Gurion University; Holderied, MW, Univsity of Bristol
- 17:00 The threat status of New Zealand's naturally uncommon ecosystems Holdaway, R.J.*, Landcare Research; Wiser, S.K., Landcare Research; Smale, M., Landcare Research; Clarkson, B., Landcare Research; Williams, P.A., Landcare Research
- 17:15 Measuring habitat loss for conservation research: A multi-scale comparison of global land cover products and a framework for the future Bogich, TLB*, *Princeton University;* Zambrana-Torrelio, C, *EcoHealth Alliance;* Ramunkutty, N., *McGill University;* Balmford, AP, *Cambridge University*

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• <u>SPEED 21: CONSERVATION POLITICS</u> Epsom Rooms 1&2 Tuesday, December 6, 16:30 to 17:30

16:30 Impact assessment of dams on population dynamics of mahseer fishes (*Tor* species) in Yamuna river of Garhwal region, India

Malik, D.S.*, Gurukula Kangri University, Haridwar, India

- 16:34 Underwater acoustic pollution: lethal and behavioural effects. Examples of society driven regulations. Aguilar, NA*, La Laguna University. Spain/ Univ. Auckland, NZ
- **16:38 Sustainable Forest Management through Community Participation in Rajasthan.** DR.PARUL GUPTA*, BBD Government College, Chimanpura, Shapura, Jaipur, Rajasthan, INDIA
- 16:42 Near real-time monitoring systems for deforestation, illegal logging, and fire John Musinsky*, Conservation International
- 16:46 Exploring the Evidence, Risks and Benefits of Payments of Ecosystem Services (PES) as a Mechanism for Supporting Conservation and Community Development
 Ingram, Jane Carter*, Wildlife Conservation Society; Wilkie, David, Wildlife Conservation Society; Olmsted, Paige, Columbia University; Naeem, Shahid, Columbia University
- 16:50 Measuring Biodiversity Offsets: market funding for restoration Craig, JL*, University of Auckland; Mitchell, NM, University of Auckland; Ussher, G, Tonkin & Taylor; Ward, G, Department of Conservation
- 16:54 Understanding Needs to more fully integrate ecosystem-based management into the seafood industry Short, K.M*, Imperial College; Milner-Gulland, E.J, Imperial College; Agnew, D, MRAG; Martin, D, Seaweb

Discussion follows last presentation until end of session

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Marlborough Room 1 Tuesday, December 6, 16:30 to 17:30

- 16:30 Tiritiri Matangi Island, New Zealand: Conservation education through community involvement Galbraith, MP*, Unitec Institute of Technology; Jones, G, Unitec Institute of Technology
- 16:45 Indirect poisoning: Impact on two critically endangered *Gyps* vultures in Assam, India Lahkar, Kulojyoti*, Wildlife Conservation and Study Centre; Phukan, Mridupaban, Wildlife Conservation and Study Centre; Risebrough, Robert W., The Bodega Bay Institute
- 17:00 A role for anthropomorphism in motivating community participation in wildlife conservation Smith, AM*, Monash University; Smith, L, Monash University; Weiler, B, Monash University
- 17:15 Improving conservation education and connecting families to nature through programs targeting the wildlife values of the public

Thomas, Rebecca*, Colorado State University; **Teel, Tara,** Colorado State University & President of the SCB Social Science Working Group; **Bruyere, Brett,** Colorado State University; **Manfredo, Michael,** Colorado State University

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• <u>STUDENT AWARD PRESENTATIONS</u> Marlborough Room 2 Tuesday, December 6, 16:30 to 17:30

16:30 How robust are biodiversity hotspots to climate change?

Iwamura, T*, The University of Queensland; Wilson, K.A, The University of Queensland; Possingham, H.P, The University of Queensland

16:45 Interacting effects between climate change and habitat loss on biodiversity: a systematic review and meta-analysis Chrystal S. Mantyka-Pringle*, University of Queensland, Centre for Spatial Environmental Research, School of Geography, Planning and Environmental Management; University of Queensland, Australian Research Council Centre of Excellence for Environmental Decisions; Tara G. Martin, University of Queensland, Australian Research Council Centre of Excellence for Environmental Decisions; CSIRO Ecosystem Sciences; Jonathan R. Rhodes, University of Queensland, Centre for Spatial Environmental Research, School of Geography, Planning and Environmental Management; University of Queensland, Australian Research Council Centre of Excellence for Environmental Decisions

17:00 The decline of Mexico's cloud forests because of climate change

Rocio del Carmen Ponce Reyes*, Ecology Centre, UQ; James E.M. Watson, Global Conservation Programs, Wildlife Conservation Society; Victor Hugo Reynoso, Instituto de Biología, UNAM; Jeremy VanDerWal, Centre for Tropical Biodiversity and Climate Change Research, JCU; Robert L. Pressey, ARC Centre of Excellence for Coral Reef Studies, JCU; Hugh P. Possingham, Ecology Centre, UQ and ARC Centre of Excellence for Environmental Decisions

17:15 Predicting how the world's largest fish will fare under climate change

Sequeira, Ana *, The Environment Institute and School of Earth & Environmental Sciences, University of Adelaide; Mellin, Camille, Australian Institute of Marine Science; Meekan, Mark G., Australian Institute of Marine Science; Bradshaw, Corey J. A., The Environment Institute and School of Earth & Environmental Sciences, University of Adelaide and South Australian Research and Development Institute

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<u>CS 25: SOCIAL SCIENCE</u>
Marlborough Room 3
Tuesday, December 6, 16:30 to 17:30

16:30 Patterns of bushmeat consumption in eastern Madagascar

Jenkins, R K B, Bangor University, UK & Madagasikara Voakaj, Madagascar; Keane, A M*, University College London & Institute of Zoology, UK; Rakotoarivelo, A A, Madagasikara Voakajy, Madagascar; Rakotomboavonjy, V, Madagasikara Voakajy, Madagascar; Randrianandrianina, F H, Madagasikara Voakajy, Madagascar; Razafimanahaka, H J, Madagasikara Voakajy, Madagascar; Ralaiarimalala, S R, Madagasikara Voakajy, Madagascar; Jones, J P G, Bangor University, UK

16:45 Predicting wildlife friendly landscaping preferences among urban residents

Rodriguez, S. L.*, North Carolina State University; Peterson, M. N., North Carolina State University; Thurmond, B., North Carolina State University; McHale, M., North Carolina State University; Cook, M., North Carolina State University; Grove, M., USDA Forest Service

17:00 A quantitative demonstration of child orientated environmental educations ability to influence household behaviours

Damerell, Peter*, Department of Life Sciences, Silwood Park, Imperial College London; **Howe, Caroline,** Centre for Environmental Policy, Imperial College London; **Milner-Gulland, Eleanor Jane,** Department of Life Sciences, Silwood Park, Imperial College London, Centre for Environmental Policy, Imperial College London 17:15 Brains versus Brawn: the role of knowledge exchange and policy influence on the resilience of a marine species comanagement network

Weiss, Kristen C.*, James Cook University; Hamann, Dr. Mark , James Cook University; Marsh, Dr. Helene, James Cook University

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<u>CS 26: LANDSCAPE ECOLOGY</u>

New Zealand Room 1 Tuesday, December 6, 16:30 to 17:30

- 16:30 Impacts of community-based natural resource management on large vertebrate habitat with implications on landscape scale conservation in Nepal.
 Carter, Neil*, Michigan State University; Shrestha, Binoj, Institute for Social and Environmental Research Nepal; Dangol, Dharma, Institute for Social and Environmental Research Nepal; Campa III, Henry, Michigan State University; Liu, Jianguo, Michigan State University
- 16:45 Towards participatory ecosystem-based planning in Indonesia: a case study in the Moluccas Laumonier, Y*, CIRAD-CIFOR; Locatelli, B, CIRAD-CIFOR; Bourgeois, R, CIRAD; Shantiko, B, CIFOR
- 17:00 Can site prioritisation for one taxonomic group conserve other taxonomic groups?
 Smith, R*, Ecosystem Management, School of Environmental and Rural Science, University of New England; Reid, N, Ecosystem Management, School of Environmental and Rural Science, University of New England
- 17:15 Valley oak recruitment: climate change, community dynanics and the importance of regional-scale resourse gradients

McLaughlin, BC*, UC Santa Cruz; Zavaleta, E, UC Santa Cruz

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• <u>CS 27: POPULATION DYNAMICS</u> New Zealand Room 2 Tuesday, December 6, 16:30 to 17:30

- 16:30 Effects of Food Supplementation on Black-Tailed Prairie Dogs (*Cynomys ludovicianus*) at their Northern Extent Lloyd, NA*, Centre for Conservation Research, Calgary Zoo; Smith, D, Centre for Conservation Research, Calgary Zoo; Moehrenschlager, A, Centre for Conservation Research, Calgary Zoo
- 16:45 Shedding moonlight on the activity patterns of the members of the last-remaining intact large carnivore guild Cozzi, G, Zurich University; Broekhuis, F*, Oxford University; McNutt, JW, Botswana Predator Conservation Trust; Turnbull, LA, Zurich University; Macdonald, DW, Oxford University; Schmid, B, Zurich University
- 17:00 Conservation of endangered woodlands in a patch dynamic system Good, M.K*, University of New England; Clarke, P., University of New England; Price, J. N., University of Tartu; Reid, N., University of New England
- 17:15 The effects of human activities on the avian scavenger community in Masai Mara National Reserve, Kenya Kendall, Corinne*, *Princeton University*

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<u>CS 28: RESTORATION ECOLOGY</u>

New Zealand Room 3

Tuesday, December 6, 16:30 to 17:30

16:30 Acoustic activity as an index of relative abundance at seabird colonies: a low-cost and scalable tool for measuring conservation outcomes.

Borker, AL*, University of California Santa Cruz; **McKown, MW,** University of California Santa Cruz; **Ackerman, JT,** U.S. Geological Survey, Western Ecological Research Center; **Eagles-Smith, CA,** U.S. Geological Survey, Western Ecological Research Center; **Croll, DA,** University of California Santa Cruz; **Tershy, BR,** University of California Santa Cruz

- 16:45 Restoring denuded, post-bleached reefs in Tanzania: testing the second phase of the Gardening Concept Nsajigwa Emmanuel Mbije*, Sokoine University of Agriculture; Ehud Spanier, Haifa University; Baruch Rinkevich, Israel Limnology Institute
- 17:00 Conservation on private lands: the need for a science-based framework Wittmer, HU*, School of Biological Sciences, Victoria University of Wellington; Marshall, AJ, Department of Anthropology, University of California, Davis
- 17:15 Using a state-and-transition model to guide cost-efficient decision making for woodland restoration Rumpff, L*, University of Melbourne; Vesk, P.A, University of Melbourne; Duncan, D.H., Arthur Rylah Institute, Department of Sustainability and Environment; Keith, D.A., Office of Environment and Heritage NSW; Wintle, B.A., University of Melbourne

New Zealand Room 4 Tuesday, December 6, 16:30 to 17:30

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16:30 Identification of hotspots of genetic diversity: Overlaying multiple phylogeographic information of endangered wetland plants in central Honshu Island, Japan

Saeki, I*, Yokohama National University; Koike, F, Yokohama National University; Murakami, N, Tokyo Metropolitan University

16:45 Return of the living dead: Protecting the rediscovered weevil, *Hadramphus tuberculatus*, through historic DNA and the community

Fountain, ED*, Lincoln University; Bowie, M, Lincoln University; Cruickshank, R, Lincoln University; Paterson, A, Lincoln University

17:00 Conservation genetics of Malleefowl (Leipoa ocellata)

Cope, T.M*, University of Melbourne; **Mulder, R,** University of Melbourne; **Dunn, P,** University of Wisconsin, Milwaukee; **Donnellan, S,** South Australian Museum

17:15 Assessing patterns of genetic diversity: essential data for implementing plant reintroduction strategies Byrne, M*, Science Division, Department of Environment and Conservation; Coates, DJ, Science Division, Department of Environment and Conservation; Millar, MA, Science Division, Department of Environment and Conservation

• <u>CS 30: ENVIRONMENTAL SOCIOLOGY & CONSERVATION PSYCHOLOGY</u> Parnell Room Tuesday, December 6, 16:30 to 17:30

- 16:30 Relations between urban bird and plant communities and human well-being and connection to nature Luck, G.W.*, Institute for Land, Water and Society, Charles Sturt University; Davidson, P., Institute for Land, Water and Society, Charles Sturt University; Boxall, D., School of Psychology, Charles Sturt University; Smallbone, L., Institute for Land, Water and Society, Charles Sturt University
- 16:45 The Case of the Trumped-up Corella: How Do Human Values Bias Wildlife Conservation? Ainsworth, GB*, Charles Darwin University; Aslin, HJ, Charles Darwin University; Garnett, ST, Charles Darwin University; Weston, MA, Deakin University

17:00 Knowledge of Indonesian University Students on Biological Commons Dilemmas Koch, Sebastian*, Georg-August-Universität Göttingen, Albrecht-von-Haller-Intitute for Plant Sciences, Didactics of Biology; Barkmann, Jan, Georg-August-Universität Göttingen, Department of Agricultural Economics and Rural Development; Sundawati, Leti, Institut Pertanian Bogor, Faculty of Forestry, Department of Forest Management; Bögeholz, Susanne, Georg-August-Universität Göttingen, Albrecht-von-Haller-Intitute for Plant Sciences, Didactics of Biology

17:15 People and Park Relations in and around Chobe National Park, Botswana Gupta, A.C. *, University of California, Berkeley

Special Evening Plenary: 6:00 P.M. to 7:00 P.M.

PLENARY SESSION 18:00-19:00, New Zealand Rooms

Bird conservation in New Zealand: progress and problems

Mick Clout, Professor of Conservation Ecology, University of Auckland

New Zealand had a unique endemic avifauna, which was devastated by human settlement and subsequent introductions of invasive mammalian predators. In the past few decades, good progress has been made with the eradication of invasive mammals from many offshore islands and their management at mainland sites, aiding the recovery of several threatened bird species. However, significant problems remain, including the threat of reinvasions by invasive mammals and the need for ongoing intensive management of some threatened bird populations. Progress in the first decade of the 21st century will be reviewed and challenges for the future considered, using examples from past and current research.



<u>SCB Sections Reception</u> 19:00 to 20:00 New Zealand Foyer

Celebrate and get to know SCB's seven regional Sections at this sensational section social! This special reception presents a rare opportunity to meet members from every SCB Section in one place at one time! Mix and mingle with members from the Africa, Asia, Austral and Neotropical America, Europe, Marine, North America, and Oceania Sections in a fun and relaxing environment! Introduce yourself to the Section presidents, find out what SCB's Sections are up to, join a Section that best suits your interests and talents, and have a good time with your fellow ICCB attendees!

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<u>NATIONAL GEOGRAPHIC FILM PREMIER: HUNT FOR THE SHADOW CAT</u> 20:00 to 21:30, New Zealand Room

Big Cat tracker Boone Smith joins Panthera scientists in the rain forests of Belize and Brazil's Pantanal to collar and film the iconic jaguar. Looking for elusive females, the team sees firsthand how hard they are to find, what threats they face, and -- with the help of motion-sensing trail cams and National Geographic's specially-designed Crittercams -- how they spend their days when they don't know anyone is watching.

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• WORKSHOP 10: Supercharge your science 19:00 to 21:00, Epsom 3

Organizer(s): William Laurance, James Cook University; Corey Bradshaw, University of Adelaide

In this dynamic and fun two-hour workshop, we will highlight a range of strategies for increasing your scientific impact and productivity. This workshop emphasizes transcending scientific audiences to engage the popular media and general public, and thus is highly relevant to the theme of SCB 2011. The workshop is divided into three parts. Part 1 is a 25-minute talk by Prof. William Laurance entitled "Reaching Out: Maximizing Your Public Impact". In it Laurance highlights a variety of approaches for engaging journalists, getting broader recognition for your work, and becoming a science and conservation leader. Part 2, by Prof. Corey Bradshaw, is a timely 30-minute talk entitled "Using Social Media to Supercharge Your Science". Bradshaw tells how blogging, tweeting, webzines, Facebook, and other social media can dramatically increase your ability to reach a diverse audience. Part 3, by Laurance, is an engaging 35-minute talk entitled "How to be More Prolific: Strategies for Writing and Publishing Scientific Papers". Laurance, the author of over 300 scientific and popular articles, highlights strategies for writing better and more easily, producing dynamic research, and dealing with editors and reviewers. The symposium includes a 15-minute coffee break and 15 minutes for questions and discussion. Laurance and Bradshaw have run this workshop twice previously to rave reviews.

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WORKSHOP 16: IUCN SSC/WCPA taskforce workshop: Consolidating the criteria for assessing site-level biodiversity conservation significance
 19:00 to 21:00, Parnell Room

Organizer(s): Thomas Brooks, NatureServe

The primary threat to biodiversity remains the destruction of important natural habitats, and so the primary response must remain to safeguard these places. But how do we know where these places are? Over the last decade, great advances have been made to answer this, both from theory, with the emergence of the sub-discipline of systematic conservation planning, and from practice, with extensive application of methods to identify important sites (IBAs, IPAs, AZE, KBAs, etc). Now, the IUCN World Commission on Protected Areas and Species Survival Commission have convened a joint taskforce (http://www.iucn.org/biodiversity_and_protected_areas_taskforce), an objective of which is to consolidate the criteria for such assessment of biodiversity conservation significance at the site level. Operating through a series of technical taskgroups and regional workshops, the taskforce will produce recommendations to the 2012 World Conservation Congress. The location of the 25th ICCB in Christchurch, New Zealand, provides a unique opportunity for the taskforce to convene such a regional workshop, focused on seeking input from an Oceania-specific perspective. The ultimate objective of this component of the IUCN taskforce's work is the establishment of a global standard for site conservation significance -- a key tool for engaging society in conservation at all levels from local and indigenous communities, through national governments, up to the international level of companies and treaties.

ICCB Special Section Conservation Biology Special 25th Anniversary Sections

Two special sections and two additional papers in the December 2011 issue of *Conservation Biology* mark the 25th anniversary of the journal with a focus on potential future advances in conservation science and its application. Guest editor Kent Redford compiled nine essays by people outside the traditional community of conservation professionals that examine how the success of conservation can be increased in the next 25 years, and guest editor Eric Dinerstein assembled eight essays on diverse topics that are likely to be emphasised by conservation professionals in the years ahead. Josh Drew provides an assessment of how the historical strengths of natural history institutions can enhance research and engage the public in novel ways, and Murray Rudd explores the extent to which there is consensus among conservation professionals on conservation strategies and the science underlying them. This suite of articles illustrates that societal priorities and capacity are the principal determinants of whether contemporary biological diversity will persist and identifies where objective, rigorous social and natural science are most likely to increase the effectiveness of conservation actions once a value-based decision to act has been made.

A copy of the special section has been provided to all attendees at ICCB 2011 as a PDF file on the USB stick received upon registration.

Special Section 1: The Futures of Conservation

Introduction (p. 1072): Kent H. Redford & Erica Fleishman

Conservation Biology through the Lens of a Career in Salmon Conservation (p. 1075): Charles Conn

Conservation Means Behavior (p. 1080): P. Wesley Schultz

Indigenous Alliances for Conservation in Bolivia (p. 1084): R. L. E. Painter, A. Duran, & E. Miro

Finding Balance between Human Need and Global Stewardship (p. 1087): Jon Waterhouse

A Vision of Conservation from School (p. 1091): José Antonio López Tercero Caamaño

Walking the Path of Environmental Buddhism through Compassion and Emptiness (p. 1094): H.H. 17th Gyalwang Karmapa, Ogyen Trinley Dorje

Competing Cultures of Conservation (p. 1098): Rebecca Hardin

Cultivating a Constituency for Conservation (p. 1103: Lowell Pritchard

Reaching the U.S. Public through Their Patriotism, Pastors, and Pockets (p. 1108): Paul O'Brien

Special Section 2: Conservation Science in the Coming Decades

Introduction (p. 1112): Eric Dinerstein

Systemic Conservation, REDD, and the Future of the Amazon Basin (p. 1113): Daniel C. Nepstad, David G. McGrath, & Britaldo Soares-Filho

Land, Food, and Biodiversity (p. 1117): David W. McLaughlin

Biodiversity Offsets and Infrastructure (p. 1121): Juan David Quintero & Aradhna Mathur

Conservation in Sustainable-Use Tropical Forest Reserves (p. 1124): Carlos A. Peres

Marine Protected Areas and the Governance of Marine Ecosystems and Fisheries (p. 1130): Bonnie J. McCay & Peter J. S. Jones

The Future of Payments for Environmental Services (p. 1134): Paul J. Ferraro

Climate Change, Connectivity, and Conservation Success (p. 1139): Lee Hannah

Future Human Intervention in Ecosystems and the Critical Role for Evolutionary Biology (p. 1143): J. J. Hellmann & M. E. Pfrender

Conservation Practice and Policy

Knowledge Gain and Behavioral Change in Citizen-Science Programs (p. 1148): Rebecca C. Jordan, Steven A. Gray, David V. Howe, Wesley R. Brooks & Joan G. Ehrenfeld

Incorporating Effectiveness of Community-Based Management in a National Marine Gap Analysis for Fiji (p. 1155): Morena Mills, Stacy D. Jupiter, Robert L. Pressey, Natalie C. Ban & James Comley

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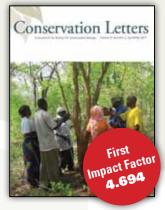
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WILEY-BLACKWELL

Wednesday, December 7

chedule at a glance

		¢	<u>مه</u>					5	K BP	
Parnell		Symp. 14 Management of wildlife diseases	SCB Austral & Neotropical America Section Meeting		Symp. 17 Invasive ant species			Contr. Sess. Conservation on private lands		9
New Zealand 4		Symp. 12 Increasing scientist involvement in grassroots action	SCB Oceania Section Meeting	-	Symp. 19 Conservation & poverty reduction			Contr. Sess. Alien & Invasive Species		
New Zealand 3		Symp. 11 Priorities for invasive alien species eradication	Marine Think Tank Lunch Session (2)		Symp. 18 Science-driven cooperative initiatives			Contr. Sess. Social Science		tangitoto Island 4. 00 P.M.
New Zealand 2 rward	and Room	Contr. Sess. Landscape Ecology	WS 11 The publication process for SCB's journals		Contr. Sess. Landscape Ecology	Room		Contr. Sess. Landscape Ecology		Evening Boat Cruise & Dinner to Rangitoto Island 7:00 P.M. to 10:00 P.M. Meet at Ferry Terminal at 7:00 P.M. 99 Quay Street
New Zealand 1 sking back to look fo aurance & Mike M a <i>nd Rooms</i>	Coffee Break: 10:00-10:30 A.M., Auckland Room	Symp. 15-1 International Year of Forests, SCB Presidents Symposium		Management Network	Symp. 15-2 International Year of Forests, SCB Presidents Symposium	:30 P.M., Auckland		Contr. Sess. Conservation genetics & medicine		Evening Boat C 7. Meet at
 Marlborough New Zealand Ne 3 1 Plenary: Mike Walker, Looking back to look forward Awards Ceremony: Bill Laurance & Mike Mascia New Zealand Rooms 		Contr. Sess. Community-driven conservation	Teaching Adaptive Management Network		Contr. Sess. Community-driven conservation	Coffee Break: 4:00-4:30 P.M., Auckland Room		Contr. Sess. Adaptive management & monitoring		ing Reception to Late Garden Bar btreet West
Marlborough 2 Awa		Symp. 13 Conservation in urban environments	₩ N H N N	Symp. 20 Conservation success in a changing world			Contr. Sess. Disturbance ecology		Student Networking Reception 6:30 P.M. to Late Empire Tavern Garden Bar 137 Victoria Street West	
Marlborough 1		Contr. Sess. Ecological restoration & end. species recovery		Contr. Sess. Ecological restoration & end. species recovery			Contr. Sess. Restoration Ecology (Alien & Invasive species)			
Epsom 1&2 VI.		:30 P.M Speed Sess. Comunication, outreach, & education		P.M	Speed Sess. Conservation management		P.M.	Speed Sess. Conservation Genetics		vards
Epsom 3 8:25 - 10:00 A.M.		10:30 A.M 12:30 P.M Symp. 16 Spee Conservation Comu translocations outre edu	SCB Chapters Business Meeting	2:00 P.M 4:00 P.M	Symp. 21 Quantitative tools to identify end. species critical habitat		4:30 P.M 6:30 P.M.	Contr. Sess. Climate Change		6:30 P.M. Onwards

Morning session: 8:25 A.M. to 10:00 A.M., New Zealand Rooms 1-4

Announcements 8:25-8:30

PLENARY SESSION 8:30-9:30

He tirohanga ā mua, He kitenga mā muri **Looking back to look forward**

Mike Walker, School of Biological Sciences, University of Auckland

This address argues that the critical challenge facing conservation in Aotearoa-New Zealand (A-NZ) arises from world view differences between the Māori and European colonisations of A-NZ roughly 800 and 200 years ago. The Māori world view treats humanity as a non-special creation that is related to the non-human species and environments in a hyper-extended and interdependent family. By contrast, the predominantly Christian world view in A-NZ treats humanity as a special creation with dominion over non-human species and environments. Despite these philosophical differences, Maori and European colonisations each initiated a round of unrestrained exploitation of the biota causing die-down of easily obtained resources, extinctions, and ongoing environmental modification. The consequences for the Māori population of the misuse of the available biological resources included environmental and economic decline, land abandonment, internal migration, and warfare. Māori had recovered by the time of Captain Cook through better management of their own environmental impacts and use of the native biota but were then adversely affected by the environmental impact of colonisation from England and Europe. Today, Māori and non-Māori largely agree on the need for conservation of the remaining biota and environments but are suspicious of each others' motives in conservation because of their different origins and histories in A-NZ. I suggest the Treaty of Waitangi provides the only effective foundation and the greatest opportunity for collaboration between Māori and non-Māori and non-Māori and the greatest opportunity for collaboration between Māori and non-Māori and non-Māori and the greatest opportunity for collaboration between Māori and non-Māori and non-Māori and the greatest opportunity to flourish into the future.

AWARD CEREMONY 9:30-10:00

William Laurance is the Distinguished Research Professor in the School of Marine and Tropical Biology at James Cook University, Australia, and the Australian Laureate Prince Bernhard Chair in International Nature Conservation. He was given the award for his outstanding contributions to tropical conservation science and policy.

The Early Career Conservationist Award is for achievement by professionals early in their careers (no more than 10 years since leaving school). The 2011 awardee is **Michael Mascia**, a Senior Social Scientist in the Conservation Science Program at the World Wildlife Fund, in recognition of his extraordinary contributions to international biodiversity conservation policy and practice through the development, mobilization, and application of social scientific knowledge.

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COFFEE BREAK 10:00 to 10:30 Auckland Room



<u>SY 16: CONSERVATION TRANSLOCATIONS: FROM REINTRODUCTION TO ASSISTED COLONIZATION</u> Epsom Room 3

Wednesday, December 7, 10:30 to 12:30

ORGANIZER(S): Ewen, JG, Zoological Society of London; Seddon, P., University of Otago; Armstrong, A., Massey University, Parker, K., Massey University

Reintroduction is a widespread technique for conserving endangered species but there is growing debate over whether species should be translocated outside their recorded range to address extinction risks such as climate change. Existing terminology refers to such interventions as "conservation introductions" i.e. movements of organisms to suitable habitat outside their historic range. Proactive Assisted Colonization is contentious, creating a rift between those who see moving individuals to more climatically suitable conditions as a tool to prevent extinctions, and those who consider the risk to both the organisms and recipient communities as too high to warrant its use. To address those risks and in anticipation of increasing attempts to establish species outside their historic range, the International Union for Conservation Purposes, organised by the Re-introduction Specialist and the Invasive Species Specialist groups. The Task Force is engaging the biological and social science community in a review of IUCN policy on all forms of Conservation Translocation, from reintroduction to assisted colonization. Ecologists, population modelers, geneticists, animal husbandry professionals, veterinarians, and conservation NGOs and community groups all have important contributions to make, with differing goals and approaches. Our symposium brings experts from these various fields together to present and discuss the creation of a unified framework for conservation translocations.

- 10:30 Conservation translocations: from reintroduction to assisted colonisation. Stanley Price, MR, University of Oxford; Seddon, P*, University of Otago; Moehrenschlager, A, Calgary Zoo
- 11:00 Decision making in Reintroduction and Assisted Colonisation Armstrong, DP*, Massey University; Rout, T.M., University of Melbourne; Parlato, EH, Massey University
- 11:15 Demo-genetic processes and evaluation of Conservation Translocation outcomes Sarrazin, Francois*, University Pierre and Marie Curie; Jamieson, Ian G., University of Otago; Robert, Alexandre, Muséum National d'Histoire Naturelle



Engaging Society in Forest Conservation: International Year of the Forests

In recognition of the International Year of Forests, SCB has organized a two-part symposium featuring talks from leading forest experts and a special roundtable discussion from SCB Section Presidents. The symposium will draw attention to the plight of the world's forests and while encouraging enhanced measures to conserve forests and their life-giving benefits.

Wednesday (TODAY!), 7 December, NZ Room 1

Part I: Symposium 10:30 A.M. – 12:30 P.M.

Part II: Symposium & SCB Presidents Roundtable with Public Forum 2:00 – 4:00 P.M.

- 11:30 Advocacy, Opportunities and Challenges; Engaging the Public in Conservation Translocations Parker, K.A.*, Massey University; Saunders, A.J., Landcare Research
- 11:45 Conservation introductions and the risk of biological invasions Genovesi, P*, ISPRA and Chair IUCN SSC Invasive Species Specialist Group
- 12:00 Disease risks and management in Conservation Translocations Ewen, J.G.*, Institute of Zoology; Sainsbury, A.W., Institute of Zoology; Jakob-Hoff, R., Auckland Zoo; McInnes, K, Department of Conservation

Discussion follows last presentation until end of session

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• <u>SPEED 31: COMMUNICATIONS, OUTREACH & EDUCATION</u> Epsom Rooms 1&2 Wednesday, December 7, 10:30 to 12:30

- 10:30 Linking ecological research to policy and practice: bridging the gap for wildlife conservation on farmland Dicks, LV*, University of Cambridge; Sutherland, WJ, University of Cambridge; Hodge, ID, University of Cambridge; Peach, W, Royal Society for the Protection of Birds; Pretty, J, University of Essex; Scharlemann, J, UNEP-World Conservation Monitoring Centre; Siriwardena, G, British Trust for Ornithology
- 10:34 Engaging the Next Generation of Pastoralists and Leaders in Community-Based Conservation in Samburu, Kenya Bruyere, Brett*, *Colorado State University*
- 10:38 350.org: A Case Study of an International Web-initiated Environmental Movement Feldpausch-Parker, AM*, SUNY-ESF; Bernacchi, LA, Texas A&M University; Parker, ID, Humboldt State University; Peterson, TR, Texas A&M University
- 10:42 Securing Coral Reef Ecosystem of Karimunjawa, Indonesia Anggoro Aji Wahyu*, Indonesian Biodiversity Research Center
- 10:46 Monitor & Manage The Marsupial Menace: Learning about biodiversity conservation through science-based computer games

Holland, EP*, Landcare Research NZ

10:50 Participatory video: An appraisal technique which encourages community communication of local environmental issues

Damerell, Peter*, Laboratorio Fauna Australis, Facultad de Agronomía e Ingeniería Forestal, Pontificia Universidad Católica de Chile; Márquez-García, Marcela, Outreach Program, Institute of Ecology and Biodiversity, Chile; Laker, Jerry,, Laboratorio Fauna Australis, Facultad de Agronomía e Ingeniería Forestal, Pontificia Universidad Católica de Chile

- 10:54 Conserving leopards in non-protected forest of Karnataka, India
 Usham Singh*, Wildlife SOS; Kartick Satyanarayan, Wildlife SOS; Geeta Seshamani, Wildlife SOS; Haobijam P.
 Meetei, Wildlife SOS; Samad Kottur, Wildlife SOS
- 10:58 Conservation Plan Implementation: Engaging People in Conservation Behaviors through Collaboration with Educators Dayer, AA, Cornell Lab of Ornithology; Ehrenberger, Kacie, Rocky Mountain Bird Observatory; Fergus, Rob*, Cornell Lab
- of Ornithology 1.02 Enhancing Conservation Practice through Effective Interdisciplinary Education
- 11:02 Enhancing Conservation Practice through Effective Interdisciplinary Education Groom, MJ*, University of Washington Bothell
- 11:06 People And Predators In A Moral Landscape: Exploring Attitudes Towards Large Carnivores To Perceptions Of Landscape

Ghosal, S.*, Norwegian University of Life Sciences (UMB)

- 11:10 Which religion has most potential to save biodiversity? Mikusinski, G.*, Swedish University of Agricultural Sciences, Department of Ecology, Grimsö Wildlife Research Station; Blicharska, M., Swedish University of Agricultural Sciences, School for Forest Management
- 11:14 Communicating about Conservation: Endangered Species Conservation on the US Gulf Coast Ragland, CJ*, Dept. Wildlife and Fisheries Sciences, Texas A&M University; Bernacchi, LA, Dept. Wildlife and Fisheries Sciences, Texas A&M University; Barbour, JB, Dept. of Communication, Texas A&M University; Peterson, TR, Dept. of Wildlife and Fisheries Sciences, Texas A&M University
- 11:18 Managing bias among experts to assess IUCN Red List status Garnett, S.T., Charles Darwin University; McBride, M., University of Melbourne; Szabo, J., Charles Darwin University; Burgman, M.A.*, University of Melbourne

11:22 Utilizing Google Earth to document land cover changes to unprecedented levels: A case-study in West and Central Africa

Jacobson, A*, Duke University; Pimm, S, Duke University; Dollar, L, National Geographic Society; Riggio, J, Duke University

Discussion follows last presentation until end of session

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- <u>CS 33: ECOLOGICAL RESTORATION AND RECOVERY OF ENDANGERED SPECIES</u> Marlborough Room 1 Wednesday, December 7, 10:30 to 12:30
 - 10:30 Disrupted seasonality by dams drives population declines and range-wide losses of California river-breeding frogs Palen, WJ*, Simon Fraser University; Kupferberg, SJ, University of California-Berkeley; Lind, AJ, US Forest Service; Bobzien, S, East Bay Regional Parks; Catenazzi, A, Gonzaga University; Drennan, J, Garcia and Associates; Power, ME, University of California-Berkeley
 - 10:45 The 'genetic rescue' of inbred populations using translocations Heber, S.*, University of Canterbury, Christchurch; Briskie, J.V., University of Canterbury, Christchurch
 - 11:00 Niche Partitioning and Ontogenic Changes in Feeding Habits of Green Sea Turtles (*Chelonia mydas*) at a Foraging Ground in the Central Pacific

McFadden, K*, American Museum of Natural History; **Sterling, E.,** American Museum of Natural History; **Arengo, F.,** American Museum of Natural History; **Vintinner, E.,** American Museum of Natural History; **Gomez, A.**, American Museum of Natural History; **E. Naro-Maciel,** City University of New York, Staten Island

11:15 Winter migration patterns and habitat use by adult northern fur seals: filling in gaps to aid conservation and management of a declining species
 Sterling, JT*, National Marine Mammal Laboratory, Seattle, WA; Springer AM, Institute of Marine Science, University of Alaska Fairbanks; Iverson SJ, Department of Biology, Dalhousie University; Johnson SP, Johnson Veterinary Service; Pelland

N, School of Oceanography, University of Washington; Johnson DS, National Marine Mammal Laboratory, Seattle, WA

- 11:30 Can we construct a comprehensive marine reserve system just using environmental domains? Sutcliffe, P.R.*, University of Queensland; Klein, C.J., University of Queensland; Possingham, H.P., University of Queensland
- 11:45 Rewilding of the South China Tiger (*Panthera tigris amoyensis*) Petri Viljoen*, Wildlife Consultant; Jim Sanderson, Wildlife Conservation Network ; Gary Koehler, Independent Advisor
- 12:00 Assessing Nesting Habitat Monitoring Protocols for Bog Turtles: Do We Know What Females Really Want? Macey, S.*, Fordham University; Clark, J.A., Fordham University
- 12:15 Hunted Felids: Too Protected To Survive?
 Palazy, L, University Lyon, France; Bonenfant, C, University Lyon, France; Gaillard, J.-M., University Lyon, France; Courchamp, F*, CNRS - University Paris Sud, France

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SY 13: CONSERVING BIODIVERSITY IN URBAN ENVIRONMENTS: ENGAGING POLICYMAKERS, DEVELOPERS, AND CITIZENS Marlborough Room 2 Wednesday, December 7

ORGANIZER(S): Hostetler, M, Department of Wildlife Ecology and Conservation, University of Florida

Florida Cities are a key leverage point for connecting society with the natural environment. In this symposium, we explore the dynamic roles of policymakers, developers, and citizens and how to engage them in urban biodiversity conservation. We first present a heuristic model about the important relationship among policymakers, developers, and citizens. Policymakers create policies and programs that enable conservation practices to be adopted by developers and citizens; developers, in turn, create the framework for residential subdivisions and commercial districts that hinder or promote the conservation actions of citizens; and day-to-day decisions by citizens impact biodiversity conservation within yards, neighborhoods, and public spaces. Next, we present case studies, techniques, and programs that have successfully engaged these three decision makers in urban and urbanizing landscapes. Conserving urban biodiversity is contingent on both the design and management across multiple scales, and conservation biologists can help to achieve positive outcomes through their involvement. We discuss case examples where planners have incorporated principles and practices from conservation research into policies; techniques and programs that have shifted developer and landowner perceptions away from conventional development; and outreach programs that have changed public perceptions and increased the adoption of biodiversity conservation practices.

10:30 Conserving Urban Biodiversity: The Dynamic Relationship of Policymakers, Developers, and Citizens Hostetler, ME*, Department of Wildlife Ecology and Conservation, University of Florida

Wednesday

- 11:00 Developing a Collaborative Approach: Lessons from Managing Integrated R&D Initiatives Allen, WJ*, Learning for Sustainability - http://learningforsustainability.net
- 11:15 A Greenprint for Re-building a Biodiverse Garden City: Post 2010/2011 Earthquake Meurk, C*, Landcare Research; Stewart, G, Lincoln University
- 11:30 Empowering Citizens to Promote Conservation: The Florida Master Naturalist Program Main, MB*, University of Florida
- 11:45 Citizen Involvement in Urban Biodiversity Conservation opportunities and obstacles in New Zealand Stewart, G*, Lincoln University; Meurk, C, Landcare Research

Discussion follows last presentation until end of session

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• <u>CS 35: COMMUNITY-DRIVEN CONSERVATION</u> Marlborough Room 3 Wednesday, December 7, 10:30 to 12:30

- 10:30 The Role of Incentives in Conserving Biodiversity Bose, A. U. *, *University of Cambridge*
- 10:45 The importance of the human landscape in assessing conservation success Garnett, S.T.*, Charles Darwin University
- 11:00 Lost islands? Biodiversity conservation weaknesses, challenges and opportunities in French Pacific islands Jean-Yves Meyer*, Delegation a la Recherche, French Polynesia; Atoloto Malau, Service de l'Environnement, Wallis and Futuna
- 11:15 The influence of spatial scale on landscape and local drivers and perceptions of human-wildlife conflict in the Nilgiri Biosphere Reserve, S. India.
 Nisha Owen*, University of Leeds; Sumin G. Thomas, Keystone Foundation; Anita Varghese, Keystone Foundation; M.D. Madhusudan, Nature Conservation Foundation
- 11:30 Environmental Saviors? The effectiveness of nonprofit organizations in greater Yellowstone Cherney, DN*, University of Colorado at Boulder
- 11:45 Community involvement in the management of a threatened shorebird Dowding, JE*, DM Consultants; Bryant, S, Dept of Conservation
- 12:00 Participation and Payments: Evaluating the effect of two conservation programs aimed at alleviating lion killing in Maasailand, Kenya

Hazzah, L*, University of Wisconsin-Madison; Dorenry, S, University of Wisconsin-Madison; Frank, L, University of California-Berkeley

12:15 Success of Traditional Pastoralists in Enumerating a Low Density, Highly Persecuted Population of African Lions (Panthera leo)

Dolrenry, Stephanie*, University of Wisconsin, Madison and Living with Lions; **Hazzah, Leela,** University of Wisconsin Madison and Living with Lions; **Frank, Laurence,** University of California Berkeley and Living with Lions

• <u>SY 15-1: ENGAGING SOCIETY IN FOREST CONSERVATION: INTERNATIONAL YEAR OF FORESTS (SCB</u> <u>PRESIDENTS SYMPOSIUM, PART I)</u> New Zealand Room 1 Wednesday, December 7, 10:30 to 12:30

ORGANIZER(S): Dominick A. DellaSala, Geos Institute

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The United Nations has declared 2011 - International Year of Forests (IYF) in recognition of the role that forests can play in sustainable development, poverty eradication, and internationally agreed upon development goals. While global rates of deforestation have slowed, forests still face mounting pressures from land use and climate change. This symposium draws on forest conservation from select regions. It includes a proclamation on forests prepared by SCB Section Presidents and submitted to the United Nations and the Secretariats of the Conventions on Biodiversity, Climate, Desertification and International Trade in Endangered Species. At the close, Section Presidents will conduct a public forum on forests. Speakers will address the following questions: 1. What could the IYF mean for forest conservation globally and SCB's role in international treaties and domestic policies? 2. How might forests change in relation to climate change? 3. What are high conservation value forests and what methods are best for identifying them? 4. How much is left of forests in temperate, boreal, and tropical systems? 5. What role do forests play in the global carbon cycle? 6. How can we manage forests in dynamic landscapes? 7. What can governments, citizens, the UN, and other major organizations do to maintain forests in these changing times?

- 10:30 Seeing the Forests Through the Trees: A Big Picture View of Tropical Rainforests Pimm, SL*, Duke University
- 11:00 Ecosystem decay of Amazonian forest fragments Laurance, William F.*, James Cook University; Lovejoy, Thomas E., George Mason University
- 11:15 Maintaining Biodiversity in Highly Dynamic Forested Landscapes Hunter, Malcolm*, University of Maine
- 11:30 High Conservation Value Forest Assessments in Boreal Canada Strittholt, JR*, Conservation Biology Institute
- 11:45 Temperate and Boreal Rainforests of the World: the Forgotten Rainforests DellaSala, D.A.*, *Geos Institute*
- 12:00 Status and Trends of High Conservation value forests in Africa Edward N. Mwavu*, *Makerere University*
- 12:15 Status of New Zealand's forests Norton, David*, University of Canterbury; Manley, Bruce, University of Canterbury
-

• <u>CS 37: LANDSCAPE ECOLOGY</u> New Zealand Room 2 Wednesday, December 7, 10:30 to 12:30

- 10:30 Assessing the impact of climate and land use change on Midwestern United States river systems Krueger, DM*, Michigan State University; Wang, L, Institute for Fisheries Research; Infante, D, Michigan State University; Whelan, G, Michigan Department of Natural Resources; Tsang, Y, Michigan State University; Wieferich, D, Michigan State University; Cooper, A, Michigan State University
- 10:45 Field Estimates and Modelling of the Tonle Sap Lake Floodplain Vegetation Biomass and Production Arias, ME*, University of Canterbury; Cochrane, TA, University of Canterbury; Killeen, T, Conservation International
- 11:00 Big tropical floodplain forest systems around the world what do we know? Parolin, Pia*, University of Hamburg, Biodiversity of Plants
- 11:15 From extinction processes to conservation management: a new perspective in freshwater ecosystems Bergerot, B*, Cemagref; Hugueny, B, IRD; Belliard, J, Cemagref
- 11:30 Effective conservation of an endangered newt species (*Triturus cristatus*): determinants from local to landscape scales

Denoel, M*, University of Liege; Perez, A, University of Liege; Ficetola, GF, University of Milano

- 11:45 Salt marsh as a coastal filter for the oceans: changes in function with increased nitrogen loading and sea-level rise NELSON, JOANNA*, University of California, Santa Cruz; Zavaleta, Erika, University of California, Santa Cruz
- 12:00 Effects of climate change on the quality of caribou and reindeer summer fodder in low arctic tundra Zamin, TJ*, Department of Biology, Queen's University, Canada; Grogan, P, Department of Biology, Queen's University, Canada
- 12:15 Glitches in the matrix: To what extent does increased productivity in agricultural systems lead to ecosystem decay in adjacent natural habitats?

Deakin, L*, University of Canterbury, Christchurch, New Zealand; **Tylianakis, JM,** University of Canterbury, Christchurch, New Zealand; **Barker, GM,** Landcare Research, Hamilton, New Zealand; **Schipper, L,** Waikato University, Hamilton, New Zealand; **Didham, RK,** University of Western Australia, Perth, Australia

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 <u>SY 11: SETTING PRIORITIES FOR ERADICATING INVASIVE ALIEN SPECIES: PERSPECTIVES FROM GLOBAL TO</u> <u>LOCAL</u> New Zealand Room 3

Wednesday, December 7, 10:30 to 12:30

ORGANIZER(S): Butchart, S, BirdLife International; Croll D, University of California; Holmes N, Island Conservation

Conservation Management. Invasive Alien Species (IAS) are among the greatest threats to biodiversity, being a major driver of recent extinctions and impacting a substantial proportion of threatened species, as well as having major impacts on ecosystem services and human health. Islands are particularly vulnerable to this threat, as they contain a disproportionate percentage of global biodiversity (including a large number of endemic and threatened species) that are impacted by IAS, especially introduced vertebrates. However, advances in technology and knowledge mean that we are more capable than ever before in controlling or eradicating alien vertebrates on islands. Nevertheless, with over 180,000 islands globally, the scale of the problem relative to available resources means that prioritization of interventions is required. This symposium will bring together leaders in the field to present and discuss approaches to priority-setting for tackling island IAS, including an overview of the problem, the first robust global datasets on insular biodiversity and threat, national scale examples, and promising new prioritization approaches.

10:30 Invasive vertebrates on islands: scope of the problem, data needs, and approaches

Croll, DA*, Coastal Conservation Action Laboratory, Ecology and Evolutionary Biology, University of California Santa Cruz; Tershy, BR, Coastal Conservation Action Laboratory, Ecology and Evolutionary Biology, University of California Santa Cruz

11:00 Ranking Eradication of Invasive Vertebrates on Islands at a Global Scale

Holmes, ND*, Island Conservation; Arnal, A, Island Conservation; Croll, DA, Coastal and Conservation Action Lab, Dept Ecology and Evolutionary Biology, University of California Santa Cruz; Kiett, BS, Island Conservation; McCreless, E, Coastal and Conservation Action Lab, Dept Ecology and Evolutionary Biology, University of California Santa Cruz; Newton, KM, Coastal and Conservation Action Lab, Dept Ecology and Evolutionary Biology, University of California Santa Cruz; Spatz, D, Coastal and Conservation Action Lab, Dept Ecology and Evolutionary Biology, University of California Santa Cruz; Tershy, B, Coastal and Conservation Action Lab, Dept Ecology and Evolutionary Biology, University of California Santa Cruz

11:15 Priorities for eradicating invasive mammals from New Zealand islands: an historical perspective David Towns*, Department of Conservation; Carol West, Department of Conservation

11:30 Strategic approaches at the regional scale: the Pacific Bird JP*, Pacific Marine IBA Co-ordinator, BirdLife International Pacific Secretariat

- 11:45 Development of novel quantitative approaches for prioritizing eradications McCreless, E*, Univ. of California, Santa Cruz; Wilcox, C, CSIRO; Spatz, D, Univ. of California, Santa Cruz; Newton, K, Univ. of California, Santa Cruz; Croll, D, Univ. of California, Santa Cruz; Tershy, B, Univ. of California, Santa Cruz

12:00 Eradicating invasives: where next? Butchart, S. H. M*, BirdLife International

Discussion follows last presentation until end of session

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SY 12: ALL BY MYSELF? INCREASING THE INVOLVEMENT OF CONSERVATION SCIENTISTS IN EFFECTIVE GRASSROOTS CONSERVATION ACTION WORLDWIDE New Zealand Room 4

Wednesday, December 7, 10:30 to 12:30

ORGANIZER(S): Anderson, S.S., California State University Channel Islands; Sekercioglu, C., University of Utah

University-based conservation scientists are not as involved in grassroots conservation as they should be. This is particularly important for convincing decision-makers to take the necessary conservation action. Our experience has shown that decisionmakers, especially in the developing world, are more likely to follow the recommendations of university-based scientists, whose academic credentials they trust, than those of independent NGOs, who they often suspect of having political agendas. Therefore, increased collaboration between grassroots conservation NGOs and research-focused conservation scientists is key to the success of effective, evidence-based conservation efforts. We will showcase a range of grassroots conservation case studies, all of which have fostered science-based, tangible conservation progress over many years while simultaneously educating and improving the quality of life for the general public and building true community-based support. We will highlight consistent themes from these case studies that span the globe and that have allowed them to persist and grow. We will make the case for why university-based conservation scientists should be more involved in grassroots conservation and outline effective ways of doing so, including undertaking evidence-based conservation science, communicating the results successfully to the decision-makers, and conducting public outreach and media engagement.

10:30 Turkey's globally important biodiversity in crisis

Çağan H. Şekercioğlu*, Department of Biology, University of Utah; Sean Anderson, Environmental Science and Resource Management Program, California State University Channel Islands; Erol Akçay, National Institute for Mathematical and Biological Synthesis (NIMBioS), University of Tennessee; Rașit Bilgin, Institute of Environmental Sciences, Boğaziçi University, Istanbul, TURKEY

- 11:00 Restoring Los Angeles's Last Coastal Wetland: Ballona Wetlands Restoration Planning Bergquist, Sean*, Santa Monica Bay Restoration Commission
- 11:15 Conservation of the prairie dog ecosystem in Mexico Ceballos, G.*, Universidad Nacional Autonoma de Mexico; Pacheco, J., Universidad Nacional Autonoma de Mexico; List, R., Universidad Nacional Autonoma de Mexico
- 11:30 Integrating wildllife and community health to promote conservation and sustainable livelihoods Kalema-Zikusoka, Gladys*, Conservation Through Public Health; Rubanga, Steven, Conservation Through Public Health; Byonanebye, Joseph, Conservation Through Public Health; Gaffikin, Lynne, Evaluation and Research Technologies for Health
- 11:45 Conservation, sustainable use, and economic development: land owners, academia, and government working together in Mexico

Medellin, RA*, Institute of Ecology, UNAM/Arizona-Sonora Desert Museum

12:00 Conservation is where the heart is Possingham, H.P.*, The University of Queensland

<u>SY 14: MANAGEMENT OF WILDLIFE DISEASES - SHIFTING THE PARADIGM</u>

Parnell Room

Wednesday, December 7, 10:30 to 12:30

ORGANIZER(S): Dan Tompkins, Landcare Research; Richard Jakob-Hoff, New Zealand Centre for Conservation Medicine

Disease is a key threatening process impacting native biodiversity. Many of the characteristics of endangered and threatened species and their habitats (such as small population size, inbreeding, habitat fragmentation and degradation) make them vulnerable to disease impacts that healthy populations living in healthy habitats would be resilient to. Indeed, pathogens and diseases are a natural part of healthy ecosystems. Hence to solve disease threats in a long-term sustainable fashion you need to treat the causes and not the symptoms. For example, in species with low genetic diversity making them vulnerable to disease, expending resources to treat infections in the wild may be wasted effort since you are not addressing the cause of the issue. A paradigm shift from current wildlife disease management practises, where the traditional approach of diagnosing and treating specific illnesses still prevails, is thus needed. By only dealing with the proximate and not the ultimate causes of ill-health, current approaches are insufficient for the longer term aim of securing and restoring biodiversity. This symposium will bring together a group of wildlife disease experts to present the benefits of such a paradigm shift and discuss the hurdles to be surmounted. Key to accomplishing this shift will be the successful engagement of society to adopt a long-term view on biodiversity and conservation, overcoming the political need to demonstrate short-term benefits of management actions.

- 10:30 The role of pathogen pollution in wildlife disease: the case of chytridiomycosis Skerratt, LF*, James Cook University; Berger, L, James Cook University
- 10:45 Changing host communities and disease dynamics in coastal seas conservation lessons from salmon Krkosek, M*, University of Otago
- 11:00 A new IUCN guide to wildlife disease risk analysis Jakob-Hoff, R.M.*, New Zealand Centre for Conservation Medicine, Auckland Zoo
- 11:15 Evolution of tolerance to avian malaria in Hawaiian forest birds Atkinson, CT*, U.S. Geological Survey, Pacific Island Ecosystems Research Center
- 11:45 Disease management options for contagious cancer in Tasmanian devils Jones, M. E.*, University of Tasmania
- 12:00 Disease Management: Treating causes not symptoms Tompkins, Daniel*, Landcare Research

Discussion follows last presentation until end of session



<u>SCB Section, Chapters, and Working Group Meetings</u>, 12:30 to 14:00
 Austral & Neotropical America Section, Parnell Room
 Oceania Section, New Zealand Room 4
 Chapters Business Meeting, Epsom Room 3
 Ecological Economics & Sustainability Science Working Group, Marlborough Room 1
 Religion & Conservation Biology Working Group, Marlborough Room 2

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 <u>Workshop 11</u>: The publication process for SCB's journals 12:30 to 14:00, New Zealand 2

Organizer(s): Erica Fleishman, John Muir Institute of the Environment, University of California

Publication of the journals *Conservation Biology* and *Conservation Letters* is a primary mechanism by which the Society for Conservation Biology (SCB) advances the science and informs the practice of conserving Earth's biological diversity. In this workshop, the editorial teams of SCB's two peer-reviewed journals will outline the complete process of publication. We will address determination of journal scope and emphasis, the review process and editorial decisions, and production of cohesive volumes. We will highlight ways that authors can increase the probability of publishing in *Conservation Biology* and *Conservation Letters* as well as options for serving in an editorial capacity. With our publisher, Wiley-Blackwell, we also will touch on current issues in the publishing industry, from subscription levels and page charges to impact factors.

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MARINE THINK TANK LUNCH SESSION (2)

New Zealand 3 Wednesday, December 7, 12:30 to 14:00

- 12:30 The Deep Sea Coral Research and Technology Program: Research to Conserve Biodiverse Deep-Sea Ecosystems Hourigan, TF*, NOAA National Marine Fisheries Service; Tsao, F., NOAA National Marine Fisheries Service
- 12:45 Pelagic Marine Protected Areas: Achieving Effective Ecosystem-based Management Lance Morgan*, Marine Conservation Institute; Sara Maxwell, Marine Conservation Institute
- 13:00 Defining boundaries for ecosystem-based management: A multispecies case study of marine connectivity across the Hawaiian Archipelago

Toonen, RJ*, Hawaii Institute of Marine Biology; **Bird, CE,** Hawaii Institute of Marine Biology; **Selkoe, KA**, Natl Center for Ecological Analyses & Syntheses; **Andrews, KR**, Hawaii Institute of Marine Biology; **Eble, JA**, Hawaii Institute of Marine Biology; **Gaither, MA**, Hawaii Institute of Marine Biology; **Skillings, DJ**, Hawaii Institute of Marine Biology; **Bowen, BW**, Hawaii Institute of Marine Biology

13:15 Marine Conservation and Satellite Telemetry: A Review and Framework for Effective Applications Maxwell, SA*, Marine Conservation Institute; Hart, KM, US Geological Survey; Costa, DP, University of California Santa Cruz; Crowder, LB, Stanford University

Early afternoon session: 2:00 P.M. to 4:00 P.M.

• <u>SY 21: QUANTITATIVE TOOLS FOR IDENTIFYING CRITICAL HABITAT OF ENDANGERED SPECIES</u> Epsom Room 3

Wednesday, December 7, 14:00 to 16:00

ORGANIZER(S): Dr. Janelle Curtis, Dr. Marten Koops, Dr. Mark Poos, Fisheries and Oceans Canada

Understanding the ecological trade-offs with identifying critical habitat of endangered species has broad societal importance. Unreliable estimates of critical habitat can result in inappropriate prioritization of areas of conservation value, setting legal precedence when unfounded, or failing to protect habitat which may actually be critical to the species survival or recovery. There are several ecological trade-offs to consider when identifying and conserving critical habitat, including trade-offs in deciding which species/ecosystems to conserve, the areas that are prioritized for management, and the stakeholders which will be impacted from those decisions. By its very nature, recognition to critical habitat inherently focuses attention towards species with conservation goals and not necessarily the recipient ecosystem, which may cause further ecological trade-offs. For example, in Canada the management of endangered northern abalone has been hampered by the expansion of sea otter populations, which are also of conservation concern. There is a need for quantitative tools to explore, identify, and weigh decisions for identifying critical habitat. This symposium will discuss quantitative tools for weighing ecological trade-offs in identifying critical habitat. Included in this discussion will be the development of new analytical tools for improving decision making, the development of scenario-based simulations, and identification of future research needs.

- 14:00 The Influence of Model Structure on Science-Based Advice for Species at Risk Curtis, Janelle*, Pacific Biological Station; Naujokaitis-Lewis, Ilona, University of Toronto
- 14:15 A First Order Approach for Quantifying Critical Habitat for Freshwater Fishes at Risk Koops, M.A.*, Fisheries and Oceans Canada; Vélez-Espino, L.A, Fisheries and Oceans Canada; Randall, R.G., Fisheries and Oceans Canada
- 14:30 Cost-effective habitat management strategies for White-backed Woodpecker recovery in Sweden Baxter, PWJ*, The University of Queensland; Possingham, HP, The University of Queensland; Gren, I-M, Swedish Agricultural University; McCarthy, MA, The University of Melbourne; Mikusiński, G, Swedish Agricultural University
- 14:45 Congruency of predictions between population dynamic and species distribution models under climate change: implications for conservation planning Fortin, M-J*, University of Toronto; Naujokaitis-Lewis, I, University of Toronto
- 15:00 Linking Landscape Connectivity, Source-Sink Dynamics, and Population Viability Nathan H. Schumaker*, US EPA; Allen Brookes, US EPA; Julie A. Heinrichs, University of Washington
- 15:15 Network-theoretic approaches for evaluating critical habitat: confronting trade-offs between habitat quality and connectivity

Rayfield, B*, Department of Biology, McGill University, Montreal, Canada; **Pelletier, D,** Département de Géographie, Université de Montréal, Montreal, Canada; **Cardille, J,** Département de Géographie, Université de Montréal, Montreal, Canada ; **Gonzalez, A,** Department of Biology, McGill University, Montreal, Canada 15:30 Modeling temporal impacts on habitat suitability and population persistence for endangered species Poos, M.S.*, Fisheries and Oceans Canada; Curtis, J., Fisheries and Oceans Canada; Grinnell, M., Fisheries and Oceans Canada; Koops, M., Fisheries and Oceans Canada

15:45 How long should we wait to protect critical habitat?

Martin, Tara*, CSIRO Ecosystem Sciences; Chades, Iadine, CSIRO Ecosystem Sciences; Possingham, Hugh, CEED, University of Queensland; NCEAS Working Group, Complex Environmental Decisions

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• <u>SPEED 41: CONSERVATION MANAGEMENT</u> Epsom Rooms 1&2 Wednesday, December 7, 14:00 to 16:00

- 14:04 Methods for multi-species conservation planning in the context of global change Lawson, DM*, San Diego State University
- 14:08 Science and elephant management decisions in South Africa Young, K.D.*, Conservation Ecology Research Unit, Department of Zoology and Entomology, University of Pretoria; van Aarde, R.J., Conservation Ecology Research Unit, Department of Zoology and Entomology, University of Pretoria
- 14:12 Spatial prioritization for improved management in the Great Western Woodlands Evans, MC*, The University of Queensland; Wilson, KA, The University of Queensland
- 14:16 Overcoming problems with the use of Biodiversity Offset schemes to protect the Saiga antelope Bull, Joe*, Department of Biology, Imperial College London
- 14:20 Using systematic monitoring to evaluate and improve the management of a tiger reserve in northern Laos Johnson, Arlyne*, Wildlife Conservation Society; Vongkhamheng, Chanthavy, Wildlife Conservation Society; Saypanya, Santi, Wildlife Conservation Society; Hansel, Troy, Wildlife Conservation Society; Strindberg, Samantha, Wildlife Conservation Society
- 14:24 What should conservation prioritization deliver? Lehtomäki, J*, University of Helsinki / Finnish Environment Institute
- 14:28 Look down and check!: Monitoring liverworts to evaluate the effectiveness of hydroriparian buffers Higgins, KK*, Quest University Canada
- 14:32 Spatial conservation prioritization for multiple administrative regions Arponen, A*, University of Helsinki; Cabeza, M, University of Helsinki; Moilanen, M, University of Helsinki
- 14:36 General rules for managing and surveying networks of pests, diseases, and endangered species
 Chades, I*, CSIRO Ecosystem Sciences; Martin, TG, CSIRO Ecosystem Sciences; Nicol, S, University of Alaska; Burgman,
 MA, University of Melbourne; Possingham, HP, University of Queensland; Buckley, YM, University of Queensland and
 CSIRO Ecosystem Sciences
- 14:40 Adapting Toward the Best of Both Worlds: Natural Resource and Infrastructure Vulnerability Assessment of the Hudson River Estuary

Miller, D.*, New York State Department of Environmetal Conservation, Hudson River National Estuarine Research Reserve; Spector, S., Scenic Hudson; Winner, J., Scenic Hudson; Blair, B., New York State Department of Environmetal Conservation, Hudson River National Estuarine Research Reserve

- 14:44 Conservation management frameworks: the what, where and how of managing biodiversity Deiner, K*, UC Davis; Forrester, T, UC Davis; Grof-Tisza, P, UC Davis; Santos, MJ, UC Davis; Souza, L, UC Davis; Wilkerson, ML, UC Davis; Zylberberg, M, UC Davis; Schwartz, MW, UC Davis
- 14:48 Entomophagy, a tool for biodiversity conservation: A case study from Arunachal Pradesh, N.E. India. GHOSH, SAMPAT*, Dept. of Zoology, Rajiv Gandhi University, Rono Hills, Itanagar, Arunachal Pradesh, India; Chakravorty, Jharna, Dept. of Zoology, Rajiv Gandhi University, Rono Hills, Itanagar, Arunachal Pradesh, India
- 14:52 An Integrated Ecosystem-Based Management Model for the Kaipara Harbour, New Zealand Makey, L J*, AUT University; Harding, D, Te Uri o Hau Settlement Trust; Breen, B, AUT University; Morrison, M, National Institute of Water & Atmospheric Research (NIWA)
- 14:56 Indigenous use of coastal wetland resources in a changing climate Ligtermoet, E*, PhD Candidate, ANU; Baker, R., Supervisor, ANU; Jackson, S., Supervisor, CSIRO

Discussion follows last presentation until end of session

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 <u>CS 43: ECOLOGICAL RESTORATION AND RECOVERY OF ENDANGERED SPECIES</u> Marlborough Room 1 Wednesday, December 7, 14:00 to 16:00 14:00 Conservation of a threatened pest: the Regent Parrot (*Polytelis anthopeplus*) in almond orchards in Victoria, Australia

Triplett, SA*, Charles Sturt University; Luck, GA, Charles Sturt University; Spooner, PG, Charles Sturt University

- 14:15 Using line transects and occupancy-based modelling to assess the status and monitor gibbons in Lao PDR: Results and implications for conservation
 Hallam, C. D.*, Wildlife Conservation Society, Lao PDR; Johnson, A., Wildlife Conservation Society, Lao PDR; Seateun, S, National University of Laos; Lathamsathith, T, Wildlife Conservation Society, Lao PDR
- 14:30 The influence of small-scale variation in habitat structure on invertebrate diversity in mixedwood forests Oxbrough, A*, University of Alberta; University College Cork; Spence, J, University of Alberta; O'Halloran, J, University College Cork
- 14:45 Recovery Programme for Critically Endangered Pygmy Hog (*Porcula salvania*) through Conservation Breeding and Reintroduction in Restored Grasslands in Assam Narayan, G.*, EcoSystems-India and Durrell Wildlife Conservation Trust; Deka, P. J., EcoSystems-India and Durrell Wildlife Conservation Trust; Oliver, W. L. R., IUCN/SSC Wild Pigs Specialist Group
- 15:00 Evolution of Oahu elepaio nest height in response to predation by alien rats VanderWerf, EA*, *Pacific Rim Conservation*
- 15:15 Anticipated global change and small population demography interact to threaten the persistence of a rare cockatoo Harris, JBC*, University of Adelaide; Fordham, DA, University of Adelaide; Mooney, PA, South Australia Dept Environment and Natural Resources; Pedler, LP, South Australia Dept Environment and Natural Resources; Araujo, MB, National Museum of Natural Sciences, Madrid; Paton, DC, University of Adelaide; Watts, MJ, University of Adelaide; Brook, BW, University of Adelaide
- 15:30 Trading off short-term and long-term risk: minimizing the threat of island extinctions from catastrophes and sealevel rise

Michelle Reynolds*, Pacific Island Ecosystem Rearch Center, US Geological Survey; Brady Mattsson, USGS; Conor McGowan, USGS; Andrew McClung, USGS; Sarah Converse, USGS

15:45 Performance of terrestrial vertebrate taxa as indicator groups for the identification of priority sites for conservation Urquiza-Haas, T. *, The National Commission for Knowledge and Use of Biodiversity; Koleff, P., The National Commission for Knowledge and Use of Biodiversity

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• <u>SY 20: CONSERVATION SUCCESS IN A CHANGING WORLD - BUILDING RESILIENCE</u> Marlborough Room 2 Wednesday, December 7, 14:00 to 16:00 *ORGANIZER(S):* Sue Mainka, IUCN

Healthy ecosystems, with their diversity of genes and species, offer the best chance of adapting to the changes in climate, population, and economics that are sure to characterize the coming years. Ensuring resilience, the ability to cope with these changes, will require building public and political support and participation in biodiversity conservation action. It also requires building a base of knowledge, tools and guidance that facilitate mainstreaming biodiversity conservation across all disciplines and sectors. By exploring specific case studies of conservation successes, this symposium explores key elements required to build resilience for the future and the particular role that engaging civil society has in those efforts.

- 14:00 Through the lens of time: Evaluating success in the longer term McNeely, JA*, *IUCN*
- 14:15 Building Community Resilience for Local Conservation Berkes, F*, University of Manitoba
- 14:30 Using knowledge networks to build conservation capacity: Population time series in protected areas. Barnes, MB*, The University of Queensland; Hockings, M, The University of Queensland
- 14:45 Lessons Learned from the Conference 'Sharing Power: A New Vision for Development' Mead, ATPM*, Chair, IUCN CEESP; Snr Lecturer, MBUS-VMS
- 15:00 Involving the Community in Conserving the Endangered Micronesian Megapode Ketebengang, HEATHER*, Palau Conservation Society
- 15:15 Conservation Sucess, Communities and the Private Sector Mainka, Sue.*, *IUCN*; Carbone, Giulia, *IUCN*; Asante-owusu, Rachel, *IUCN*

Discussion follows last presentation until end of session

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<u>CS 45: COMMUNITY-DRIVEN CONSERVATION</u>

Marlborough Room 3

Wednesday, December 7, 14:00 to 16:00

14:00 Can biotic homogenization be stopped in low intensity agriculture on the large scale?

Doxa, A.*, CEFE-CNRS; Paracchini, M-L., IES-JRC; Philippe Pointereau, SOLAGRO; Vincent Devictor, CNRS-UM2; Frédéric Jiguet, MNHN

14:15 Village-REDD+: a concept that promotes broad participation and spreads benefits widely among forest dependent people in Papua New Guinea

Ken, Bensolo^{*}, Wildlife Conservation Society, Papua New Guinea Programme; Arihafa, Arison, Wildlife Conservation Society, Papua New Guinea Programme; Clements, Tom, Wildlife Conservation Society, Papua New Guinea Programme; Kuange, John, Wildlife Conservation Society, Papua New Guinea Programme; Samson, Mellie, Wildlife Conservation Society, Papua New Guinea Programme; Zeriga-Alone, Tanya, Wildlife Conservation Society, Papua New Guinea Programme; Sinclair, J Ross, Wildlife Conservation Society, Papua New Guinea Programme

- 14:30 Solving a monitoring conundrum; an on-the-ground solution for REDD+ Venter, Michelle*, James Cook Universitiy; Bird, MI, James Cook University
- 14:45 Integrating tourism within fishing communities: A grassroots effort to create a beneficial industry for the user and a non-extractive use of the marine resource

Porter, BA*, NZTRI Auckland University of Technology

- 15:00 Climate change vulnerability assessment for a national park in California: Evaluating community-level vulnerability Hameed, Sarah O, UC Davis Graduate Student; Baty, Jill, UC Davis Graduate Student; Holzer, Katie, UC Davis Graduate Student; Doerr, Angela*, UC Davis Graduate Student
- 15:15 Gender and stress affect facilitation intensity in a widespread cushion plant Cranston, B*, University of Otago; Callaway, RM, University of Montana; Monks, A, Landcare Research; Dickinson, KJM, University of Otago
- 15:30 Predicting and managing trophic cascade by removal of alien apex predators: the importance of alternative resources to mesopredators

Nishijima, S*, The University of Tokyo; Takimoto, G, Toho University; Miyashita, T, The University of Tokyo

15:45 Approaches for recruiting and training undergraduate conservation leaders Ryan, ME*, Western Washington University; Manolis, J, Minnesota Department of Natural Resources

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• <u>SY 15-2: ENGAGING SOCIETY IN FOREST CONSERVATION: INTERNATIONAL YEAR OF FORESTS (SCB</u> <u>PRESIDENTS SYMPOSIUM, PART II)</u> New Zealand Room 1 Wednesday, December 7, 14:00 to 16:00 *ORGANIZER(S):* Dominick A. DellaSala, Geos Institute

The United Nations has declared 2011 - International Year of Forests (IYF) in recognition of the role that forests can play in sustainable development, poverty eradication, and internationally agreed upon development goals. While global rates of deforestation have slowed, forests still face mounting pressures from land use and climate change. This symposium draws on forest conservation from select regions. It includes a proclamation on forests prepared by SCB Section Presidents and submitted to the United Nations and the Secretariats of the Conventions on Biodiversity, Climate, Desertification and International Trade in Endangered Species. At the close, Section Presidents will conduct a public forum on forests. Speakers will address the following questions: 1. What could the IYF mean for forest conservation globally and SCB's role in international treaties and domestic policies? 2. How might forests change in relation to climate change? 3. What are high conservation value forests and what methods are best for identifying them? 4. How much is left of forests in temperate, boreal, and tropical systems? 5. What role do forests play in the global carbon cycle? 6. How can we manage forests in dynamic landscapes? 7. What can governments, citizens, the UN, and other major organizations do to maintain forests in these changing times?

- 14:00 History and Land Use Effects on Biodiversity in European Boreal Systems Jonsson, BG*, Dept of Natural Sciences, Mid Sweden University
- 14:15 Status and trends of high conservation value forests in Asia McNeely, JA*, *IUCN*

14:30 Presidents Roundtable on International Year of Forests DellaSala, Dominick A.*, SCB North America Section; Dieterich, Martin, SCB Europe Section; Dovie Delali, Benjamin, SCB Africa Section; Majiluf, Patricia, SCB ANA Section; Nemtzov, Simon, SCB Asia Section; Watson, James, SCB Oceania Section

14:45 Forests in the Spotlight: International Year of Forests DellaSala, Dominick A.*, Geos Institute

15:00 International Treaties, IPBES, and Domestic Policies in Protecting and Restoring Forests (and Paying Forest Experts)

John Fitzgerald*, SCB ; Jonsson Bengt-Gunnar, SCB-IPBES Task Force & MIU, Sweden

Discussion follows last presentation until end of session

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- <u>CS 47: LANDSCAPE ECOLOGY</u> New Zealand Room 2 Wednesday, December 7, 14:00 to 16:00
 - 14:00 Predicting Habitat Loss Driven Changes In Community Composition: From Simulated Matrices To Birds Of The Atlantic Forest

Banks-Leite, C*, Imperial College London; Ewers, RM, Imperial College London; Metzger, JP, Universidade de Sao Paulo

- 14:15 Assessing the value of public lands and waters to U.S. birds: the 2011 State of the Birds Report
 Jocelyn Aycrigg*, National Gap Analysis Program, University of Idaho; Chris Eberly, Department of Defense Partners in
 Flight; Daniel Fink, Cornell University; David Mehlman, The Nature Conservancy; Ken V. Rosenberg, Cornell University;
 John R. Sauer, U.S. Geological Survey; J. Michael Scott, Idaho Cooperative Fish and Wildlife Research Unit, U. S. Geological
 Survey, University of Idaho
- 14:30 GARM A Genetic Algorithm for Resistance Map creation for the study of species connectivity and gene flow. Hand, Brian*, University of Montana; Landguth, E.L., University of Montana; Raiford, D., University of Montana
- 14:45 Integrating cameras and tracking to examine wildlife road avoidance along a Mexican highway Brichieri-Colombi, T.*, PhD Candidate, University of Calgary; Alexander, S.M., Associate Professor, University of Calgary
- 15:00 Googling wildlife connectivity: how new tools for analysis of the structure of the internet can help map habitat linkages

Carroll, C*, KCCR; McRae, B, The Nature Conservancy

- 15:15 Estimating the Occupancy of Northern Goshawk (Accipiter gentilis) to Inform Forest and Conservation Planning at Landscape and Regional Scales
 Dickson, BG*, Northern Arizona University; Sisk, TD, Northern Arizona University; Sesnie, SE, Northern Arizona University; Rundall, JM, Northern Arizona University
- 15:30 A model to quantify effects of habitat fragmentation and bushmeat hunting on bonobo (*Pan paniscus*) distributions in support of conservation planning

Hickey, JR*, University of Georgia; Nibbelink, NP, University of Georgia; Carroll, JP, University of Georgia

15:45 Territorial Competition and Landscape Ecology in Yellow Warblers (*Dendroica petechia*) Ozelski, Ashley*, CUNY Graduate Center; Manne, Lisa, CUNY Graduate Center; Nott, Philip, The Institute for Bird Populations

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SY 18: GETTING TO GROUND: SCIENCE-DRIVEN COOPERATIVE INITIATIVES ON FOUR CONTINENTS TO CONSERVE BIODIVERSITY AT LARGE LANDSCAPE SCALES New Zealand Room 3

Wednesday, December 7, 14:00 to 16:00

ORGANIZER(S): Michael Soulé and Kenyon Fields, Wildlands Network; Paul Beier, N. Arizona University

There is a growing consensus that success in conservation depends on cooperation between governments, NGOs, businesses, indigenous groups, and private landowners. To conserve biodiversity in the face of habitat fragmentation, climate change, and socio-political dispassion or outright obstruction, cooperative conservation initiatives are springing up globally, implementing strategies that engender broader participation. Inherent in these efforts are two needs: to inspire people with a grand vision which overcomes the limited appeal and reach of local conservation campaigns; and to emphasize the imperative of ecological connectivity across broad regions. Such connectivity across landscapes can only be achieved by a corresponding connectivity amongst human interests. We will present examples of the leading large landscape conservation initiatives from Australia, Africa, Asia, and North and South America. Each of these efforts is a collaboration among public and private land managers, transportation agencies, indigenous communities, industry, and passionate citizens. Each is tackling a complex patchwork of management and ownership boundaries, and needing to reconcile competing land use policies and goals. We will address successful strategies, from policy, to planning, mapping of ecological priorities, management, and on-the-ground implementation, emphasizing lessons that can be applied to other initiatives around the world. This symposium is a continuation of SY-2 (yesterday morning) on key scientific issues in connectivity analyses.

14:00 Reconnecting the Spine of the Continent Wildway – A network of conservation action in Mexico, the U.S., and Canada

Fields, K*, Wildlands Network; Soule, M, Wildlands Network

Pack your bags for these upcoming SCB Section meetings on three continents!

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North America Congress for Conservation Biology

Bridging the Gap: Connecting people, nature & climate 15-18 July, 2012 • Oakland, California

Biodiversity Asia 2012: 2nd Asia Regional Conference Science, Policy, Governance 7-10 August, 2012 • Bangalore, India

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 3rd European Congress of Conservation Biology Conservation on the Edge
 28 August – 1 September, 2012 • Glasgow, Scotland

- 14:15 From Pattern to Process -- Advancing the science and practice of large scale conservation around the globe. Tabor, GM*, Center for Large Landscape Conservation
- 14:30 Australia's Great Eastern Ranges Initiative Connecting People Connecting Nature Dunn, ROB*, Great Eastern Ranges Initiative; Howling, Gary, Office of Environment and Heritage, Department of Premier and Cabinet; Pulsford, Ian, Global Learning Pty. Limited
- 14:45 Achieving wildlife corridors in densely populated and fragmented landscapes: the experience from "Elephant Corridors" in India Raman Sukumar*, Indian Institute of Science; Vivek Menon, Wildlife Trust of India
- 15:00 Tanzania's national inventory of wildlife corridors Jones*, *T*; Caro, *T*; Davenport, *TRB*
- 15:15 A Review of Large-Scale Conservation Corridors in South Africa: From Design to Implementation Rouget, M*, University of Pretoria, South Africa; Knight, AT, Stellenbosch University, South Africa; Cowling, RM, Nelson Mandela Metropolitan University, South Africa; Lötter, M, Mpumalanga Tourism and Parks Agency, South Africa
- 15:30 The Yellowstone to Yukon Conservation Initiative: Continental scale collaboration for biodiversity conservation Francis, WL*, Yellowstone to Yukon Conservation Initiative

Discussion follows last presentation until end of session

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<u>SY 19: CONSERVATION AND POVERTY REDUCTION - WORKING TOGETHER TO CREATE WIN-WIN SITUATIONS</u> New Zealand Room 4

Wednesday, December 7, 14:00 to 16:00

ORGANIZER(S): Timothy Boucher and Craig Leisher, The Nature Conservancy

Our symposium topic fits within the Conservation Management theme, as we will highlight conservation strategies that both help sustain or improve the ecological condition of ecosystems and reduce the poverty of those people who are reliant on those systems. Quite often, and especially in developing countries, the people living in conservation areas are poor, and rely heavily upon local natural resources for their survival. To sustain our conservation efforts over the long-term, we have to ensure that our conservation strategies offer tangible benefits to this important, yet often overlooked and vulnerable constituent. If our actions work to reduce poverty, then a clear win-win situation is created, greatly enhancing the long-term viability of our conservation efforts. Additionally, we might also be able to convince the development community that consideration of the environment in their projects will not be a needless drain on their scarce recourses. But can strategies be designed to protect nature and also help reduce rural poverty? This question was addressed by assessing the ecological and socioeconomic impacts of a number of conservation initiatives in various countries that specifically incorporate poverty reduction in their strategies. We demonstrate how one can empirically measure changes in human well-being from conservation projects, extract lessons learned, and present the results from case studies in tropical marine protected areas, temperate grasslands, and freshwater protection.

- 14:00 Why the Poor Matter: Searching for Sustainability in Conservation Sanjayan, M.*, *The Nature Conservancy*
- 14:30 Can marine protected areas help reduce poverty? Evidence from four site in Asia Pacific and the policy implications Leisher, Craig*, *The Nature Conservancy*; Van Beukering, Peter, *VU University*; Scherl, Lea M, *James Cook University*
- 14:45 Local perspectives on Ebiil Marine Protected Area through socio-economic study Noelle Wenty Oldiais*, Palau International Coral Reef Center; Supin Wongbusarakum, The Nature Conservancy; Adelle Lukes Isechal, Palau International Coral Reef Center; Dawnette Ulimang Olsudong, Palau International Coral Reef Center
- 15:00 Socioeconomic impacts of community-based grasslands conservation in Mongolia's Gobi Hess, S.M.*, Hess Environmental Economic Analyst; Leisher, C, The Nature Conservancy, Central Science; Beukering, P. van, Institute for Environmental Studies
- 15:15 Measuring ecological benefits provided by a community conservation project in the Mongolian Gobi region Boucher, TM*, *The Nature Conservancy;* Leisher, C, *The Nature Conservancy*
- 15:30 Oyster reef restoration in the northern Gulf of Mexico: Economic values and impacts and opportunities for engaging marginalized local communities Kroeger, Timm*, *The Nature Conservancy*

Discussion follows last presentation until end of session

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<u>SY 17: INVASIVE ANT SPECIES: PREDICTION, PREVENTION, AND CONTROL</u>

Parnell Room

Wednesday, December 7, 14:00 to 16:00

ORGANIZER(S): Gloria M. Luque, Franck Courchamp, Universite Paris Sud XI

Ants figure prominently among lists of invasive species (18 invasive ants among the world's worst invaders) because they are extremely successful invaders (threat to biodiversity, agricultural production, and pests in household) causing major environmental, social, and economic impacts. Their success has been shown to be related to some key attributes common to invasive ants that increase the probability of transport, survival, establishment, spread, and high impact. Thus, prevention of establishment and management of invasive ants present special challenges. Globally, successful management of ant invasions is often not well known to the public, and sometimes even to scientists, causing widespread pessimism that not much can be done to alleviate an increasing problem. Yet, New Zealand and Australia are worldly renown for two points regarding biological invasions. In particular, they have developed pioneering programs for invasive ants with many successful examples. Second, public awareness of impacts and control efforts are considered determinant for successful outcomes of current programs6 as well as for moving to a more proactive approach. This symposium aims at confronting the expertise of invasive ant specialists with different views with SCB conservationists and NZ invasion biologists and practitioners, to provide insights into the underlying principles necessary to create decision frameworks for the successful prevention and control of invasive ants.

14:00 Invasive ant species: History and Impacts

Luque, GM*, Universite Paris Sud XI; Courchamp, F, Universite Paris Sud XI

- 14:30 Risks of incursion, collapse and the influence of climate change on an invasive ant Lester, P.J.*, Victoria University of Wellington
- 14:45 Predicting ant invasion risks on islands worldwide Bertelsmeier, Cleo*, University Paris-Sud XI; Luque, Gloria M., University Paris-Sud XI; Courchamp, Franck, University Paris-Sud XI
- 15:00 Ecological meltdown on an oceanic island: Management of the invasive yellow crazy ant, *Anoplolepis gracilipes*, on Christmas Island

Boland, C., Parks Australia; Andersen, A.*, CSIRO Ecosystem Sciences

- 15:15 Ant eradications: a synthesis of successes, and identification of needs Hoffmann, BD*, CSIRO
- 15:30 Understanding the "invasive" syndrome: invasive ants are a symptom of an underlying land-use problem King, JR*, University of Central Florida; Tschinkel, WR, Florida State University

Discussion follows last presentation until end of session

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COFFEE BREAK 16:00 to 16:30 Auckland Room



Late afternoon session: 4:30 P.M. to 6:30 P.M.

• <u>CS 52: CLIMATE CHANGE</u> Epsom Room 3 Wednesday, December 7, 16:30 to 18:30

- 16:30 Estimating vegetation expansion in the Arctic under climate change using machine learning Phillips, SJ*, AT&T Labs-Research; Pearson, RG, American Museum of Natural History; Beck, PSA, Woods Hole Research Center; Loranty, MM, Woods Hole Research Center; Goetz, SJ, Woods Hole Research Center; Damoulas, T, Cornell University
- 16:45 Modeling range boundaries of birds and butterflies to test effects of climate-change Roll, U.*, Tel-Aviv University; Stone, L., Tel-Aviv University; Solow, A., Woods Hole Oceanographic Institution
- 17:00 Drought-driven changes in koala distribution and numbers: a reflection of things to come under climate change? Seabrook L*, The University of Queensland; McAlpine C, The University of Queensland; Baxter G, The University of Queensland; Rhodes J, The University of Queensland; Bradley A, The University of Queensland; Lunney D, 4Department of Environment, Climate Change and Water NSW

17:15 Impact of regulatory fragmentation on the ability of species to adapt to climate change

Carroll, Jennifer*, University of Notre Dame; McLachlan, Jason, University of Notre Dame; Camacho, Alejandro, University of California, Irvine; Johnson, Dylan, University of Notre Dame; Dalby, Christopher, University of California, Irvine

17:30 Identifying priority targets for conservation under climate change for amphibians and mammals: separating sensitivity from exposure in predicting risk Dickinson, Maria G*, Imperial College London; Grantham Institute for Climate Change

17:45 Genetic Responses to Climate Change in the Common Brown Butterfly (Heteronympha merope)

Lister, A*, La Trobe University, Bundoora, Australia; Murray, N, La Trobe University, Bundoora, Australia; Sunnucks, P, Monash University, Clayton, Australia; Kearney, M, University of Melbourne, Parkville, Australia; Norgate, M, Monash University, Clayton, Australia; Yazgin, V, La Trobe University, Bundoora, Australia; Barton, M, University of Melbourne, Parkville, Australia

18:00 Orang-utan persistence under global change requires a multi-faceted conservation strategy

Stephen D. Gregory*, The Environment Institute and School of Earth & Environmental Sciences, University of Adelaide, Adelaide, South Australia, Australia; Damien A. Fordham, The Environment Institute and School of Earth & Environmental Sciences, University of Adelaide, Adelaide, South Australia, Australia; Benoit Goossens, Biodiversity and Ecological Processes Group, Cardiff School of Biosciences, Cardiff University, United Kingdom & Institute for Tropical Biology and Conservation, Universiti Malaysia Sabah, Sabah, Malaysia; Marc Ancrenaz, Kinabatangan Orang-utan Conservation Project, Sabah, Malaysia; Alfred Raymond, Borneo Conservation Trust; Laurentius Ambu, Sabah Wildlife Department, Kota Kinabalu, Sabah, Malaysia; Barry W. Brook, The Environment Institute and School of Earth & Environmental Sciences, University of Adelaide, Adelaide, South Australia, Australia

18:15 Regional and species-specific variation in long-term habitat-occupancy relationships

Van der Hoek, Yntze*, City University of New York/College of Staten Island; Manne, Lisa, City University of New York/ College of Staten Island

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SPEED 51: CONSERVATION GENETICS Epsom Rooms 1&2 Wednesday, December 7, 16:30 to 18:30

> 16:30 Multiple introductions, high gene flow and intraspecific hybridization during Invasion of Lantana camara into India

Avik Ray*, National Centre for Biological Sciences; Uma Ramakrishnan, National Centre for Biological Sciences; Suhel Quader, National Centre for Biological Sciences

16:34 Using ancestral and contemporary DNA in Peary caribou to examine the relative loss of microsatellite and Mhc variation following population bottlenecks

Taylor, Sabrina S.*, Louisiana State University; Jenkins, Debbie, Dept. of the Environment, Baffin Region; Arcese, Peter, University of British Columbia

16:38 Individual Genetic Diversity does not Predict Ejaculate Quality in Captive- or Wild-Born Cheetahs (Acinonyx jubatus)

Terrell, KA*, Center for Species Survival, Smithsonian Conservation Biology Institute (SCBI), Front Royal, VA; Crosier, AE, Center for Species Survival, Smithsonian Conservation Biology Institute (SCBI), Front Royal, VA; Wildt, DE, Center for Species Survival, Smithsonian Conservation Biology Institute (SCBI), Front Royal, VA; O'Brien, SJ, Laboratory of Genomic Diversity, National Cancer Institute, Frederick, MD; David, VA, Laboratory of Genomic Diversity, National Cancer Institute, Frederick, MD; Anthony, NM, Department of Biological Sciences, University of New Orleans, New Orleans, LA; Crumpler, N, Science Applications International Corporation, Laboratory of Genomic Diversity, National Cancer Institute, Frederick, MD; Marker, LL, Cheetah Conservation Fund, Otjiwarongo, Namibia

- 16:42 Should we use pedigrees to detect inbreeding depression when the founders might be related? Kardos, MK*, University of Montana; Luikart, G, University of Montana; Allendorf, FW, University of Montana
- 16:46 Population Genetics of the Endemic Spiny-breasted Frog (Quasipaa fasciculispina) in Fragmented Khao Soi Dao Population, Chantaburi Province, Thailand Khudamrongsawat, Jenjit*, Department of Biology, Faculty of Science, Mahidol University, Thailand; Chomcheun Siripunkaw, Mahidol University at Nakornsawan, Thailand
- 16:50 Population genetics: A promising future of wildlife conservation Mishra, A*, Bundelkhand University, Jhansi, India; Mishra, S, Wildlife Institute of India, Dehradun, India
- 16:54 Does human landscape perturbation impact genetic diversity on the guigna (Leopardus guigna, Mammalia, Felidae)? Insights from Chiloe Island, southern Chile Napolitano, C*, Laboratory of Molecular Ecology, Institute of Ecology and Biodiversity, University of Chile, Santiago, Chile; Sanderson, J, Small Cat Conservation Alliance; Johnson, W, Laboratory of Genomic Diversity, National Cancer Institute, Frederick, Maryland, USA; Ritland, K, Laboratory of Population Genetics and Genomics, Department of Forest Sciences, Faculty of Forestry, University of British Columbia, Vancouver, Canada; Poulin, E, Laboratory of Molecular Ecology, Institute of Ecology and Biodiversity, University of Chile, Santiago, Chile

16:58 Understanding invasion history and the eradication project of the Argentine ant in Japan

Maki, Inoue*, National Institute for Environmental Studies; Koichi, Goka, National Institute for Environmental Studies

Discussion follows last presentation until end of session

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 <u>CS 53: RESTORATION ECOLOGY (ALIEN AND INVASIVE SPECIES)</u> Marlborough Room 1 Wednesday, December 7, 16:30 to 18:30

16:30 Can novel species functionally replace extirpated species? A case study of compensation in pollination from New Zealand

Pattemore, D*, Princeton University

- 16:45 Untangling the paradox: the use of invasive plants by native pollinators Harmon-Threatt, Alexandra*, UC Berkeley ; Kremen, Claire, UC Berkeley
- 17:00 Colonization of new patches of forest habitat by epiphytic lichens
 Gjerde, I.*, Norwegian Forest and Landscape Institute; Blom, H.H., Norwegian Forest and Landscape Institute; Sætersdal,
 M., Norwegian Forest and Landscape Institute; Heegaard, E., Norwegian Forest and Landscape Institute
- 17:15 Odours of mass deception reducing the impact of alien predators using chemical camouflage Catherine J Price*, University of NSW; Peter B Banks, University of Sydney
- 17:30 Invasive Species on the Menu: Reciprocal Predation and the Co-Persistence of Native and Non-Native Species Henkanaththegedara, Sujan M., North Dakota State University; Stockwell, Craig A.*, North Dakota State University
- 17:45 Political transformation, lag phase and invasion of alien species. How planted for centuries Walnut, *Juglans regia*, became invasive in Central Europe?

Lenda, M*, Institute of Environmental Sciences, Jagiellonian University; Skórka, P, Institute of Zoology, Poznań University of Life Sciences; Moroń, D, Institute of Systematics and Animal Evolution, Polish Academy of Sciences; Woyciechowski, M, Institute of Environmental Sciences, Jagiellonian University

- 18:00 Success Factors for Large-Scale Conservation Programs Hoekstra, JH*, The Nature Conservancy; Anderson, K, The Nature Conservancy; Kareiva, P, The Nature Conservancy; Ramos, A, The Nature Conservancy; Oidov, E, The Nature Conservancy
- 18:15 The predictability of infection: weather-driven simulations of pathogen proliferation help explain patterns of endemic chytridiomycosis

Murray, K. A.*, University of Queensland; Skerratt, L. F., James Cook University; Garland, S., James Cook University; Kriticos, D., CSIRO Entomology and the Cooperative Research Centre for National Plant Biosecurity; McCallum, H., Griffith University

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• <u>CS 54: DISTURBANCE ECOLOGY</u> Marlborough Room 2 Wednesday, December 7, 16:30 to 18:30

- **16:30** Indirect effects of herbicide on trematode proliferation in the freshwater snail host *Potamopyrgus antipodarum* HOCK,SD*, Department of Ecology, University of Otago; Poulin, Robert, Department of Ecology, University of Otago
- 16:45 Understanding the impacts of habitat degradation on Indo-Pacific coral reef sponge assemblages Abigail L Powell*, Victoria University of Wellington, New Zealand; James J Bell, Victoria University of Wellington, New Zealand; David J Smith, University of Essex, UK
- 17:00 Caribbean corals larger than 50 cm in diameter survive fierce long-term macroalgal competition Ferrari, R*, University of Queensland, Marine Spatial Ecology Lab; Gonzalez-Rivero, M, University of Exeter, Marine Spatial Ecology Lab; Mumby, PJ, University of Queensland, Marine Spatial Ecology Lab
- 17:15 A seascape model of the impacts of disturbance on functional diversity of marine benthic communities Lundquist, Carolyn*, *NIWA*; Thrush, Simon, *NIWA*; Coco, Giovanni, *NIWA*; Pritchard, Mark, *NIWA*; Hewitt, Judi, *NIWA*; Phillips, Ngaire, *NIWA*; Bowden, David, *NIWA*

17:30 Cumulative impacts to coastal ecosystem services in British Columbia

Martone, Rebecca G*, Institute for Resources, Environment and Sustainability, University of British Columbia; Thompson, Allison, Institute for Resources, Environment and Sustainability, University of British Columbia; Singh, Gerald G, Institute for Resources, Environment and SusInstitute for Resources, Environment and Sustainability, University of British Columbia; Chan, Kai M.A., Institute for Resources, Environment and Sustainability, University of British Columbia

17:45 How does salmon aquaculture affect marine fish biodiversity and ecosystem structure?

Uglem, Ingebrigt*, Norwegian Institute for Nature Research; Dempster, Tim, Department of Zoology, University of Melbourne; Bjorn, Paal-Arne, NOFIMA; Sanchez-Jerez, Pablo, Department of Marine Sciences and Applied Biology, University of Alicante; Fernandez-Jover, Damian, Department of Marine Sciences and Applied Biology, University of Alicante

18:00 Post-fire potoroo hide and seek

Smith, J K*, Department of Zoology, The University of Melbourne; Coulson, G, Department of Zoology, The University of Melbourne

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• <u>CS 55: ADAPTIVE MANAGEMENT AND MONITORING</u> Marlborough Room 3 Wednesday, December 7, 16:30 to 18:30

16:30 How powerful are underwater visual census methods for detecting long-term trends in temperate reef fish abundances?

Timothy Jones*, Victoria University of Wellington; Robert J Davidson, Davidson Environmental ltd; Jonathan P A Gardner, Victoria University of Wellington; James J Bell, Victoria University of Wellington

- 16:45 Monitoring Marine Reserves How do we know if protection is effective?
 Gregor, K.E.*, Marine Studies Department, Bay of Plenty Polytechnic; Young, K.D., Department of Conservation; Overton, J. McC., Landcare Research; Rapson, D., Department of Conservation
- 17:00 Do population indicators work? Investigating correlated responses of bird populations in relation to predator management

Hoare, JM*, New Zealand Department of Conservation; Monks, A, Landcare Research; O'Donnell, CFJ, New Zealand Department of Conservation

- 17:15 Using private agreements and collaborative research to design and test area-based fisheries management approaches Mary Gleason*, The Nature Conservancy; Michael Bell, The Nature Conservancy; Matt Merrifield, The Nature Conservancy; Steve Rienecke, The Nature Conservancy; Jono Wilson, Bren School, Univ. of California Santa Barbara; Chuck Cook, The Nature Conservancy
- 17:30 Identification of Areas of Conservation Importance as MPA Candidates Through the Analysis of Dolphin Critical Habitats, Golfo Dulce, Costa Rica

Oviedo, L*, The Swire Institute for Marine Science and School of Biological Sciences, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong.; **Karczmarski, L,** The Swire Institute for Marine Science and School of Biological Sciences, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong.

- 17:45 Avian responses to reduced-impact logging in the Southwestern Brazilian Amazon Chaves, W*, University of Florida; Sieving, KE, University of Florida
- 18:00 Impacts of Supplementation on Wild Chinook Salmon Productivity: Lessons from Long-Term Monitoring Buhle, ER*, NOAA Fisheries Service; Scheuerell, MD, NOAA Fisheries Service; Ford, MJ, NOAA Fisheries Service; Cooney, T, NOAA Fisheries Service; Carmichael, RW, Oregon Department of Fish and Wildlife
- 18:15 Does research and conservation management reduce lifetime reproductive success in a long-lived seabird? Stein, AM*, Zoology Department, University of Otago, PO Box 56 Dunedin 9054; van Heezik, Y, Zoology Department, University of Otago, PO Box 56 Dunedin 9054; Seddon, PJ, Zoology Department, University of Otago, PO Box 56 Dunedin 9054

• <u>CS 56: CONSERVATION GENETICS AND MEDICINE</u> New Zealand Room 1 Wednesday, December 7, 16:30 to 18:30

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- 16:30 Conserving allelic diversity in small populations
 Weiser, EL*, Department of Zoology, University of Otago; Grueber, CE, Department of Zoology, University of Otago;
 Jamieson, IG, Department of Zoology, University of Otago
- 16:45 Genetic analyses reveal congruence between biogeographic and genetic boundaries in the New Zealand endemic little-necked clam, Austrovenus stutchburyi.
 Ross, PM*, University of Waikato; Hogg, ID, University of Waikato; Pilditch, CA, University of Waikato; Lundquist, CJ, NAtional Institute of Water and Atmospehric Research; Wilkins, RJ, University of Waikato
- 17:00 Genetic and demographic monitoring of southern right whales, *Eubalaena australis*, around New Zealand
 E. Carroll*, Laboratory of Molecular Ecology and Evolution, School of Biological Sciences, University of Auckland; S.
 Childerhouse, Australian Marine Mammal Centre, Australian Antarctic Division, DEWHA, Kingston, Tasmania, Australia;
 N. Patenaude, LGL Limited, Environmental Research Associates, King City, Ontario; A. Alexander, Marine Mammal
 Institute and Department of Fisheries and Wildlife, Hatfield Marine Science Center, Oregon State University; D. Steel, Marine

Mammal Institute and Department of Fisheries and Wildlife, Hatfield Marine Science Center, Oregon State University; **R. Constantine**, School of Biological Sciences, University of Auckland, Auckland; **S. Smith**, New Zealand Department of Conservation, Aquatic & Threats Unit; **C.S. Baker**, Marine Mammal Institute and Department of Fisheries and Wildlife, Hatfield Marine Science Center, Oregon State University

- 17:15 Genetic changes in captive breeding: adaptation versus drift in a supportive breeding of Houbara Bustard Charge, R.*, *MNHN*; Sorci, G., *CNRS*; Saint Jalme, M., *MNHN*; Loic Lesobre, *ECWP*; Teplitsky, C., *CNRS*
- 17:30 Revisiting parasite conservation in endangered species Harris, NC*, NC State University; Livieri, TM, Prairie Wildlife Research; Dunn, RR, NC State University
- 17:45 A new technology for rapid gender determination and disease prevalence in amphibians using Near Infrared Reflectance Spectroscopy (NIRS)

Vance, CK, Biochemistry, Molecular Biology, Entomology and Plant Pathology, Mississippi State University, Mississippi State; Kouba, AJ*, Conservation and Research, Memphis Zoo; Willard, ST, Biochemistry, Molecular Biology, Entomology and Plant Pathology, Mississippi State University

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• <u>CS 57: LANDSCAPE ECOLOGY</u> New Zealand Room 2 Wednesday, December 7, 16:30 to 18:30

> 16:30 Effects of a highly interactive species, the black-tailed prairie dog, on urban avian diversity Magle, SB*, Lincoln Park Zoo; Salamack, KA, Wildlife Habitat Council; Crooks, KR, Colorado State University; Reading, RP, Denver Zoo

16:45 Can pocket parks support suburban birds in a compact city?

Stagoll, K*, Fenner School of Environment and Society, Australian National University; **Manning, AD,** Fenner School of Environment and Society, Australian National University; **Knight, E,** Fenner School of Environment and Society, Australian National University; **Fischer, J,** Faculty of Sustainability, Leuphana University Lueneburg; Lindenmayer, DB, Fenner School of Environment and Society, Australian National University

17:00 Urbanisation and its effects on the distribution and activity of insectivorous bats and their insect prey in Sydney, Australia

 Threlfall, C*, Evolution and Ecology Research Centre, School of Biological Earth and Environmental Sciences, University of New South Wales, Sydney; Penman, T, Forest Science Centre, Industry and Investment NSW, Beecroft, NSW, Australia; Law,
 B, Forest Science Centre, Industry and Investment NSW, Beecroft, NSW, Australia; Banks, P, School of Biological Sciences, University of Sydney

- 17:15 Predicting the effect of urban noise on acoustic communication in birds Parris, KM, University of Melbourne; McCarthy, MA*, University of Melbourne
- 17:30 Relative roles of urban greenery and landscape variables in promoting bird and butterfly communities in Singapore Teo, S, Centre for Sustainable Asian Cities, School of Design and Environment, National University of Singapore; Chong, KY*, Department of Biological Sciences, National University of Singapore; Kurukulasuriya, BR, Centre for Remote Imaging, Sensing and Processing, National University of Singapore; Chung, YF, Centre for Sustainable Asian Cities, School of Design and Environment, National University of Singapore; Tan, HTW, Department of Biological Sciences, National University of Singapore
- 17:45 Impact of urbanization on flower visitors assessed with a country-wide monitoring program based on citizen science.

Deguines N*, Museum national d'Histoire naturelle; **Fontaine C,** Museum national d'Histoire naturelle; **Julliard R,** Museum national d'Histoire naturelle

- 18:00 A paradigm shift: revisiting Noss (1990) for a comprehensive framework for biodiversity-assessment Chivers, SJ*, University of New England, NSW, Australia; Oliver, I, NSW Department of Environment, Climate Change, and Water, Australia; Gross, CL, University of New England, NSW, Australia
- 18:15 The habitat value of indigenous perennial tree-crop systems in a highly fragmented ecosystem of Mediterranean Australia

Gove, AD*, Dept. Environment and Agriculture, Curtin University; Woodall, GS, Centre of Excellence in Natural Resource Management, University of Western Australia

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• <u>CS 58: SOCIAL SCIENCE</u> New Zealand Room 3

Wednesday, December 7, 16:30 to 18:30

16:30 Navigating cultural ecosystem services to inform environmental management

Klain, S*, University of British Columbia; Gould, R, Stanford University; Chan, K, University of British Columbia; Satterfield, T, University of British Columbia; Levine, J, University of British Columbia

- 16:45 Exploring the impacts of social and biological indicators on beliefs about local effects of climate change Dietsch, AM*, Graduate Research Assistant, Colorado State University; Manfredo, MJ, Professor & Department Chair, Colorado State University; Teel, TL, Associate Professor, Colorado State University; President of Social Science Working Group, Society for Conservation Biology
- 17:00 Identifying indicators of illegal behaviour: carnivore killing in human-managed landscapes St. John, F.A.V.*, Bangor University; Keane, A.M., University College London; Edwards-Jones, G., Bangor University; Jones, L., n/a; Yarnell, R.W., Nottingham Trent University; Jones, J.P.G., Bangor University
- 17:15 Conservation in rural-amenity landscapes: social-ecological interactions shaping private land conservation practice Cooke, BR*, *RMIT University*
- 17:30 Participatory forest management in Kenya informed by scientific and land use change research Mitchell, Nicholas*, Institute for Applied Research, Karlsruhe University of Applied Sciences, 76133 Karlsruhe, Germany; Schaab, Gertrud, Institute for Applied Research, Karlsruhe University of Applied Sciences, 76133 Karlsruhe, Germany
- 17:45 A portrait of a protected area in distress: insurgency, wildlife decline and local antagonism towards conservation in Similipal Tiger Reserve, India

Priya Davidar*, Department of Ecology and Environmental Sciences, Pondicherry University; **Sasmita Sahoo**, Department of Ecology and Environmental Sciences, Pondicherry University

18:00 Meaningful nature experiences: reconnecting society with a conservation ethic

Zylstra, MJ*, Dept. Conservation Ecology & Entomology, Stellenbosch University; **Knight, AT,** Dept. Conservation Ecology & Entomology, Stellenbosch University; **Esler, KJ,** Dept. Conservation Ecology & Entomology, Stellenbosch University; **Le Grange, L,** Faculty of Education (Curriculum Studies), Stellenbosch University

18:15 Use of websites for engaging society in conservation Aguayo, Claudio*, Waikato University; Otrel-Cass, Kathrin, Waikato University; Eames, Chris, Waikato University

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• <u>CS 59: ALIEN AND INVASIVE SPECIES</u> New Zealand Room 4 Wednesday, December 7, 16:30 to 18:30

- 16:30 Invasive Ant Suppression Benefits the Conservation of a Functionally Important Native Tree on a Tropical Island Gaigher, R.*, Department of Conservation Ecology and Entomology, Faculty of AgriSciences, Stellenbosch University; Samways, M.J., Department of Conservation Ecology and Entomology, Faculty of AgriSciences, Stellenbosch University
- 16:45 Biodiversity impacts of feral pigs in a temperate rainforest ecosystem Krull, CR*, University of Auckland; Burns, BR, University of Auckland; Choquenot, D, Landcare Research; Stanley, MC, University of Auckland
- 17:00 Power poles and tall trees adjacent to sunflower fields increase pest damage caused by the invasive Rose-ringed Parakeet in Israel
 Schäckermann, Jessica*, Leuphana University Lüneburg; Klein, Alexandra-Maria, Leuphana University Lüneburg; Mandelik, Yael, Hebrew University of Jerusalem
- 17:15 Pathogen spillover from greenhouses and declines of North American bumble bees Szabo, ND*, University of Ottawa; Kerr, JT, University of Ottawa
- 17:30 De-stocking seral grassland/shrubland ecosystems leads to biodiversity gains but alters suites of invasive mammals Pech, R*, Landcare Research; Byrom, A, Landcare Research; Whitehead, A, Landcare Research; Clayton, R, Landcare Research; Norbury, G, Landcare Research; Wilson, D, Landcare Research
- 17:45 Investigating the feasibility of managing an alien marine species through the combined efforts of central government and local communities.
 Walls, K*, Ministry of Agriculture and Forestry, Biosecurity New Zealand (MAFBNZ)
- 18:00 Invasive plants in conservation linkages: what have we been overlooking? Wilkerson, ML*, University of California, Davis
- 18:15 Predicting introduced Pallas's squirrel (Callosciurus erythraeus) expansion in Southern France Dozieres, A.*, MNHN UPMC CNRS UMR 7204; Lorrilliere, R., MNHN UPMC CNRS UMR 7204; Robert, A., MNHN UPMC CNRS UMR 7204; Chapuis, J.L., MNHN UPMC CNRS UMR 7204

Parnell Room Wednesday, December 7, 16:30 to 18:30

16:30 Landscape composition and scale determine butterfly richness in gardens: evidence from citizen-scientist garden counts in Belgium

Maes, D*, Research Institute for Nature and Forest (INBO; Vanreusel, W, Natuurpunt; Van Dyck, H, UCL

- 16:45 Comparing environmental performance of organic and integrated management kiwifruit orchards MACLEOD, CJ*, Landcare Research
- 17:00 Effects of pond draining on farm pond biodiversity and water quality Usio, Nisikawa*, Niigata University, Japan; Miho Imada, National Institute for Environmental Studies, Japan; Megumi Nakagawa, National Institute for Environmental Studies, Japan; Munemitsu Akasaka, National Institute for Environmental Studies, Japan; Noriko Takamura, National Institute for Environmental Studies, Japan
- 17:15 Herbivory as an indirect driver of change in fragmented eucalypt forests Farmilo, BJ*, La Trobe University; Morgan, JW, La Trobe University
- 17:30 Elevational distribution pattern and conservation of amphibians in the eastern Himalaya, India Chettri, Basundhara, Sikkim Government College, Tadong; ACHARYA, BK*, Sikkim Government College, Tadong
- 17:45 Contribution of land use types to regional plant diversity in temperate Australian agricultural landscapes
 Schultz, Nick*, School of Environmental & Rural Science, University of New England, Armidale NSW Australia; Reid, Nick, School of Environmental & Rural Science, University of New England, Armidale NSW Australia; Lodge, Greg, Department of Trade & Investment, Regional Infrastructure and Services, Primary Industries, Tamworth Agricultural Institute, Calala NSW Australia
- 18:00 The Satoyama Index: A biodiversity indicator for agricultural landscapes Kadoya, T*, National Institute for Environmental Studies; Washitani, I, The University of Tokyo
- 18:15 Matrix heterogeneity affects population size of Harvest mice in fragmented landscape Misako Kuroe*, *Akita Prefectural University*



Student Networking Reception

18:30 - Late, The Empire Tavern Garden Bar (137 Victoria Street West)

A social evening of networking with like-minded students from around the world. Conservation-themed entertainment, one compimentary drink and nibbles will be provided. Pre-registration is required and ticket price is \$10. Walking directions: Turn left on Victoria Street West when leaving Federal Street (which runs between Casino and Convention Centre) and walk ~250m to the corner of Victoria and Nelson Street. The Empire Tavern is on the northeast corner. The Garden Bar is in the back of the pub.

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Evening Boat Cruise and Dinner to Rangitoto Island

19:00 - 22:00, Meet at Ferry Terminal, 99 Quay Street at 19:00

Head out of the Waitemata Harbour to enjoy an evening cruise to Rangitoto Island. This is a wonderful opportunity to see a conservation project in action as the last of the pests have recently been eradicated. Pohutakawa trees should be in full bloom and the birds, including parakeets, will be making a spectacle of themselves. This short island stop will allow you to stretch your legs and will be followed by a buffet dinner on board the boat. One drink is included and then a cash bar will be available. The ferry terminal is a 15min walk from the SKYCITY convention centre. Ticket price \$68.

Society for Conservation Biology North America Congress for Conservation Biology



July 15-18, 2012 • Oakland, California

Thursday,	Thursday, December 8							Schedul	Schedule at a glance
Epsom 3	Epsom 1&2	Marlborough 1	Marlborough 2	Marlborough 3	New Zealand 1	New Zealand 2	New Zealand 3	New Zealand 4	Parnell
8:25 - 10:00 A.M.	у.	d	Plenary: Richard Hobbs,		ation in production landscapes: Ca Awards Ceremony: Brian Huntley <i>New Zealand Rooms</i>	Conservation in production landscapes: Can we have our cake and eat it too? Awards Ceremony: Brian Huntley <i>New Zealand Rooms</i>	ke and eat it too?		
				Coffee Break: 10:00-10:30 A.M., Auckland Room	10:30 A.M., Auckl	and Room			
10:30 A.M 12:30 P.M	30 P.M								
Symp. 24 Impacts roads & traffic on biodiversity	Speed Sess. Biogeography	Contt. Sess. Indigenous knowledge & conservation	Symp. 32 Conservation & food security	Contr. Sess. Environmental politics & policy	Symp. 26 Effects of climate change on biodiversity in Oceania	Contr. Sess. Population Dynamics (Climate Change)	Symp. 25 Looking back & moving forward on conserving threatened species	Contr. Sess. Conservation genetics & medicine	Symp. 22 Knowing & doing: Effectiveness, failure & Implementation Gap
		SCB North America Section Meeting	SCB Europe Section Meeting	SCB Asia Section Meeting	Student Learn Over Lunch with Plenary Speakers & Smith Fellows	WS 12 Value of Ecological Economics for Wildlife Conservation	Marine Think Tank Lunch Session (3)	WS 22 Adaptively managing biodiversity in changing world	
2:00 P.M 4:00 P.M	P.M							_	
Symp. 29 How science can help policy make sense	Speed Sess. Landscape Ecology	Contt. Sess. Disturbance Ecology	Symp. 30 Marine megafauna in a changing climate	Contr. Sess. Environmental & ecological economics	Symp. 28 Island Conservation: Restoration outcomes	Contr. Sess. Population Dynamics	Symp. 31 Confronting climate-biodiversity crisis through innovative applications	Contr. Sess. Conservation genetics & medicine	Symp. 27 Integrating research & community-led management
				Coffee Break: 4:00-4:30 P.M., Auckland Room	:30 P.M., Auckland	Room			
4:30 P.M 6:30 P.M.	. W.				SCB M Awarr Woi	lembers Meeting, 25 d Ceremony, Poster / man in Conservation 4:30 P.M. New Zea	SCB Members Meeting, 25th Anniversary Video, Student Award Ceremony, Poster Award Ceremony, and Young Woman in Conservation Biology Award Ceremony 4:30 P.M. to 6:30 P.M. New Zealand Rooms	,, Student d Young emony	Thursday
6:00 P.M. Onwards	ards	WS 19 Lessons learned in PNG on engaging local communities 6-8 P.M.	WS 21 SCB Chapters: Engaging society in conservation 6:30-8 P.M.		Pos 6∷	Poster Session & Drinks 6:30 P.M. to 8:30 P.M. Auckland Room	S		WS 13 (Discussion Group) NASA and conservation applications 6-8 P.M.
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Thursday, December 8

Morning session: 8:25 A.M. to 10:00 A.M., New Zealand Rooms 1-4

Announcements 8:25-8:30

PLENARY SESSION 8:30-9:30

Conservation in production landscapes: Can we have our cake and eat it too?

Richard Hobbs, University of Western Australia, Perth, Western Australia

How well prepared is conservation biology to provide guidance to help conserve the world's biodiversity in the Anthropocene? Increasing evidence suggests that humanity's impacts on ecosystems are pervasive, and yet much conservation theory and practice has been based on a view of the world in which human activities and conserved nature are separated as much as possible. In this view, the world is categorized into protected and unprotected areas, habitat and non-habitat, production land and conservation land. Although these categories may still be appropriate in some instances, the scale of the human enterprise and the impacts of climate and land-use change, amongst other global drivers, mean that a radical rethink of conservation approaches may be needed. This is most obvious in the areas of the world taken up for production of food and fiber and for human settlements. Here, alteration and fragmentation of the landscape is obvious with, often, little of the pre-existing ecosystem remaining. In these landscapes, multiple trends are coalescing to present new conundrums for conservation. The majority of the world's growing human population will soon be urban. This growing population, declining amounts of good and fuel are becoming common. Conserving biodiversity thus has to happen in an increasingly volatile and unpredictable biophysical and social environment. So, how does conservation biology respond to these new challenges? Do we simply retreat to the barricades and hang on to existing approaches, or are new approaches and paradigms needed? Can we have our cake and eat it too?

AWARD CEREMONY

9:30-10:00

Edward T. LaRoe III Memorial Award

The Edward T. LaRoe III Memorial Award recognises the innovative application of science to resource management and policy by scientists. The 2011 LaRoe awardee is **Brian John Huntley**. Professor Huntley is Emeritus Professor at the University of Cape Town, South Africa and Research Associate at the Centre of Excellence for Invasion Biology at the University of Stellenbosch. He was given the award for his visionary and dynamic leadership in transforming the biodiversity and ecosystem management arenas in South Africa and Southern Africa.

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COFFEE BREAK 10:00 to 10:30 Auckland Room

SY 24: QUANTIFYING THE IMPACTS OF ROADS AND TRAFFIC ON BIODIVERSITY Epsom Room 3

Thursday, December 8, 10:30 to 12:30

ORGANIZER(S): Clara Grilo, Universidade de Lisboa; Alex Bager, Universidade Federal de Lavras; Rodney van der Ree, University of Melbourne

Linear infrastructure (such as roads, railways and utility easements) dissects all continents and influences biodiversity and ecosystem processes for many hundreds and even thousands of meters. When combined with vehicles (including cars, trucks, trains and planes), their effects on wildlife are often negative and profound. In the past two decades, the amount of research on the effects of roads and traffic and the use and effectiveness of mitigation works (such as fencing to prevent road-kill and underand over-pass structures to facilitate connectivity) has increased dramatically. However, recent reviews have highlighted that many studies are poorly designed, have insufficient replication and are too short in duration to understand the impacts at the level of populations, communities and ecosystems. This symposium will focus on the effects of roads on higher orders, greater spatial scales and over longer time periods. This symposium will address the SCB theme of Conservation Management by presenting pure and applied research into the effects of roads and traffic on biodiversity. The engagement of society in this issue is a critical step towards conserving biodiversity and presenters have been encouraged to consider how to engage with society on this issue of global importance. A second complementary symposium will focus on mitigation programs that aim to reduce the effects of roads and traffic on biodiversity.

10:30 Building an integrated platform for projecting and monitoring persistence of wildlife populations faced with roads and traffic

Sunnucks, P*, Monash University; Taylor, AC, Monash University; Amos, N, Monash University; van der Ree, R, Australian Research Centre for Urban Ecology, Royal Botanic Gardens Melbourne

10:45 Evaluating the effectiveness of road mitigation measures for wildlife: how much monitoring is enough? Soanes, K*, Australian Research Centre for Urban Ecology; van der Ree, R, Australian Research Centre for Urban Ecology

11:00 Individual space use behavior: assessing sensitivities and vulnerabilities to roads

Grilo, C*, Universidade de Lisboa, Centro de Biologia Ambiental/Departamento de Biologia Animal, Faculdade de Ciências/ Departamento de Biología de la Conservación, Estación Biológica de Doñana (EBD-CSIC); Sousa, J, Universidade de Lisboa, Centro de Biologia Ambiental/Departamento de Biologia Animal, Faculdade de Ciências; Ascensao, F, Universidade de Lisboa, Centro de Biologia Ambiental/Departamento de Biologia Animal, Faculdade de Ciências; Matos, H, Universidade de Lisboa, Centro de Biologia Ambiental/Departamento de Biologia Animal, Faculdade de Ciências; Leitao, I, Universidade de Lisboa, Centro de Biologia Ambiental/Departamento de Biologia Animal, Faculdade de Ciências; Leitao, I, Universidade de Lisboa, Centro de Biologia Ambiental/Departamento de Biologia Animal, Faculdade de Ciências; Suntos, P, Universidade de Lisboa, Centro de Biologia Ambiental/Departamento de Biologia Animal, Faculdade de Ciências; Suntos-Reis, M, Universidade de Lisboa, Centro de Biologia Ambiental/Departamento de Biologia Animal, Faculdade de Ciências; Suntos-Reis, M, Universidade de Lisboa, Centro de Biologia Ambiental/Departamento de Biologia Animal, Faculdade de Ciências; Revilla, E, Departamento de Biología de la Conservación, Estación Biológica de Doñana (EBD-CSIC), Sevilla, España

11:15 Traffic noise impacts on vertebrates of tropical rainforest

Goosem, M*, James Cook University; Hoskin, C., James Cook University; Dawe, G., James Cook University

11:30 Disentangling time and traffic volume effects on road genetic differentiation

Ascensão, Fernando^{*}, Centre for Environmental Biology, FCUL, Portugal / Western Transportation Institute, Montana State University, USA.; Ruiz-Capillas, Pablo, Obrascón Huarte Lain, S.A. Research, Development and Innovation (R&D) Service, Madrid, Spain.; Mullins, Jacinta, Centre for Environmental Biology, FCUL, Portugal.; Fernandes, Carlos, Centre for Environmental Biology, FCUL, Portugal.; Clevenger, Anthony, Western Transportation Institute, Montana State University, USA.; Malo, Juan E., Terrestrial Ecology Group-TEG, Departamento Ecologia, Universidad Autonoma de Madrid, Spain.; Santos-Reis, Margarida, Centre for Environmental Biology, FCUL, Portugal.; Mata, Cristina, Terrestrial Ecology Group-TEG, Departamento Ecologia, Universidad Autonoma de Madrid, Spain.

11:45 Determining Location and Design of Cost Effective Wildlife Crossing Structures along US 64 in North Carolina Smith, DJ*, University Of Central Florida

12:00 Experimenting with roads: Learning how to improve mitigation for wildlife

Van Der Ree, R*, Australian Research Centre for Urban Ecology; **Jaeger, J,** Concordia University, Canada; **Fahrig, L,** Carleton University, Canada; **Madrinan, F,** Concordia University, Canada; **Houlahan, J,** University of New Brunswick at St john; **Findlay, S,** 4Institute of the Environment, & Ottawa-Carleton Institute of Biology

Discussion follows last presentation until end of session

• <u>SPEED 61: BIOGEOGRAPHY</u>

Epsom Rooms 1&2

Thursday, December 8, 10:30 to 12:30

- 10:30 Managed Relocation for Conservation: Issues and Concerns Schwartz,M.W.*, University of California, Davis; Hellmann, J.J., Notre Dame University; McClachlan, J.S., Notre Dame University; Sax, D.F., Brown University
- 10:34 Alien predator ameliorates threat of invasive mesopredator on native prey in a pond metacommunity Miyashita, T., Department of Ecosystem Studies, University if Tokyo; Takeda, H., Department of Ecosystem Studies, University if Tokyo; Kuroe, M., Department of Ecosystem Studies, University if Tokyo; Osada, Y.*, Department of Ecosystem Studies, University if Tokyo
- 10:38 Conservation planning under climate change should we and could we? Kujala, H*, Metapopulation Research Group, University of Helsinki
- 10:42 Influence of Biotic Factors and Spatial Scale on Range Margin Dynamics Among Competing Species Under Climate Change

Naujokaitis-Lewis, I*, University of Toronto; Fortin, MJ, University of Toronto

- **10:46** Conserving a critical landscape connectivity in south India Jones, S*, LORIS-The Biodiversity Conservation Society
- 10:50 Modeling Habitat Suitability for Specialized Woodpeckers: Toward Quantitative Conservation Targets Roberge, J.-M.*, Dept. of Wildlife, Fish and Environmental Studies, SLU, Sweden; Angelstam, P., School for Forest Management, SLU, Sweden; Mikusinski, G., Dept. of Ecology, SLU, Sweden; Stighäll, K., Swedish Society for Nature Conservation; Edman, T., Metria AB
- 10:54 Mussel and dogwhelk distribution along the north-west Atlantic coast: testing predictions from the abundant-centre model

Tam, J.C.*, Victoria University of Wellington

- 10:58 Regional spore rain in a bryophyte genus implications for nature conservation Sebastian Sundberg*, Dept Plant Ecology & Evolution, Uppsala University
- 11:02 A Compairing of two Different Population of [Branchiopoda; Chirocephalus sp.] with Conservative Approach within Soulukli & Arneh Temporary Wetland NE Iran
 Mahmoud soufi*, Department of Environment and Energy Science and research Branch Islamic Azad University, Tehran, Iran; Bahram Zehzad, Shahid Beheshti University, Tehran, Iran; Haji Gholi Kami, Department of Biology, Faculty of Sciences, University of Golestan, P. O. Box 49165, Gorgan, Iran.; Ali Turk Qashqae, Department of Environment and Energy Science and research Branch Islamic Azad University, Tehran, Iran; Mosa Ghorbani Orjanli, 4Department of Geological Sciences research of Iran
- 11:06 Specialist and generalist differential responses to different types of disturbances. Lorrilliere, R.*, MNHN UPMC CNRS UMR 7204; Couvet, D., MNHN UPMC CNRS UMR 7204; Robert, A., MNHN UPMC CNRS UMR 7204
- 11:10 Recovery After a Disturbance of Litter Fauna Communities in a Temperate and a Boreal Forest Comor, V.*, Wageningen University; van Langevelde, F., Wageningen University; Berg, M., VU University Amsterdam; Prins, H., Wageningen University; de Bie, S., Wageningen University
- 11:14 Invasive alien plant species: is it a threat to the existence of threatened spot-billed pelicans in Sri Lanka? Weerakoon, K*, Eco friendly Volunteers; Athukorala, Eco friendly Volunteers
- 11:18 Feral Cats Pest in the Indian Ocean Koch, K*, Biodiversity and Climate Research Centre (BiK-F), Siesmayerstrasse 70, 60323 Frankfurt; Algar,D, 2Department of Environment and Conservation, Science Divison, 6026 Woodvale, Western Australia; Schwenk,K, Biodiversity and Climate Research Centre (BiK-F), Siesmayerstrasse 70, 60323 Frankfurt
- 11:22 Distribution of invasive plants in roads near the city of La Paz- Bolivia Fernandez Murillo, MP, Carrera de Biología, Universidad Mayor de San Andrés, Intituto de Ecologia de Bolivia; Rico, A. *, Instituto de Ecología de Bolivia; Kindlmann, P., Institute for Environmental Studies, Faculty of Science, Charles University, Benátská
- 11:26 Incorporating the influence of uncertainty into biodiversity credits systems Bruggeman, DJ*, Michigan State University; Wiegand, T, Helmholtz Centre for Environmental Research

Discussion follows last presentation until end of session

<u>CS 63: INDIGENOUS KNOWLEDGE AND CONSERVATION</u>

Marlborough Room 1 Thursday, December 8, 10:30 to 12:30

10:30 Can Agroforestry Conserve the Biodiversity? Study on four contrasting agroforestry land-uses in tropical forests of Bangladesh

Sharif Ahmed Mukul*, Faculty of Life Science, Copenhagen University, Denmark; Narayan Saha, Shahajalal University of Science and Technology, Sylhet 3114, Bangladesh

- 10:45 Using Traditional Ecological Knowledge to Design an Ecological Study a case study of the Admiralty cuscus (Spilocuscus kraemeri) in Papua New Guinea Samson, MJ*, Wildlife Conservation Society - Papua New Guinea; Whitmore, N, New Zealand Department of Conservation
- 11:00 Understanding evolving resource governance in Gabon: lessons for community-based conservation
 Walters, G., University College London; Coad, L.*, University of Oxford; Schleicher, J., University of Cambridge; Hymas, O., Zoological Society of London; Kialo, P., Institut de Pharmacopee et Medicines Traditionelles, Gabon
- 11:15 'Conservation' among animist beliefs of the Ikundi-ku of Papua New Guinea Kagl, John*, Wildlife Conservation Society, Papua New Guinea Programme
- 11:30 Traditional Ecological Belief Systems: Assessing the role of cultural filters in driving positive perceptions between fishers and dolphins

D'Lima, C*, James Cook University & Nature Conservation Foundation; Arthur, R, Nature Conservation Foundation; Sinha, A, National Institute of Advanced Studies; Hamann, M, James Cook University; Marsh, H, James Cook University

- 11:45 Global success of coral reef management strategies in social-ecological outcomes Freed, Sarah*, Portland State University; Granek, Elise, Portland State University
- 12:00 From artisanal fishing vessels to space: using all the available tools to know more about the endangered franciscana dolphin (*Pontoporia blainvillei*)

Szephegyi, MN*, Cetaceos Uruguay; Facultad de Ciencias; Franco Trecu, V, Cetaceos Uruguay; Passadore, C, Cetaceos Uruguay; Costa, P, Cetaceos Uruguay; Dimitriadis, C, Cetaceos Uruguay; Laporta, P, Cetaceos Uruguay; Abud, C, Cetaceos Uruguay

12:15 The use of innovative learning approaches and tools to catalyse community-based conservation and monitoring Yuliani, E.L.*, *CIFOR*; Syahputra, H.A., *Consultant*; Indriatmoko, Y., *CIFOR*

• <u>SY 32: HEALTHY ECOSYSTEMS, HEALTHY COMMUNITIES? : LINKS BETWEEN CONSERVATION AND FOOD</u> <u>SECURITY</u> Marlborough Room 2 Thursday, December 8, 10:30 to 12:30

ORGANIZER(S): Clare Gupta

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To effectively engage society in conservation, the conservation community must understand and highlight the ways in which biological diversity provides for human populations across the globe. Conservation must be viewed not merely as the protection of charismatic wildlife species and revered ecosystems, but as an endeavor to sustain the ecosystem services and goods upon which human society depends. One issue of particular long-standing importance to the global community is food security, which has significant yet often overlooked links to the conservation of biological diversity. Our symposia will assemble a panel of speakers who will present a range of perspectives on this topic, from scholars who study the links between natural resource dependence and food availability to practitioners who examine the interactions between biodiversity and sustainable agricultural systems. A key point of discussion will be the ways in which conservation and food security goals can overlap under different conditions. We will examine how conservation can provide for or inhibit food security among different groups of people and across different geographical regions. Speakers will present primary research findings as well as implications for management and policy. This panel will be interdisciplinary and will be comprised of both ecologists and social scientists who will provide varied yet complementary analyses of the complex relationship between ecosystem health and community health in the context of food production and availability.

10:30 Coping with a tattered safety net: Assessing household wildlife use before, during and after food supply and price shocks in Ghana and Tanzania

Brashares, JS*, UC-Berkeley; Sam, MK, Ghana Wildlife Division; Okello, G, Bushmeat Monitoring Network

- 11:00 Human Health Impacts of Ecosystem Services: Wildlife Consumption and Food Security Golden, CD*, Harvard University School of Public Health/Center for the Environment
- 11:15 The value of fragments: extending park boundaries, dwindling resources, or sourcing crop raiders? Ryan, Sadie*, SUNY-ESF; Hartter, Joel, University of New Hampshire
- 11:30 A Paradox of Resource Abundance: Food Security on the Shores of Lake Victoria Fiorella, KJ*, *UC Berkeley*

Thursday

11:45 Climate Change and Food Security: Robust Solutions from Nature. Hills, T*, Conservation International

12:00 Fishers, Conservation and Marine Parks Shaw, Sylvie*, The University of Queensland

Discussion follows last presentation until end of session

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 <u>CS 65: ENVIRONMENTAL POLITICS AND POLICY</u> Marlborough Room 3

Thursday, December 8, 10:30 to 12:30

- 10:30 Ownership, poverty alleviation and conservation: the dolphin-watching industry in Chilika lagoon, India Sutaria, D*, Foundation for Ecological Research, Advocacy and Learning; Marsh, H, James Cook University
- 10:45 Mitigating local causes of ocean acidification with existing laws
 Foley, MM*, Center for Ocean Solutions; Kelly, RP, Center for Ocean Solutions; Fisher, WS, US Environmental Protection Agency; Feely, RA, NOAA Pacific Marine Environmental Lab; Halpern, BS, National Center for Ecological Analysis and Synthesis; Waldbusser, GG, Oregon State University; Caldwell, MR, Center for Ocean Solutions
- 11:00 New Zealand Aquaculture Development, Spatial Conflict and Ecological Outcomes Collins, Meghan*, Victoria University of Wellington
- 11:15 Conservation issues in Australian fisheries management: the application of the precautionary and ecosystem approaches in five case studies.
 Nevill, J*, Retired University of Tasmania
- 11:30 Improving MPA management efficiency through collaboration between managers and scientists: the PAMPA project Pelletier, D.*, *IFREMER*
- 11:45 Moving Beyond the CBD'S 2010 Target A Review on the Effectiveness of Fauna and Flora Protection Ordinance in Protected Area Establishment in Sri Lanka
 Perera, Nishanthi*, PhD Candidate,, Department of Zoology, University of Colombo, Sri Lanka; Kotagama, S.W, Proffessor of Environmental Science, Dpeartment of Zoology, University of Colombo, Sri Lanka
- 12:00 Biases in biodiversity conservation research and uptake Sandbrook, CG*, UNEP-WCMC; Hoffmann, M, IUCN
- 12:15 Examining the Gridlock of Tiger Conservation: Results of a Grounded Theory Inquiry into the Social Factors that Affect Tiger Conservation in India.

Archi Rastogi*, Department of Natural Resource Sciences, McGill University, Canada; Gordon M Hickey, Department of Natural Resource Sciences, McGill University, Canada; Ruchi Badola, Wildlife Institute of India, Dehradun, India; S A Hussain, Wildlife Institute of India, Dehradun, India

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• SY 26: EFFECTS OF CLIMATE CHANGE ON BIODIVERSITY IN OCEANIA New Zealand Room 1 Thursday, December 8, 10:30 to 12:30 ORGANIZER(S): Prof. Richard Kingsford, Australian Wetlands and Rivers Centre, University of NSW

This symposium aims to tackle a major issue for the region with a series of thematic and regional talks on the effects of Climate in our region. Thematic talks would review the literature on current impacts for terrestrial, freshwater and marine ecosystems, predict future if no change, provide options for management and policy. Regional talks would review current status of climate change in each of the regions (Australia, New Zealand, Pacific Islands) and identify Government processes and their effectiveness.

- 10:30 Climate change, Variability and conservation impacts in Australia Prowse, TAA, University of Adelaide; Brook, BW*, University of Adelaide
- 10:45 Predicted impacts of climate change on New Zealand's biodiversity Lundquist, CJ*, NIWA; Ramsay, D, NIWA; Bell, R, NIWA; Swales, A, NIWA; Kerr, S., Motu Economic and Public Policy Research
- 11:00 No Room in the Ark? Climate Change and Biodiversity in the Pacific Islands of Oceania Duffy, D.C.*, University of Hawai`i Manoa
- 11:15 Climate change impacts on the terrestrial biodiversity and carbon stocks of Oceania Wardell-Johnson, GW*, Curtin Institute for Biodiversity and Climate; Keppel, G, Curtin Institute for Biodiversity and Climate; Sander, J, Curtin Institute for Biodiversity and Climate

- 11:30 Ecosystem-based adaptation in marine ecosystems of tropical Oceania in response to climate change Grantham, H.S., Conservation International; McLeod, E, The Nature Conservancy,; Brooks, A, Woodland Park Zoo's Tree Kangaroo Conservation Program; Jupiter, S.D.*, Wildlife Conservation Society Fiji Country Program; Hardcastle, J., The Nature Conservancy; Richardson, A.J., The University of Queensland; Poloczanska, E.S., CSIRO Marine and Atmospheric Research; Hills, T., Conservation International
- 11:45 Climate change and freshwater ecosystems in Oceania: an assessment of vulnerability and adaptation opportunities Jenkins, KM*, University of NSW; Kingsford, RT, University of NSW; Closs, GP, University of Otago; Wolfendenac, BJ, New South Wales Office of Water,; Matthaei, C, University of Otago; Hay, S, University of NSW
- 12:00 Is Australia ready for assisted colonisation? Policy changes required to facilitate translocations under climate change Burbidge, AA*, Floreat, WA 6014; Byrne, M, Science Division, Department of Environment and Conservation, Western Australia; Coates, D, Science Division, Department of Environment and Conservation, Western Australia; Garnett, ST, Research Institute for Environment and Livelihoods, Charles Darwin University, ; Harris, S, Department of Primary Industries, Parks, Water and Environment, Tasmania; Hayward, MW, Australian Wildlife Conservancy; Martin, TG, Climate Adaptation Flagship, CSIRO Ecosystem Sciences; McDonald-Madden, E, Climate Adaptation Flagship, CSIRO Ecosystem Sciences

Discussion follows last presentation until end of session

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• <u>CS 67: POPULATION DYNAMICS (CLIMATE CHANGE)</u> New Zealand Room 2 Thursday, December 8, 10:30 to 12:30

10:30 Rodent dynamics in Serengeti National Park, Tanzania: implications of climate and land use change for East African savanna ecosystems

Byrom, AE*, Landcare Research; Metzger, K, Centre for Biodiversity Research, University of British Columbia, Vancouver; Craft, M, Division of Ecology and Evolutionary Biology, University of Glasgow; Nkwabi, A, Serengeti Biodiversity Program, , Arusha, Tanzania; Durant, S, Institute of Zoology, Zoological Society of London, Regent's Park; Reed, D, Department of Anthropology, University of Texas at Austin; Ruscoe, WA, Landcare Research; Sinclair, ARE, Centre for Biodiversity Research, University of British Columbia

10:45 Global change and species interactions: What will happen to the web of life?

De Sassi, C*, University of Canterbury, New Zealand; Tylianakis, JM, University of Canterbury, New Zealand

11:00 Climate and the macroecology of abundance

Manne, Lisa*, City University of New York; Hawkins, Bradford, University of California at Irvine; La Sorte, Frank, Yale University

- 11:15 Using normalized difference vegetation index (NDVI) to predict the impact of environmental change on biodiversity Pettorelli, Nathalie*, Institute of Zoology, Zoological Society of London
- 11:30 Age matters: Adult and juvenile survival rates will respond differently to climate change Dybala, Kristen*, University of California, Davis
- 11:45 Conservation implications of ecotypic differentiation in a changing climate Souther, Sara*, West Virginia University; McGraw, James B., West Virginia University
- 12:00 Disentangling the effects of different sources of uncertainty on the projected decline of an epixylic moss population Ruete, A*, Department of Ecology, Swedish University of Agricultural Sciences (SLU). ; Yang, W, Swedish Meteorological and Hydrological Institute (SMHI), ; Bärring, L, Swedish Meteorological and Hydrological Institute (SMHI), ; Stenseth, NC, Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biology, University of Oslo; Snäll, T, Department of Ecology, Swedish University of Agricultural Sciences (SLU).
- 12:15 Using Acoustic Enrichment to Improve Reproductive Success in Small Populations of Colonial Species Clark, JA*, Fordham University; Haseley, A, Fordham University; Van Genderen, G, Fordham University; Frink, J, Fort Valley State University; Clum, N, Wildlife Conservation Society/Bronx Zoo; Hofling, M, Wildlife Conservation Society/Bronx Zoo; Pokorny, Y, Wildlife Conservation Society/Bronx Zoo; Gonzalez, N, Wildlife Conservation Society/Bronx Zoo

• <u>SY 25: LOOKING BACK AND MOVING FORWARD ON THE CONSERVATION OF THREATENED SPECIES</u> New Zealand Room 3 Thursday, December 8, 10:30 to 12:30

ORGANIZER(S): Bottrill, MC, University of Queensland

The CBD 2010 biodiversity target was to significantly reduce the rate of biodiversity loss, but has fallen short of reaching this goal. Populations of threatened species continue to decline, while conservation expenditures are shifting from single-species strategies to more ecosystem-based approaches. Conservation efforts post-2010 should both address the inadequacies of past performances in species management and provide guidance to improve outcomes in the future. Knowledge on effectiveness of



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actions in achieving threatened species recovery is needed to assess changes in policy, evaluate what has worked (and what has not), and also inform future investments about which actions are likely to lead to species recovery. This symposium focuses on approaches to planning and evaluation of national and regional strategies targeted at threatened species recovery. In a series of case studies representing perspectives from the Oceania region and further afield, this symposium explores (1) retrospective approaches which evaluate the effectiveness of different past actions; and (2) prospective approaches which aim to prioritise the actions most likely to be effective in the future. Being explicit about the effectiveness of our efforts to protect threatened species is critical in engaging society in their conservation by promoting accountability, improving transparency, while also raising awareness and managing expectations of the level of resources needed to halt declines.

10:30 Measuring biodiversity outcomes in the world's protected areas

Thomas Brooks*, NatureServe; Stuart Butchart, BirdLife International; Mark Hockings, University of Queensland; Stephen Woodley, Parks Canada

11:00 What is needed to increase the capacity of Australia's protected area system to represent threatened species? Watson, J*, Wildlife Conservation Society; Evans, M., University of Queensland; Carwardine, J., CSIRO; Fuller, R., University of Queensland; Joseph, L., Widlife Conservation Society; Segan, D., University of Queensland; Taylor, M., WWF-Australia; Possingham, H., University of Queensland

11:15 Does recovery planning improve the status of threatened species?

Bottrill, M.C.*, University of Queensland; Walsh, J.C., University of Queensland; Watson, J.E.M., Wildlife Conservation Society; Joseph, L.N., Wildlife Conservation Society; Ortega-Argueta, A., Instituto de Ecologica; Possingham, H.P., University of Queensland

11:30 Applying a project prioritisation protocol to conserve New Zealand threatened species Maloney, RF*, Department of Conservation; Davis, JP, Department of Conservation; Joseph, LN, Wildlife Conservation Society; O'Connor, SM, Department of Conservation; Possingham, H, University of Queensland

12:00 Building a better mouse-trap: improving estimates of the impact of conservation action Holmes, K., IUCN Species Survival Commission; Duckworth, J. W., None; Hoffmann, M.*, IUCN Species Survival Commission; Mallon, D., Manchester Metropolitan University; Stuart, S.N., IUCN Species Survival Commission

Discussion follows last presentation until end of session

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• <u>CS 69: CONSERVATION GENETICS AND MEDICINE</u> New Zealand Room 4 Thursday, December 8, 10:30 to 12:30

> 10:30 Herbivory Interactions Cause Phylogenetic Changes in Pinyon-Associated Communities Jarvis, KJ*, Northern Arizona University; Craig, AJ, Northern Arizona University; Allan, GJ, Northern Arizona University; Whitham, TG, Northern Arizona University; Beresic-Perrins, RK, Northern Arizona University; Stone, AC, Northern Arizona University; Gehring, CA, Northern Arizona University

10:45 Genetic differentiation of Wild Asian Elephants in Salakphra Wildlife Sanctuary, Thailand

Kongrit, C*, Department of Biology, Faculty of Science, Mahidol University, Bangkok, Thailand; Siripunkaw, C, Department of Biology, Faculty of Science, Mahidol University, Bangkok, Thailand; Akkarapatumwong, V, Institute of Molecular Biosciences, Mahidol University, Nakhonpathom, Thailand; Srikosamatara, S, Department of Biology, Faculty of Science, Mahidol University, Bangkok, Thailand; Brockelman, WY, Department of Biology, Faculty of Science, Mahidol University, Bangkok, Thailand

- 11:00 Conservation management of rare plant species, is eco-sourcing doing more harm than good? Houliston, G.J.*, Landcare Research
- 11:15 Limited dispersal due to forest fragmentation results in increased genetic relatedness and inbreeding in an arboreal marsupial

Lancaster, ML*, School of Earth and Environmental Sciences, The University of Adelaide; Taylor, AC, Australian Centre for Biodiversity and School of Biological Sciences, Monash University; Cooper, SJB, Evolutionary Biology Unit, South Australian Museum; Carthew, SM, School of Earth and Environmental Sciences, The University of Adelaide

11:30 Impact of forest fragmentation on dispersal and gene flow in a nationally endangered Australian marsupial, the Southern Brown Bandicoot

Li, You*, The University of Adelaide; Lancaster, ML, The University of Adelaide; Cooper, SJB, South Australian Museum; Carthew, SM, The University of Adelaide

11:45 Understanding the genetic history of the endangered Iberian lynx Casas-Marce, M*, Estación Biológica de Doñana - CSIC; Revilla, E, Estación Biológica de Doñana - CSIC; Godoy, JA, Estación Biológica de Doñana - CSIC

- 12:00 Microsatellite DNA Markers as Tools to Prevent Illegal Substitution of Wild Babies for Captive Elephants Siripunkaw, Chomcheum*, Mahidol University at Nakornsawan, Thailand; Chalita Kongrit, Department of Biology, Faculty of Science, Mahidol University, Thailand; Varaporn Akkarapatumwong, Institute of Molecular Biosciences; Sompoad Srikosamatara, Department of Biology, Faculty of Science, Mahidol University, Thailand; Warren Y. Brockelman, Department of Biology, Faculty of Science, Mahidol University, Thailand
- 12:15 Reproductive technologies to help recovery of threatened New Zealand vertebrates for ecological restoration Frank Molinia*, Landcare Research; Dianne Gleeson, Landcare Research; Edward Narayan, Environmental Futures Centre, School of Environment, Gold Coast Campus, Queensland, Australia; Jennifer Germano, San Diego Zoo Institute for Conservation Research; Alison Cree, Phil Bishop, Department of Zoology, University of Otago; Richard Jakob-Hoff, New Zealand Centre for Conservation Medicine, Auckland Zoo; John Cockrem, Institute of Veterinary, Animal and Biomedical Sciences, Massey University; Neil Gemmell, Centre for Reproduction and Genomics, Invermay Agricultural Centre

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• <u>SY 22: KNOWING AND DOING: ADDRESSING EFFECTIVENESS, FAILURE AND THE RESEARCH-IMPLEMENTATION GAP</u> Parnell Room

Thursday, December 8, 10:30 to 12:30

ORGANIZER(S): Knight, A.T., Stellenbosch University

Implementing effective conservation initiatives is a highly complex undertaking, whatever the activity. Although research on conservation science has burgeoned and planning techniques have advanced significantly over the last several decades, we are far from being able to guarantee the comprehensive or timeous achievement of conservation goals. The vast majority of peer-reviewed literature addresses the technical dimension of conservation using reductionist techniques of "knowing" how to undertake conservation activities. Comparatively little is documented on the operational issues of "doing" conservation in the transdisciplinary way required to be effective (Fazey et al. 2005; Knight et al. 2008). Bridging this gap between "knowing" and "doing" is the eternal challenge facing conservation biologists, one which has often eluded practitioners, researchers and educators alike. The factors fundamental to defining an effective conservation action, the importance of establishing a 'safe-fail' culture, making the most of failure, and how to learn and adapt to do conservation more effectively by evaluating our conservation efforts. There is a recently emerging body of conservation literature on these topics, yet much research remains to be undertaken into how to embody these practices into pragmatic conservation initiatives. All of the confirmed speakers are recognised world-leaders in these fields, both academically and practically, with each contributing a novel but complementary perspective on how to translate conservation science into practical and effective conservation. These issues are fundamental to "engaging society in conservation action. These issues are fundamental to "engaging society in conservation", and to implementing effective conservation.

10:30 Defining conservation problems for effective planning solutions: learning the hard way to bridge the researchimplementation gap.

Knight, AT*, Stellenbosch University

- 10:45 Defining the Burden of Proof in Conservation Redford, Kent H.*, Wildlife Conservation Society; Salafsky, Nick, Foundations of Success
- 11:00 Where do national and local conservation actions meet? Modelling differences between local implementation and national conservation planning in Fiji
 Ms. Morena Mills*, James Cook University; Ms. Vanessa Adams, James Cook University; Prof. Robert L. Pressey, James

Ms. Morena Mills*, James Cook University; Ms. Vanessa Adams, James Cook University; Prof. Robert L. Pressey, Jame Cook University; Dr. Natalie C. Ban, James Cook University; Dr. Stacy D. Jupiter, James Cook University

- 11:15 The importance of understanding landowner preferences in designing and promoting conservation initiatives Broch, Stine Wamberg, Faculty of Life Sciences, University of Copenhagen; Jacobsen, Jette Bredahl, Faculty of Life Sciences, University of Copenhagen; Wilson, Kerrie Ann, The Ecology Centre, School of Integrative Biology, The University of Queensland; Knight, Andrew Thomas, Department of Conservation Ecology & Entomology, Stellenbosch University; Strange, Niels*, Faculty of Life Sciences, University of Copenhagen
- 11:30 How to Make Conservation Planning More Effective: a case study of The Nature Conservancy, U.S.A. Groves, Craig R*, *The Nature Conservancy*; Game, Edward, *The Nature Conservancy*
- 11:45 New Performance Measures for US State Fish and Wildlife Agencies Lead to Archetypal Effectiveness Measures for All Conservation Actions Salafsky, N*, Foundations of Success

Discussion follows last presentation until end of session



 <u>SCB Section, Chapters, and Working Group Meetings</u>, 12:30 to 14:00 North America Section, Marlborough Room 1 Asia Section, Marlborough Room 2 Europe Section Meeting, Marlborough Room 3

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• <u>Student, Learn over Lunch with Plenary Speakers and Smith Fellows</u> 12:45 to 13:45, New Zealand Room 1

Chat with the Plenary Speakers and Smith Postdoctoral Fellows at an informal "bring your own" lunch session. A great opportunity to learn more about how they got into conservation and perhaps pick up some tips for your own career in conservation. Pre-registration is required. Please note that NO lunch is included.

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• <u>Workshop 12</u>: The Value of Ecological Economics for Wildlife Conservation 12:30 to 14:00, New Zealand 2

Organizer(s): Brian Czech, US Fish and Wildlife Service; John Peet, Sustainability Aotearoa New Zealand

This workshop will contribute to the overall conference theme of engaging society in conservation by identifying how many of the current activities which are destructive to wildlife are inherent aspects of the growth economy. Research supporting this conclusion will be presented. By highlighting both the feasibility and attractiveness of an alternative economic model, the workshop will assist conservation professionals communicate options to both policy makers and the broader public. Participants will come to understand the intimate communication between wildlife conservation and economic activity, and the inherent problem with an economic model based on continuous growth, especially for conservation goals. More importantly, participants will come to understand there are attractive and feasible options to the current economic model. Policies which flow from an ecological economics model will be identified, their value to conservation highlighted, with examples given of how many of these policies have in fact been implemented in some jurisdictions. Participants will also be introduced to the Centre for the Advancement of the Steady State Economy (www. steadystate.org). An opportunity will be provided to discuss the formation of a New Zealand chapter of CASSE.

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- MARINE THINK TANK LUNCH SESSION (3) 12:30 to 14:00, New Zealand 3
 - 12:30 Improving the Effectiveness of Community-Managed Marine Protected Areas for Biodiversity Conservation, Fisheries Management and Climate Change Adaptation
 Weeks, R*, Wildlife Conservation Society - Fiji; Pressey, RL, ARC Centre of Excellence for Coral Reef Studies, James Cook University; Jupiter, SD, Wildlife Conservation Society - Fiji; Comley, J, Institute of Applied Science, University of the South Pacific
 - 12:45 Identifying marine Important Bird Areas as key sites for conservation in the tropical Pacific Bird JP*, *BirdLife International Pacific Secretariat*
 - 13:00 Advancing databases for global biodiversity assessments Costello, M J, University of Auckland; Pagad, S*, University of Auckland
 - 13:15 The origins of tropical marine biodiversity: a phylogeographic perspective Bowen, BW*, University of Hawaii; Rocha, LA, California Academy of Sciences; Eble, JA, University of Arizona; Bird, CE, University of Hawaii; Toonen, RJ, University of Hawaii
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- Workshop 22: Adaptive management for managing biodiversity in a changing world 12:30 to 14:00, New Zealand Room 4

Organizer(s): E. McDonald-Madden, T.G. Martin

Conservation managers face the challenge of making good decisions despite uncertainty around how ecological systems function. This challenge is exacerbated by climate change leading to widely divergent predictions about system change through time. Currently our ability to reduce uncertainty through learning is not captured in most decision-making frameworks. To make good conservation decisions we must evaluate the benefit of gaining information relative to the cost in terms of time and money. Active adaptive management (AM), a process that optimally combines the benefits of efficient

management and learning, is touted as the key to achieving this trade-off. Indeed most current science- and policy-based documentation on biodiversity management and climate change outlines the need for evaluating and implementing AM. Despite this, there have been few successful applications of AM. One reason for this lack of uptake is our failing to evaluate the benefits of AM. This symposium will showcase the latest developments in methods for evaluating AM. Presentations will focus on the use of AM for managing biodiversity in the face of the uncertainty surrounding climate change impacts. This symposium is central to the theme of "Engaging Society in Conservation" as often government-funded conservation demands the evaluation of outcomes. Engaging society in AM is perhaps the best way of demonstrating why evaluation leads to learning, and how learning can lead to improved management.

- 12:30 From prediction to action the science of saving species under climate change. Wintle, B.A., University of Melbourne; Possingham, H.P.*, University of Queensland
- 12:45 Using the expected value of information to identify critical uncertainties for adaptive management in the face of climate change

Runge, M.C.*, United States Geological Survey

13:00 When to move a species in the face of climate change.

McDonald-Madden, E.*, University of Queensland and CSIRO Ecosystem Sciences; Runge, M.C., United Stages Geological Survey; Possingham, H.P., University of Queensland ; Martin, T.G., CSIRO Ecosystem Sciences

- 13:15 Rethinking barriers and bridges to AM: risk, uncertainty, and indeterminism. Tyre, A.*, University of Nebraska; Michaels, S., University of Nebraska
- 13:30 POMDPs: a solution for modelling adaptive management problems in conservation biology Chades, I.*, CSIRO Ecosystem Sciences; Jalladeau, L., CSIRO Ecosystem Sciences; Carwardine, J., CSIRO Ecosystem Sciences; Martin, T.G., CSIRO Ecosystem Sciences; Nicol, S., University of Alaska; Buffet, O., INRIA, France



Early afternoon session: 2:00 P.M. to 4:00 P.M.

• SY 29: SWIMMING IN THE ALPHABET SOUP: KEY OPPORTUNITIES AND CHALLENGES IN IPBES, THE CBD, UNFCCC, CITES, AND CMS -- HOW SCIENCE CAN HELP POLICY MAKE SENSE Epsom Room 3

Thursday, December 8, 14:00 to 16:00

ORGANIZER(S): Fitzgerald, J.M., Society for Conservation Biology

The theme and purpose is to demonstrate how scientists can use a new invitation from the United Nations to engage with policy makers in a way that enhances our scientific integrity and theirs. We will discuss how we can use specific policies and procedures that we helped bring about to bring science into the policy process in a transparent, considered way. Brendan Mackey from the host region will help the panel ensure that points and examples address specific concerns of the region as well as the globe. We have called for precautionary use of ecosystem science in climate change policy, Scientific Integrity Policies and for the formation of an IPBES at previous meetings. All three are novel in that we are now called upon to shape or apply those things we asked for in concept before. We must prepare to do that. We will address the question of how to improve the use of science in policy processes. This will be made current and concrete with substantive examples such as how to ensure that the best science on forests (and other ecosystems) and climate change will be used both now and as our understanding evolves in the development of the REDD+ and LULU (land use) programs under the UNFCCC process. Finally, we will consider improvements science can bring to policy enforcement (e.g., the recent paper from the Hague--on improving the enforcement of MEAs http://www.envirosecurity.org/helf/HELF_Report2.pdf)

- 14:00 Swimming in the Alphabet Soup: Key opportunities and challenges of global conventions and programs McNeely, JA*, *SCB*
- 14:30 How Policy Makers Can Distinguish Junk Science from Science That Is Tried, True and Trustworthy for Policy Making and Enforcement.
 - Pullin, AS*, Collaboration for Environmental Evidence
- 14:45 How SCB Can Help IPBES Make International Agreements Affecting Conservation More Effective In Conserving and Restoring Biodiversity?

Jonsson, BG*, Dept of Natural Sciences, Mid Sweden University

15:00 How to Ensure Facts and Experience Prevail Over Power and Fear in Natural Resource Governance – In US Policy, CITES, CBD and UNFCCC John Fitzgerald*, *SCB*

Discussion follows last presentation until end of session

SPEED 71: LANDSCAPE ECOLOGY

Epsom Rooms 1&2

Thursday, December 8, 14:00 to 16:00

- 14:00 Marginal Mortality: Elevated Vertebrate Road Kill Along Ecotones, Borders, and Transitions Anderson, SA*, CSU Channel Islands
- 14:04 The consequences of interactions between scales of movement and grains of fragmentation for dispersal success Cattarino, L.*, University of Queensland; Rhodes, J.R., University of Queensland; McAlpine, C., University of Queensland
- 14:08 The effect of forest habitat change on the breeding success of an area-sensitive passerine- A multi-temporal approach Le Tortorec, E*, University of Turku; Suorsa, P, University of Turku; Helle, S, University of Turku; Käyhkö, N, University of Turku; Hakkarainen, H, University of Turku
- 14:12 Recent status of Ortolan Bunting, Emberiza hortulana L., 1758 population in Ukraine Davydenko I.*, Biol. Dept., Shevchenko National University, Volodymyrska Str. 64, in Kiev, 01601; Serebryakov V., Biol. Dept., Shevchenko National University, Volodymyrska Str. 64, in Kiev, 01601
- 14:16 Invasive blackberry (*Rubus fruticosus aggregate*) retains the diversity of small terrestrial mammals in degraded landscapes

Jasmin Packer*, University of Adelaide; Sue Carthew, University of Adelaide; David Paull, University of New South Wales

- 14:20 Shade coffee as an ecological trap for Neotropical birds Mark, Melissa*, Columbia University
- 14:24 Top predator decline, mesopredator release and disease transmission: The case of the Tasmanian devil, feral cat and toxoplasmosis

Tracey Hollings*, University of Tasmania; **Menna Jones**, University of Tasmania; **Nick Mooney**, Department of Primary Industries, Parks, Water and Environment; **Hamish McCallum**, Griffith University

- 14:28 The effects of non-random species loss on spatial and temporal biodiversity in intertidal algal communities Lilley, Stacie*, University of Canterbury; Schiel, David, University of Canterbury
- 14:32 Do sweat the small stuff: why we should pay attention to "rare" species in biodiversity studies South, Paul*, University of Canterbury; Schiel, David, University of Canterbury
- 14:36 Impacts of human recreation on conservation of plant diversity in protected desert meadows
 El-Bana, M.I.*, Department of Plant Production, College of Agricultural & Food Sciences, King Saud University, Saudi Arabia;
 Assaeed, A.M., Department of Plant Production, College of Agricultural & Food Sciences, King Saud University, Saudi Arabia;
 Al-Rowaily, S.L., Department of Plant Production, College of Agricultural & Food Sciences, King Saud University, Saudi Arabia;
 Al-Rowaily, S.L., Department of Plant Production, College of Agricultural & Food Sciences, King Saud University, Saudi Arabia;
- 14:40 Conservation of a rare and threatened plant, Quassia bidwillii, on a coal mine site in central Queensland NAIK, V.M.*, Centre for Plant and Water Science, CQUnivesity, Rockhmapton, QLD 4702, Australia; Ashwath, N., Centre for Plant and Water Science, CQUnivesity, Rockhmapton, QLD 4702, Australia

Discussion follows last presentation until end of session

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• <u>CS 73: DISTURBANCE ECOLOGY</u> Marlborough Room 1 Thursday, December 8, 14:00 to 16:00

- 14:00 An oily end? Can lowland forest birds persist in the palm oil plantations of New Britain, Papua New Guinea? Davis, RA*, School of Natural Sciences, Edith Cowan Universityh Cowan
- 14:15 Fire and Fidelity: Responses of Reptiles in Urban Bushland Remnants How, RA*, Western Australian Museum
- 14:30 Impacts of hydro-electric project development on the critical habitats for montane birds, Western Himalaya Virat Jolli*, CISMHE, University of Delhi
- 14:45 From co-existence to exclusion: mechanisms behind the generalist replacement of specialists in the face of disturbance.
 Mildenstein, Tammy L.*, Wildlife Biology Program, College of Forestry and Conservation, University of Montana, Missoula, MT 59812, USA
- 15:00 Scale effects on indicators of biodiversity state facing global changes: The relevance of the mean species trait approach to evaluate the biodiversity fate.

Le Viol, Isabelle*, National Museum of Natural History, UMR7204 MNHN-CNRS-UPMC; Porcher, Emmanuelle, National Museum of Natural History, UMR7204 MNHN-CNRS-UPMC; Julliard, Romain, National Museum of Natural History, UMR7204 MNHN-CNRS-UPMC; Jiguet, Fredéric, National Museum of Natural History, UMR7204 MNHN-CNRS-UPMC; Kerbiriou, Christian, National Museum of Natural History, UMR7204 MNHN-CNRS-UPMC; Devictor, Vincent, ISEM, UMR 5554 15:15 Assessing cumulative effects: It is important to include many taxa.

Schieck, Jim*, Alberta Biodiversity Monitoring Institute; Huggard, Dave, Alberta Biodiversity Monitoring Institute; Boutin, Stan, University of Alberta

15:30 Using long-term monitoring data to investigate 20-year trends of body condition of two New Zealand skink species Gebauer, Konstanze*, University of Otago, Ecology Programme

15:45 Habitat use by nonnative feral goats in Hawaiian dryland montane landscapes

Chynoweth, MW*, Department of Natural Resources and Environmental Management, University of Hawaii at Manoa; Lepczyk, CA, Department of Natural Resources and Environmental Management, University of Hawaii at Manoa; Litton, CM, Department of Natural Resources and Environmental Management, University of Hawaii at Manoa; Cordell, S, Institute of Pacific Islands Forestry USDA Forest Service; Kellner, JR, Department of Geography, University of Maryland; Asner, GP, Department of Global Ecology, Carnegie Institution

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• <u>SY 30: SYSTEMATIC MANAGEMENT OF MARINE MEGA-FAUNA IN A CHANGING CLIMATE</u> Marlborough Room 2 Thursday, December 8, 14:00 to 16:00

ORGANIZER(S): Mariana Fuentes, ARC Centre of Excellence for Coral Reef Studies

Marine mega-fauna, which include seabirds, sea turtles, marine mammals, and elasmobranchs, are key components of marine ecosystems that have social and economical value globally. Many populations of marine mega-fauna have declined in recent decades due largely to anthropogenic threats. Further impacts to this important group will likely occur from predicted climate change and affect their distribution, behavior, reproduction and demographics. Therefore conservation strategies that help species moderate or cope with projected climate change are needed. However, dealing with the reality of climate change is challenging as incorporating actions to alleviate the impacts of climate change into ongoing conservation projects is often limited largely by uncertainties in what action can be taken. Thus, there is the need for new, flexible and dynamic conservation strategies that integrate climate impacts, species responses and changing ecological relationships. Thus, this symposium will focus on the systematic management of marine mega-fauna in a changing climate. It will highlight the threats that marine mega-fauna face as climate change progresses, potential option for prioritizing the management of these threats and ways to engage the broad society to achieve desired conservation goals. It will also showcase the types of activities that are currently underway in the conservation world, highlight successes and possibilities for coordination of future work and development of guidelines.

14:00 Systematic management of marine mega-fauna in a changing climate

Fuentes, MMPB*, ARC COE Coral Reef Studies; **Pressey, B,** ARC COE Coral Reef Studies; **Marsh, H,** James Cook University

14:15 Marine mammals and sea ice loss in the Pacific Arctic: challenges and opportunities during a period of rapid climage change

Moore, SE*, NOAA/Fisheries S&T

- 14:30 Challenges for detecting and projecting climate change impacts on marine mega fauna Poloczanska, E.S.*, Climate Adaptation Flagship, CSIRO Marine and Atmospheric Research; Richardson, A.J., Climate Adaptation Flagship, CSIRO Marine and Atmospheric Research; Marine Climate Change Impacts Working Group, National Centre for Ecological Analysis and Synthesis
- 14:45 Monitoring marine fauna in a changing climate: working with citizen scientists Chambers, LE*, Centre for Australian Weather and Climate Research
- 15:00 Analysis of Climate Change Impacts to Marine Species Under the United States of America (US) Endangered Species Act (ESA)

Maison, KA*, JIMAR/NOAA Fisheries; Opay, P, NOAA Fisheries

15:15 An integreated risk assessement for climate change: analysing the vulnerability of sharks and rays on the Great Barrier Reef

Andrew Chin*, James Cook University; Peter Kyne, Charles Darwin University; Terrence I Walker, Melbourne University; Rory B McAuley, Department of Fisheries Western Australia

 15:30 Climate change and Little Penguins: predictions based on a long-term demographic study

 Dann, P*, Phillip Island Nature Parks; Sidhu, L, School of PEMS, University of NSW; Chambers, L, Centre for Australian Weather & Climate Research - Bureau of Meteorology; Catchpole, E., School of PEMS, University of NSW

Discussion follows last presentation until end of session

14:00 Estimating the value of two Marine Reserves in New Zealand via public Willingness To Pay Rojas-Nazar, UA*, Centre for Marine Environmental and Economic Research, Victoria University of Wellington; Cullen, R, Department of Accounting, Economics and Finance, Lincoln University; Gardner, JPA, Centre for Marine Environmental

and Economic Research, Victoria University of Wellington; Bell, JJ, Victoria University of Wellington

- 14:15 Performance of Catch Share Management in United States Fisheries Bonzon, Kate*, Environmental Defense Fund
- 14:30 Sustainability of a post-larval capture and culture (PCC) based stock-enhancement program for coral reef food-fish in Fiji

Grignon, J*, *Griffith University*; **Johnston, B,** *Department of Employment, Economic Development and Innovation*; **Pickering, T,** *Secretariat of Pacific Community*; **Morrison, C,** *Griffith University*

- 14:45 Optimal Surveillance and Eradication of Invasive Species in Heterogeneous Landscapes
 Epanchin-Niell, Rebecca*, Resources for the Future; Haight, Robert, US Forest Service Northern Research Station; Berec,
 Ludek, Biology Centre of the Academy of Sciences of the Czech Republic; Kean, John, AgResearch Lincoln; Liebhold, Andrew,
 US Forest Service Northern Research Station
- 15:00 Cost-benefit analysis for international plant introductions under uncertainty Yokomizo, H*, National Institute for Environmental Studies; Possingham, HP, The University of Queensland; Hulme, PE, Lincoln University; Grice, AC, CSIRO Ecosystem Sciences; Buckley, YM, The University of Queensland
- 15:15 The effects of natural disasters and stochastic events on the management costs of protected areas Craigie, I. D.*, ARC Centre of Excellence for Coral Reef Studies, James Cook University; Pressey, R. L., ARC Centre of Excellence for Coral Reef Studies, James Cook University; Hockings, M., The University of Queensland
- 15:30 Real-world conservation planning: maximizing economic return to guarantee biodiversity persistence Di Minin, E.*, Durrell Institute of Conservation and Ecology (DICE), School of Anthropology and Conservation, University of Kent, Canterbury, UK; Slotow, R., Amarula Elephant Research Programme, School of Biological and Conservation Sciences, Westville Campus, University of KwaZulu-Natal, Durban, RSA; MacMillan, D.C., University of Kent, Canterbury, UK
- 15:45 More than just nuts: Do Brazil nut concessions conserve biodiversity along the Interoceanic Highway in Peru? Larsen, TH*, Conservation International; Nunez, G, Amazon Conservation Association

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• <u>SY 28: ISLAND CONSERVATION: RESTORATION OUTCOMES AND LIFE AFTER ERADICATION</u> New Zealand Room 1 Thursday, December 8, 14:00 to 16:00 *ORGANIZER(S):* Holly Jones, UC Santa Cruz

Island conservation is a substantial and important field in conservation biology, and one that New Zealand has led the world in through the development of efficient pest eradication technologies and the development of innovative restoration strategies for islands. Because of the importance and diversity of island conservation in New Zealand and throughout the world of conservation practitioners, we propose two back-to-back symposia to address this topic. We have logically divided the symposia across the lines of pre-eradication, with a focus on inputs to eradication programmes, and post-eradication, with a focus on outcomes from eradication programmes. In both cases the proposed symposia are organized by leading experts in the respective fields, and draw upon international speakers to present cutting-edge research and developments in the broad topics of island conservation. The congress topic of engaging societies in conservation is central to both symposia, as island conservation more so than ever is now a human endeavour, both in empowering communities and stakeholders to undertake eradication projects on islands, and in ensuring that the outcomes of island eradications lead to successful restoration of island ecosystems.

14:00 Island restoration in the 21st century: building a future based on the past

Saunders, AJ*, Landcare Research; Towns, D, NZ Department of Conservation; Jones, HP, University of California, Santa Cruz

14:30 Molecular resolution of model ecosystems for island restoration

Drummond, A., Department of Computer Science, University of Auckland, Auckland, New Zealand; Nelson, N., Allan Wilson Centre for Molecular Ecology and Evolution, School of Biological Sciences, Victoria University of Wellington, Wellington, New Zealand; Russell, J.*, School of Biological Sciences and Department of Statistics, University of Auckland, Auckland, New Zealand; Stevens, M., South Australian Museum, Adelaide, South Australia, Australia; Newcomb, R., Plant and Food Research, Mt Albert, Auckland, New Zealand; Buckley, T., Landcare Research, Tamaki, Auckland, New Zealand.

14:45 Stomped by seabirds or ripped by rats? How colonial seabirds and invasive rodents differ in selection filters they impose on island vegetation

Mulder, CPH*, University of Alaska Fairbanks, USA; Bellingham, PJ, Landcare Research, Lincoln, New Zealand; Grant-Hoffman, MN, Bureau of Land Management, Grand Junction, USA

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SCB Members' Meeting 8 December • 4:30-6:30 P.M. • New Zealand Rooms 1-4

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Thursday

- 15:00 Taking Eradication Funding and Measurable Outcomes One Step Further Restoring Island Ecosystems Kappes, P*, Oregon State University; Jones, HP, UC Santa Cruz
- 15:15 How communities of people view island restoration

Towns, D.R.*, Department of Conservation; Boudjelas, S., Pacific Invasives Initiative; Nagle, W., Pacific Invasives Initiative

15:30 Community and social actors involvement in conservation on Mexican islands

Aguirre-Muñoz, A*, Grupo de Ecología y Conservación de Islas, A.C.; Rodríguez-Malagón, M., Grupo de Ecología y Conservación de Islas, A.C.; Samaniego-Herrera, A., Grupo de Ecología y Conservación de Islas, A.C.; Luna-Mendoza, L., Grupo de Ecología y Conservación de Islas, A.C.; Ortiz-Alcaraz, A., Grupo de Ecología y Conservación de Islas, A.C.; Méndez-Sánchez, F., Grupo de Ecología y Conservación de Islas, A.C.; Félix-Lizárraga, M., Grupo de Ecología y Conservación de Islas, A.C.; Latofski-Robles, M., Grupo de Ecología y Conservación de Islas, A.C.;

Discussion follows last presentation until end of session

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- <u>CS 77: POPULATION DYNAMICS</u>
 New Zealand Room 2
- Thursday, December 8, 14:00 to 16:00
 - 14:00 Representing macroinvertebrate dynamics for instream flow assessments Anderson, KE*, Department of Biology, University of California, Riverside; Harrison, LR, Bren School of Environmental Science and Management, University of California, Santa Barbara
 - 14:15 Ecological & Anthropogenic Covariates Influencing Gharial Distribution & Habitat Use; And The Feasibility Of Photo-Identification For Population Estimation. Nair, Tarun*, Student, Post-Graduate Programme in Wildlife Biology and Conservation, National Centre for Biological Sciences
 - 14:30 Coral recruitment at Lord Howe Island closed or open populations? Cameron, KA*, Marine Ecology Research Centre, Southern Cross University; Harrison, PL, Marine Ecology Research Centre, Southern Cross University
 - 14:45 Larval dispersal, population connectivity and customary tenure in coral reef fisheries: are ecological and social spatial scales compatible?

Almany, GR*, ARC Centre of Excellence for Coral Reef Studies, James Cook University, Australia; Hamilton, RJ, The Nature Conservancy, Indo-Pacific Resource Centre, Australia; Matawai, M, The Nature Conservancy, Manus Field Office, Papua New Guinea; Potuku, T, The Nature Conservancy, Kavieng Field Office, Papua New Guinea; Berumen, ML, Red Sea Research Center, King Abdullah University of Science and Technology, Kingdom of Saudi Arabia; Planes, S, USR 3278 CNRS EPHE, Center de Recherches Insulaires et Observatoire de l'Environnement (CRIOBE), French Polynesia

- 15:00 A Century of Trophic Change: Retrospective Analysis of Fishing and Oceanographic Variability on Seabird Diets Beissinger, S.R.*, U.C. Berkeley; Becker, B.H., Point Reyes National Seashore; Moody, A., U.C. Berkeley; Semmens, B., Northwest Fisheries Lab, NOAA; Ward, E., Northwest Fisheries Lab, NOAA; de Valpine, P., U.C. Berkeley
- 15:15 Oceanographic drivers of recruitment, growth, and genetic diversity in a long-lived exploited marine fish Lotterhos, KE*, *Florida State University;* Markel, RW, *University of British Columbia*
- 15:30 Migratory patterns of humpback whales in Colombia and the selection of areas included in the Corredor Marino del Pacífico Oriental Tropical

Recalde-Salas, Angela *, Fundación Yubarta. Cali, Colombia - The University of Queensland, Cetacean Ecology and Acoustics Laboratory. Gatton, Australia.; Flórez-González, Lilián, Fundación Yubarta. Cali, Colombia.; Wilson, Howard, The University of Queensland, The Ecology Centre. St Lucia, Australia; Noad, Michael, The University of Queensland, Cetacean Ecology and Acoustics Laboratory. Gatton, Australia.; Capella, Juan, Fundación Yubarta. Cali, Colombia; Tobón, Isabel, Fundación Yubarta. Cali, Colombia

15:45 Determinants of Global Extinction Risk in Marine Mammals

Davidson, AD*, Institute of Ecology, National University of Mexico; Boyer, Alison G., Department of Ecology and Evolutionary Biology, Yale University; Kim, Hwahwan, Computational Sciences and Engineering, Oak Ridge National Laboratory; Pompa-Mansilla, S, Institute of Ecology, National University of Mexico; Hamilton, MJ, Santa Fe Institute; Costa, DP, Department of Ecology and Evolutionary Biology, University of California, Santa Cruz; Ceballos, G, Institute of Ecology, National University of Mexico; Brown, JH, Department of Biology, University of New Mexico

• <u>SY 31: CONFRONTING THE CLIMATE-BIODIVERSITY CRISIS: TACKLING CLIMATE THREATS THROUGH</u> INNOVATIVE APPLICATIONS OF CONNECTIVITY SCIENCE

New Zealand Room 3

Thursday, December 8, 14:00 to 16:00

ORGANIZER(S): Jupiter, SD and Watson, J, Wildlife Conservation Society Fiji Country Program

Protected areas are increasingly recognized for their role in promoting climate change adaptation, resilience and mitigation. However, protected areas are embedded within a physical landscape and seascape, as well as within a policy landscape of other sectors, such as agriculture, forestry, fisheries, energy and development. Therefore, conservation planners and policy makers are beginning to look beyond individual protected areas to the broader landscape when developing their conservation, climate and development strategies. Increasing the connectivity of landscapes and seascapes will likely be a critical strategy for addressing climate change impacts on biodiversity. This symposium explores some of the most recent thought and research on connectivity conservation as a way to address the impacts of climate change, including what connectivity needs look like for various species and groups under climate change, and what types of policy and management options exist or need to be developed to maintain or increase connectivity on the landscape. Talks will address theoretical, empirical, modeling and policy approaches for ameliorating climate change impacts through increased connectivity, including connectivity between humans and their environment. Through case studies from around the world, the talks will provide much-needed clarity on how to define and identify connectivity for climate change so that conservation practitioners and managers can implement these strategies.

14:00 What does connectivity conservation actually mean for terrestrial conservation planning in a time of climate change?

Watson, J.EM*, Wildlife Conservation Society; Mackey, B., Australian National University

14:30 Building Social and Ecological Connectivity for Climate Resilience

Weeks, R*, Wildlife Conservation Society Fiji; Jupiter, SD, Wildlife Conservation Society Fiji; Eisma-Osorio, R-L, Coastal Conservation and Education Foundation

14:45 Conservation of Highly Migratory Ichthyofauna Using Ecosystem-Based Management Principles at Local and National Scales in Fiji

Jupiter, SD*, Wildlife Conservation Society Fiji Country Program; Jenkins, AP, Wetlands International-Oceania; Qauqau, I, Wildlife Conservation Society Fiji Country Program; Weeks, R, Wildlife Conservation Society Fiji Country Program; Mailautoka, K, Wildlife Conservation Society Fiji Country Program

15:00 Africa's Albertine Rift: Planning for protected area connectivity in a global biodiversity hotspot under a changing climate

Seimon, A*, Wildlife Conservation Society; Picton-Phillipps, G, Wildlife Conservation Society; Plumptre, A, Wildlife Conservation Society; Watson, J, Wildlife Conservation Society

15:15 Balancing decisions between land- and sea-based conservation management actions to increase the resilience of coral reefs

Klein, C, The University of Queensland; Possingham, H.P.*, The University of Queensland

15:30 Connectivity in coral reef conservation planning: Dealing with future challenges Beger, M*, The University of Queensland

Discussion follows last presentation until end of session

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• <u>79: CONSERVATION GENETICS AND MEDICINE</u> New Zealand Room 4 Thursday, December 8, 14:00 to 16:00

14:00 Artificial Insemination Allows Genetic Management Of The Kakapo Strigops habroptilus

Robertson, BC*, Department of Zoology, University of Otago; **Blanco, JM**, Aquila Foundation, Madrid, Spain; Adams, SL, Cawthron Institute, Nelson, New Zealand; **Eason, DK**, National Kakapo Team, Department of Conservation, Nelson, New Zealand; **Vercoe, DA**, National Kakapo Team, Department of Conservation, Nelson, New Zealand; Kakapo Team, Department of Conservation, Nelson, New Zealand; Kakapo Team, Department of Conservation, Nelson, New Zealand

- 14:15 Tolerance or Translocation: How Best to Ensure the Genetic Diversity of Leopard in southern Africa? Ropiquet, A*, University of Stellenbosch; Born, C, University of Stellenbosch; Matthee, CA, University of Stellenbosch; Knight, AT, University of Stellenbosch
- 14:30 Molecular vibration of hairs: a rapid and noninvasive identification of species and sex in primates Aranibar-Rojas, Nestor Hugo*, Mamaco Program, Asociación Armonía, La Paz, Bolivia; Rodríguez-Fernández, Jaime Ivan, Department of Biochemistry and Molecular Biology, Federal University of Paraná, Brazil; Ingberman, Bianca, Department of Zoology, Federal University of Paraná, Brazil

14:45 Integrating New Wildlife Disease Information into Conservation Management through Disease Risk Assessment. Barraclough, RK*, Massey University, Albany Campus

15:00 Conservation genetics and management of the Mauritius parakeet (Psittacula echo)

Raisin, C.*, DICE, University of Kent, University of Kent, Canterbury, Kent; Jones, C. G., Durrell Wildlife Conservation Trust, Les Augres Manor, Trinity, Jersey; Greenwood, A., Wildlife Vets International; Zuel, N., Mauritian Wildlife Foundation, Mauritius, Indian Ocean.; Groombridge, J. J., DICE, University of Kent, University of Kent, Canterbury, Kent

15:15 Conservation genetics of the Asiatic half ass (*Equus hemionus*): accessing genetic diversity and geographic structure in the Northern Chinese population

Sónia Rosenbom^{*}, CIBIO – Research Centre in Biodiversity and Genetic Resources - Campus Agrário de Vairão, R. Padre Armando Quintas 7, Vairão, Portugal; Vânia Costa, CIBIO – Research Centre in Biodiversity and Genetic Resources - Campus Agrário de Vairão, R. Padre Armando Quintas 7, Vairão, Portugal; Shanyuan Chen, CIBIO – Research Centre in Biodiversity and Genetic Resources - Campus Agrário de Vairão, R. Padre Armando Quintas 7, Vairão, Portugal; Ablimit Abdukadir, Xinjiang Institute of Ecology and Geography Chinese Academy of Sciences; Albano Beja-Pereira, CIBIO – Research Centre in Biodiversity and Genetic Resources - Campus Agrário de Vairão, R. Padre Armando Quintas 7, Vairão, Portugal; Otario de Vairão, R. Padre Armando Quintas 7, Vairão, Portugal;

- 15:30 Inbreeding depression, multilocus heterozygosity and fitness in a small, inbred population of South Island robins Townsend, Sheena M*, University of Otago, Zoology Department; Jamieson, Ian G, Unversity of Otago, Zoology Department
- 15:45 Inter-population variation and sociality of the North Island rifleman (*Acanthisitta chloris granti*): Implications for conservation management

Withers, Sarah Jane*, The University of Auckland; Parsons, Stuart, The University of Auckland; Hauber, Mark, Hunter College, City University of New York; Lavery, Shane, The University of Auckland

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• <u>SY 27: INTEGRATING RESEARCH AND COMMUNITY-LED MANAGEMENT</u> Parnell Room Thursday, December 8, 14:00 to 16:00 *ORGANIZER(S)*: Al Glen, Landcare Research

In recent years the community and private sector have become increasingly involved in conservation. This includes environmental monitoring, invasive species management, advocacy and education, as well as establishing privately owned sanctuaries. Members of the Australasian Wildlife Management Society have been at the forefront, engaging community groups to develop and promote best-practice methods for conducting conservation initiatives and monitoring their outcomes. This symposium will feature examples of collaboration between professional scientists, the private sector and community groups to optimise the outcomes of community-led conservation. Speakers will describe successful approaches as well as lessons learned and priorities for further improvement. Too often, the results of research are communicated only to a scientific audience. This not only disenfranchises the broader community from conservation, but also delays incorporation of the latest knowledge into management. It is vital that scientists proactively engage natural resource managers and the community, not only to communicate their findings and recommendations, but to work together in planning, conducting and applying the results of their research.

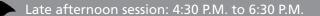
- 14:00 Human community ecology: making connections for conservation Dickman, CR*, University of Sydney
- 14:30 Research in community-led sanctuaries in New Zealand Innes, JG*, Landcare Research; Watts, CH, Landcare Research; Burns, BR, School of Biological Sciences, Auckland University
- 14:45 Achieving biodiversity protection on private land Norbury, G*, Landcare Research; Walker, S, Landcare Research
- 15:00 Te Tiaki Mahinga Kai: Community-led research for protection and restoration of coastal ecosystems in Aotearoa / New Zealand Maller H*, CSAEE, University of Otean Henburg, C. Dat attracts of Marine Science, University of Otean

Moller, H*, CSAFE, University of Otago; Hepburn, C, Department of Marine Science, University of Otago

- 15:15 Bringing together the aspirations of Indigenous people and conservation biologists in the vastness of arid Australia Southgate, RI*, Envisage Environmental Sciences; King, Z, Kanyirninpa Jukurrpa
- 15:30 Environmental ethics: meeting the ethical challenges from opponents of lethal control of invasive animals Warburton, B*, Landcare Research; Norton, B, Georgia Institute of Technology

Discussion follows last presentation until end of session







 <u>SCB Members Meeting, 25th Anniversary Video, Student Award Ceremony, Poster Award Ceremony, and</u> <u>Young Woman in Conservation Biology Award Ceremony</u> Thursday, 8 December 16:30-18:30 New Zealand Rooms

Don't miss the most important meeting of the year for SCB members and discover the winners of the student award presentations, the poster presentation, and the Africa Section's Young Woman in Conservation Biology ! Come help decide the future direction of SCB while celebrating the Society's 25th Anniversary.

Not a member? Come find out what we're all about at the Members' Meeting! We'd love to get to know you and for you to see what makes SCB the best society for conservation professionals in the world!



Special Evening Events

 Poster Session and Drinks (See full listing following pages) 18:30 to 20:30, Auckland Room

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 <u>Workshop 21: SCB Chapters: Directly Engaging Society in Conservation</u> 18:30 to 20:00, Marlborough 2 (Social to follow at local brewpub)

SCB, through its subgroups, effects societal change at multiple levels. One of these subgroups, SCB Chapters, conducts onthe-ground scientific conservation by directly engaging with individuals and communities personally affected by biodiversity issues and ecological concerns. This symposium-style workshop will highlight Chapter activities around the globe and provide the opportunity for current Chapter members or those interested in joining or starting an SCB Chapter to network and learn from our combined experiences working in our local communities.

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Workshop 19: Engaging Local Communities in Science-based Conservation: Successes and Lessons Learned in Papua
New Guinea

18:00 to 20:00, Marlborough 1

Organizer(s): Lisa Dabek, Woodland Park Zoo; B. Beehler, Conservation International; A. Krockenberger, James Cook University, Z. Wells and K. Kuna, Tree Kangaroo Conservation Program

The government-recognized land tenure system in Papua New Guinea (PNG) (indigenous people own over 95% of the land) creates a unique opportunity to focus on community-based conservation and to engage Melanesian society in conservation. One successful example is a community-based conservation program in the YUS Local Level Government region on the Huon Peninsula of Morobe Province. Landowners have pledged portions of their hunting land for the first nationally recognized Conservation Area in PNG and in exchange the community-based organization to help manage the Conservation Area, and they engage in monitoring and research with outside scientists. This long-term program, as well as other long standing conservation efforts in PNG, can serve as models; however the remoteness of this country has limited the ability to disseminate lessons learned. The purpose of this discussion group is to discuss successful approaches to community-based conservation research and share lessons learned on current conservation research and

activities. Facilitators will address key components of successful conservation programs, and attendees will share their experience and expertise in Melanesian community-based conservation efforts.

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• <u>Workshop 13 (Discussion Group)</u>: Engaging NASA in the Definition and Development of Conservation Applications 18:00 to 20:00, Parnell Room

Organizer(s): John Musinsky, Conservation International; Woody Turner and Allison Leidner, NASA Applied Sciences Program; Sarah Burgess-Herbert, NASA Applied Sciences Program / AAAS S&T Policy Fellowship

From 2011 to 2025, NASA is planning to launch over a dozen Earth Observing Satellite Missions. At least nine of these missions, which utilize optical, hyperspectral, RADAR, and LiDAR instruments for the monitoring of terrestrial, oceanographic, and atmospheric environments, will have a wide range of potential conservation applications. The data produced and the knowledge resulting from these NASA Earth observing missions are mostly global in coverage and are essentially free and publically accessible. Applications of these data and knowledge can therefore be both national and international in scope. NASA remains interested in exploring ways for the conservation community to provide input into various stages of mission development. This discussion group will give participants an opportunity to: 1) learn about the Decadal Survey and associated missions, including the Landsat Data Continuity Mission (LDCM), the NPOESS Preparatory Project (NPP) mission, ACE, DESDynI, Geo-CAPE, GPM, HyspIRI, ICESat and SMAP; and, 2) discuss options for better communicating with and engaging NASA in defining and developing conservation-relevant applications as these missions progress. These options may, for example, take the form of communication with Science Team members and/or participation in Science Team meetings for the individual missions, participation on Applications Teams, development of a NASA-Conservation working group, etc.



Poster session: 6:30 P.M. to 8:30 P.M., Auckland Room

- Restoring coastal ecosystems: removing predators from Hawai`i's first predator-proof fence at Kaena Point Natural Area Reserve Young, Lindsay C, Pacific Rim Conservation; VanderWerf, Eric A*, Pacific Rim Conservation; Miller, Christopher J, Hawaii Department of Land and Natural Resources; Lohr, Michael T, Pacific Rim Conservation; Smith, David G, Hawaii Department of Land and Natural Resources
- Motives and preferences for trophy hunting: who, why and which ones?
 Palazy, L.*, UMR CNRS 5558, Lab BBE, Université Lyon 1, VIlleurbanne, France ; Bonenfant, C., UMR CNRS 5558, Lab BBE, Université Lyon 1, VIlleurbanne, France ; Gaillard, J.M., UMR CNRS 5558, Lab BBE, Université Lyon 1, VIlleurbanne, France ; Courchamp, F., UMR CNRS 8079, Lab ESE, Université Paris-Sud, Orsay, France
- 3. Spatial variability in habitat quality of modified tropical rainforest Ewers, RM*, Imperial College London; Turner, EC, Imperial College London
- 4. Investigating predatory behaviour of ship rats toward house mice Bridgman, LJ*, Department of Biological Sciences, University of Waikato; King, CM, Department of Biological Sciences, University of Waikato; Innes, J, Landcare Research; Gillies, C, Research & Development Group, Department of Conservation
- Responses in soil chemistry and vegetation to soil perturbation implemented as a restoration measure in decalcified sandy grassland
 Ödman, AM*, Department of Biology, Lund University; Mårtensson LM, Department of Biology, Lund University; Sjöholm C, Department of Biology, Lund University; Olsson PA, Department of Biology, Lund University
- 6. The economic value of environmental services on Indigenous held lands in Australia Zander, K.K.*, *Charles Darwin University*; Garnett, S.T., *Charles Darwin University*
- Grey Nurse Shark (*Carcharias taurus*) Diving Tourism: Tourist Compliance, Shark Behaviour & Environmental Knowledge & Attitudes At Fish Rock, Australia
 Smith, KR*, Victoria University; Scarpaci, C, Victoria University; Scarr, M, Victoria University
- 9. Migration of captive-bred released Asian Houbara bustards from West-Kazakhstan Riou Samuel, *NARC - IFHC*; Rautureau Pierrick, *NARC - IFHC*; Judas Jacky*, *NARC - IFHC*
- The Liben Plain: Bird and Mammal Diversity
 Alazar Daka *, Addis Ababa University; Samson Zelleke, Addis Ababa University; Bruktawit Abdu, Addis Ababa University
- Losing Money and Species due to Illegal fishing Royalty, Winden*, *Tarleton State University*
- 12. An evolutionary perspective of anthropocentric versus ecocentric approaches of conservation Sarrazin, Francois, University Pierre and Marie Curie; Lecomte, Jane*, University Paris-Sud 11
- 13. Biodiversity conservation as a local activity: participation in endangered species/community integration Bernacchi, LA*, *Texas A&M University;* Ragland, CJ, *Texas A&M University;* Peterson, TR, *Swedish Agricultural University*
- Variations in insect communities along a conservation area- agricultural gradient in Swaziland Catanach, T.A.*, Texas A&M University; McCleery, R.A., University of Florida; Silvy, N.J., Texas A&M University
- 15. The WCS Albertine Rift Climate Assessment Project: A strategic initiative to implement climate change adaptation in a global biodiversity hotspot

Seimon, A*, Wildlife Conservation Society; Picton Phillipps, G, Wildlife Conservation Society; Plumptre, A, Wildlife Conservation Society; Watson, J, Wildlife Conservation Society

- Long-distance dispersal by spores How fat is the tail?
 Lönnell, Niklas*, Plant Ecology, Department of Botany, Stockholm University; Hylander, Kristoffer, Plant Ecology, Department of Botany, Stockholm University; Jonsson, Bengt Gunnar, Department of Natural Sciences, Engineering and Mathematics, Mid Sweden University; Sundberg, Sebastian, Department of Plant Ecology, Evolutionary Biology Centre (EBC), Uppsala University
- HIV and Biodiversity in Sub-Saharan Africa: Identifying Target Zones for Public Health and Conservation Outreach Using MODIS, MAPA, and DHS Data
 de Moor, E*, University of California, Santa Barbara
- Cultural, environmental, and socioeconomic influences on crop genetics: tartary buckwheat (*Fagopyrum tataricum*) landrace diversity in Yunnan, China
 Saunders, Mary*, University of Wisconsin-Madison; Posner, Josh, University of Wisconsin-Madison

- 21. Biodiversity and climate change: lessons from a regional study deBlois, Sylvie*, *McGill University*
- 22. Aboriginal-led efforts to study and protect woodland caribou in Canada Lee, PG*, *Global Forest Watch Canada;* Qualie, G, *Grand Council of the Crees (Eeyou Istchee)*
- Solutions and Challenges to Addressing Population Growth and Climate Change
 Lepczyk, CA, University of Hawaii at Manoa; Bergstrom, R, University of Hawaii at Manoa; Chynoweth, M*, University of Hawaii at Manoa; Ellsworth, L, University of Hawaii at Manoa; Henly-Shepard, S, University of Hawaii at Manoa; Iwashita, D, University of Hawaii at Manoa; Miller, K, University of Hawaii at Manoa; Rhodes, R, University of Hawaii at Manoa
- 24. Community-Based Adaptive Marine Co-Management in the South Pacific: A Fiji experience Tawake, A*, James Cook University; Meo, S, Institute of Applied Science, University of the South Pacific, Fiji; Bogiva, A, Institute of Applied Science, University of the South Pacific, Fiji; Fong, S, Institute of Applied Science, University of the South Pacific, Fiji; Tawake, L, University of Sunshine Coast (Aus); Vave, R, Institute of Applied Science, University of the South Pacific, Fiji; Institute of Applied Science, University of the South Pacific, Fiji; Aalbersberg, B, Institute of Applied Science, University of the South Pacific, Fiji
- 25. Species Distribution Modelling for predicting migration patterns Runge, C*, University of Queensland; Possingham, H, University of Queensland; Fuller, R, University of Queensland
- **26.** Wok wantaim: engaging remote Papua New Guinea communities in biodiversity conservation. **Thomas, J,** *Tenkile Conservation Alliance;* **Banks, C B*,** *Zoos Victoria*
- 27. Gathering Scientific Input to Government Conservation Policy-making: A Case Study Highlighting Ecological Processes McGregor, AM*, Environmental consultant; Bennett, AF, School of Life & Environmental Sciences, Deakin University
- Does translocation work? Monitoring translocated Asian elephant males in Sri Lanka with GPS collars
 Pastorini, J*, Centre for Conservation and Research; Prasad, T, Department of Wildlife Conservation; Leimgruber, P, Smithsonian
 Conservation Biology Institute; Fernando, P, Centre for Conservation and Research
- Asian elephant conservation and human-elephant conflict mitigation: change in paradigm needed
 Fernando, P*, Centre for Conservation and Research; Pathiraja, C, Department of Wildlife Conservation; Weerakoon, D, University of Colombo; Jayewardene, J, Biodiversity and Elephant Conservation Trust; Pastorini, J, Centre for Conservation and Research
- 30. Analysis of 65,000 species distributions maps 30 biogeographic realms in the ocean Costello, M J*, University of Auckland; Tsai, P, University of Auckland; Wong, P S, University of Auckland; Cheung, A, University of Auckland
- 31. Effects of habitat fragmentation on a sacred population of critically endangered Monkey (*Cercopithecus sclateri*) in Nigeria Eniang, Edem A.*, Dept. of Forestry and Wildlife, University of Uyo, Akwa Ibom State, Nigeria.; Egwali, Edwin C., Dept. of Zoology, University of Uyo, Akwa Ibom State, Nigeria.
- 32. Population Genetic Structure of Liparis loeselii (Orchidaceae) in the Coastal Wetland of the Dutch Wadden Sea Islands Rohani Shahrudin*, Centre for Energy and Environmental Studies (IVEM), University of Groningen, Nijenborgh 4, 9747 AG, Groningen, The Netherlands; Sascha van der Meer, Institue for Biodiversity and Ecosystem Dynamics (IBED), P.O.Box 94248, 1090 GE, Amsterdam, The Netherlands; Gerard Oostermeijer, Institue for Biodiversity and Ecosystem Dynamics (IBED), P.O.Box 94248, 1090 GE, Amsterdam, The Netherlands
- 33. Brazil's Amazon Region Protected Areas Programme (ARPA): A success story of society's involvement in biodiversity conservation

Bueno, M.A.F.*, ARPA, Departmento de Areas Protegidas, Ministerio do Meio Ambiente, Brasilia, Brazil; Quinhoes, T., ARPA, Departmento de Areas Protegidas, Ministerio do Meio Ambiente, Brasilia, Brazil; Pinto, R., ARPA, Departmento de Areas Protegidas, Ministerio do Meio Ambiente, Brasilia, Brazil; Barata, T., Consultant

34. Co-Management Approach for Pygmy Seahorse Conservation: A Case Study for Recreational Diving Industry in Semporna, Malaysia

Choo, C.K.*, Department of Marine Science, Universiti Malaysia Terengganu; **Yeong, Y.L.**, Department of Marine Science, Universiti Malaysia Terengganu; **Orosco, C.O.**, Department of Marine Science, Universiti Malaysia Terengganu; **Maidin, N.**, nasrulhm@gmail.com

35. Assessment of Soil Microbial Respiration in Afforested and Grassland Area of ISM, Dhanbad, India Kumar,S*, Indian School of Mines, Dhanbad; Chudhury,S, Indian School of Mines, Dhanbad; Maiti, S.K, Indian School of Mines, Dhanbad

- 36. Predicting potential global distribution of amphibian pathogen Batrachochytrium dendrobatidis Moriguchi, S*, National Institute for Environmental Studies; Tominaga, A, University of the Ryukyus; Irwin, KJ, Arkansas Game and Fish Commission; Freake, MJ, Lee University; Suzuki, K, National Institute for Environmental Studies; Goka, K, National Institute for Environmental Studies
- **37.** Mapping patch connectivity for brushtail possums in Hawke's Bay, New Zealand **Etherington, TR*,** *The University of Auckland*
- Using Local Knowledge of Traditional Management Practices from Kubulau District (Fiji) to Inform Current Actions to Maintain Sustainable Livelihood Practices

Fox, M*, Wildlife Conservation Society Fiji Country Programme; Tokota'a, M, The Coral Reef Alliance; Dulunaqio, S, Wildlife Conservation Society Fiji Country Programme; Williams, H, The Coral Reef Alliance; Jupiter, SD, Wildlife Conservation Society Fiji Country Programme

- DNA-Based Identification of Frog Remains in Mammalian Predator Stomach Contents
 Egeter, B*, Department of Zoology, University of Otago; Robertson, BC, Department of Zoology, University of Otago; Bishop, PJ, Department of Zoology, University of Otago
- 40. Priorities in policy and management when existing biodiversity stressors interact with climate-change
 Driscoll, DA*, Fenner School of Environment and Society, Australian National University; Felton, A, Southern Swedish Forest Research Centre, Swedish University of Agricultural Sciences; Gibbons, P, Fenner School of Environment and Society, Australian National University; Felton, AM, Southern Swedish Forest Research Centre, Swedish University; Felton, AM, Southern Swedish Forest Research Centre, Swedish University; Felton, AM, Southern Swedish Forest Research Centre, Swedish University of Agricultural Sciences; Munro, NT, Fenner School of Environment and Society, Australian National University; Lindenmayer, DB, Fenner School of Environment and Society, Australian National University
- 41. Secondary succession and factors determining change in soil condition from fallow to savannah in Sudanian Zone Emeline P.S., Assede*, Université d'Abomey-Calavi, Faculté des Sciences Agronomiques, Département d'Aménagement et de Gestion de l'Environnement; Aristide C., Adomou, Université d'Abomey-Calavi, Faculté des Sciences et Techniques, Département de Biologie Végétale; Brice, Sinsin, Université d'Abomey-Calavi, Faculté des Sciences Agronomiques, Département d'Aménagement et de Gestion de l'Environnement
- **42.** Variation in baseline corticosterone levels of Tree sparrow (*Passer montanus*) populations along an urban gradient in Beijing, China

Shuping Zhang*, Minzu university of China

- **43.** The middle ground in conservation and development: Evaluating the ICDP in Kalakad Mundathurai Tiger Reserve **Jesudasan, A.*,** *Ashoka Trust for Research in Ecology and the Environment;* **Soubadra, D.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesan, R.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;* **Ganesh, T.,** *Ashoka Trust for Research in Ecology and the Environment;*
- 44. Effects of human and protected area impact on freshwater ecosystem services of Nepal **Pandeya**, **B**.*, *King's College London*; **Mulligan**, **M.**, *King's College London*
- 45. Distribution and status of the Mindoro Bleeding Heart Pigeon (*Gallicolumba platenae*) on Mt. Siburan, Sablayan, Occidental Mindoro, Philippines
 Ramayla, SP*, Phil. Science High School-Central Visayas Campus; Rico, ELB, FFI; Dimaranan, JE, WCSP; Dimas, JC, WCSP; Alviola, PA, UPLB
- **46.** Conservation of the marbled murrelet in the Pacific Northwest, USA **Raphael, MG*,** *USDA Forest Service, Pacific Northwest Research Station*
- 47. A landscape-scale study of woodland moths: collecting scientific data with the help of corporate volunteers Slade, E.M. *, WildCRU, University of Oxford, UK; Merckx, T., WildCRU, University of Oxford, UK; Riordan, P., WildCRU, University of Oxford, UK; Bebber, D., Earthwatch Institute, Oxford, UK; MacDonald, D.M., WildCRU, University of Oxford, UK
- 48. Genetic diversity and patterns of inbreeding/outbreeding in an isolated population of bottlenose dolphins (*Tursiops truncatus*) in Fiordland, New Zealand
 Tezanos-Pinto, G.*, *The University of Auckland;* Steel, D, *The University of Auckland, Oregon State University;* Baker, CS, *The University of Auckland, Oregon State University*
- 49. Causations of Faunal Succession of Groun-dwelling Vertebrates in Sichuan, China: Earthquake or Climate Change? Cheng Li*, Chengdu Institute of Biology, Chinese Academy of Science; Dajun Wang, School of Life Sciences, Peking University, China; Yuanbin Zhang, Chengdu Institute of Biology, Chinese Academy of Science; Chunping Liang, Wanglang National Nature Reserve, China; Xi Liu, School of Life Sciences, Peking University, China
- Do Rainforest Mammals Exhibit Micro-scale Avoidance Behaviour to Roads? Byrnes, P.J.*, James Cook University

Thursday

- International legal trade in endangered birds: Do CITES controls have an impact? Jackson, Wendy*, *Lincoln University*
- 52. Frequent colonization of burned forests results in high gene flow across the boreal forests of North America
 Pierson, Jennifer C.*, University of Montana; CSIRO; Allendorf, Fred W., University of Montana; Michael K. Schwartz, USDA Forest Service
- **53.** Sustaining conservation on private lands- a case of Bhimashankar Wildlife Sanctuary from North Western Ghats, India **Sarnaik, JP*,** *Applied Environmental Research Foundation(AERF);* **Godbole,AJ**, *Applied Environmental Research Foundation(AERF);* **Punde,SP**, *Applied Environmental Research Foundation(AERF)*
- 54. An Inconvenient Tree: Inherent Trade-offs Between Carbon Capture and Invasion Risk
 McGregor, KF*, The Bio-Protection Research Centre, PO Box 84, Lincoln University, Lincoln 7647, New Zealand; Watt, MS, SCION, PO Box 29237, Fendalton, Christchurch, New Zealand; Hulme, PE, The Bio-Protection Research Centre, PO Box 84, Lincoln University, Lincoln 7647, New Zealand; Duncan, RP, The Bio-Protection Research Centre, PO Box 84, Lincoln University, Lincoln 7647, New Zealand; Duncan, RP, The Bio-Protection Research Centre, PO Box 84, Lincoln University, Lincoln 7647, New Zealand; Duncan, RP, The Bio-Protection Research Centre, PO Box 84, Lincoln University, Lincoln 7647, New Zealand;
- 55. Patterns and potential costs of nesting migrations in the tuatara, an endemic island reptile Refsnider, Jeanine M., Iowa State University; Daugherty, Charles H., Victoria University of Wellington; Godfrey, Stephanie S., Flinders University; KEALL, SUSAN N.*, Victoria University of Wellington; Moore, Jennifer A., Victoria University of Wellington; Nelson, Nicola J., Victoria University of Wellington
- 56. Metapopulations, mitochondria and McMansions: Conservation genetics of an endangered Australian frog in an urbanising landscape.

Keely, Claire C*, The University of Melbourne; Parris, Kirsten M, The University of Melbourne; Heard, Geoff W, The University of Melbourne; Melville, Jane E, Museum Victoria; Hamer, AJ, Royal Botanic Gardens Melbourne

- Landscape genetics of long-eared bats (*Nyctophilus*) in fragmented landscapes of south-eastern Australia Fuller, NC*, *The University of Adelaide*; Carthew, SM, *The University of Adelaide*; Cooper, SJB, *South Australian Museum*
- Effects of intrinsic and extrinsic factors on tree survival in a temperate forest, northeastern China Hao,ZQ*, Institute of Applied Ecology, Chinese Academy of Sciences; Wang,XG, Institute of Applied Ecology, Chinese Academy of Sciences
- 60. Application of molecular methodologies for conservation of the Western Swamp Tortoise, Pseudemydura Umbrina
 Giustiniano D R*, 1School of Animal Biology, Faculty of Natural and Agricultural Sciences, University of Western Australia; MIlls
 H, 1School of Animal Biology, Faculty of Natural and Agricultural Sciences, University of Western Australia; Robertson H, Perth Zoo;
 Groth D M, School of Biomedical Science, WABRI, Curtin University
- 61. The genetic status of threatened Manchurian trout (*Brachymystax lenok Pallas*; Salmoninae, Salmonidae) in Korea, inferred from mitochondrial DNA sequences
 Jeong-Nam Yu*, National Institute of Biological Resources; Young-Woon Lim, Seoul National University; Soonok Kim, National Institute of Biological Resources; Myounghai Kwak, National Institute of Biological Resources
- Bounded rationality and the design of protected areas systems: a case study from Uruguay
 Soutullo, A*, Museo Nacional de Historia Natural; Bartesaghi, L, Dirección Nacional de Medio Ambiente; Mejía, P, Dirección Nacional de Medio Ambiente; Nin, M, Museo Nacional de Historia Natural; Ríos, M, Museo Nacional de Historia Natural
- 63. Linking national and local objectives in the design and management of protected areas: three case studies from Uruguay Soutullo, A*, *Museo Nacional de Historia Natural;* Bartesaghi, L, *Dirección Nacional de Medio Ambiente;* Mejía, P, *Dirección Nacional de Medio Ambiente;* Nin, M, *Museo Nacional de Historia Natural;* Ríos, M, *Museo Nacional de Historia Natural;*
- 64. Oil and gas development in the World Heritage and wider protected area network in sub-Saharan Africa
 Osti, M*, Environmental Change Institute, University of Oxford; United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC); Coad, L, Environmental Change Institute, University of Oxford; United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC); Fisher, JB, Environmental Change Institute, University of Oxford; Bomhard, B, United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC); Hutton, JM, United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)
- 65. Effects of pond and landscape characteristics on amphibian abundance in the context of an invasive plant species Perez Amélie*, Institut de Recherche en Biologie Végétale, Département de Sciences Biologiques, Université de Montréal, Montréal, QC, Canada; Mazerolle Marc.J., Centre d'étude de la forêt et Département des sciences appliquées, Université du Québec en Abitibi-Témiscaminque, Rouyn-Noranda, QC, Canada; Brisson Jacques, Institut de Recherche en Biologie Végétale, Département de Sciences Biologiques, Université de Montréal, Montréal, QC, Canada
- **66.** The potential for cougar recolonization of Midwestern North America **Nielsen, Clayton*,** *Southern Illinois University*

- Developing community-based management of Podocnemis population in the Lower Amazon, Brazil Pezzuti, J.C.B.*, NAEA/UFPA, Brazil; Félix-Silva, D., UERJ, Brazil; Lima, J.P., INPA, Brazil; Rebêlo, G.H., INPA, Brazil; Begossi, A., Unicamp, Brazil; NcGrath, D.G., Woods Hole Research Center, EUA
- **68.** Long term monitoring in a biodiversity hotpot of India: use of autonomous data collection protocol to monitor anurans. **Seshadri, KS*,** *ATREE;* **Ganesh, T,** *ATREE*
- 69. Reintroduction of an Endangered Hawaiian Forest Bird and Prospects for Its Recovery
 Banko, PC*, U.S. Geological Survey, Pacific Island Ecosystems Research Center; Farmer, C, American Bird Conservancy; Brinck, KW, Hawai'i Cooperative Studies Unit, Pacific Aquaculture and Coastal Resources Center, University of Hawai'i at Hilo; Leonard, DL, Hawai'i Department of Land and Natural Resources, Division of Forestry and Wildlife; Stephens, RM, Pacific Cooperative Studies Unit, University of Hawai'i at Mānoa
- 70. Conservation Priorities for Mexican Islands Latofski-Robles, Mariam*, Grupo de Ecología y Conservación de Islas, A.C.; Aguirre-Muñoz, A., Grupo de Ecología y Conservación de Islas, A.C.; Méndez-Sánchez, F., Grupo de Ecología y Conservación de Islas, A.C.; Reyes-Hernandez, H., Universidad Autónoma de San Luis Potosí; Schlüter, S., Fachhochschule Köln
- 71. Next-generation sequencing in conservation genetics: rapid assessment of MHC diversity of wild populations.
 Grueber, C. E.*, Dept of Zoology; Dept of Anatomy and Structural Biology, University of Otago; Abdelkrim, J., Muséum National d'Histoire Naturelle, Paris ; Zavodna, M, Department of Anatomy and Structural Biology, University of Otago; Bryant, D, Department of Mathematics and Statistics, University of Otago; Jamieson, I. G., Dept of Zoology, University of Otago; Gemmell, N. J., Centre for Reproduction and Genomics, Dept of Anatomy and Structural Biology, University of Otago
- 72. Semi-stabilized sand-dune habitat effects on biological soil-crust microbial functional diversity
 Yu, J*, The Mina & Everard Goodman Faculty of Life Sciences, Bar-Ilan University; Kidron, GJ, Institute of Earth Sciences, The Hebrew University; Pen-Mouratov, S, The Mina & Everard Goodman Faculty of Life Sciences, Bar-Ilan University; Wasserstrom, H, The Mina & Everard Goodman Faculty of Life Sciences, Bar-Ilan University; Barness, G, The Mina & Everard Goodman Faculty of Life Sciences, Bar-Ilan University; Steinberger, Y, The Mina & Everard Goodman Faculty of Life Sciences, Bar-Ilan University;
- **73.** Flagship species and engaging the community **Leigh, KA*,** *Conservation Ecology Centre Cape Otway;* **Corke, LM,** *Conservation Ecology Centre Cape Otway*
- 74. Behavioural studies in conservation; Bridging theory and action in management of New Zealand's rarest ratite. Abbott, R.*, Victoria University of Wellington; Bell, B., Victoria University of Wellington; Kay, D., NZ Department of Conservation
- 75. Broad and fine scale habitat preferences of an endangered marsupial, the Sandhill Dunnart (*Sminthopsis psammophila*) in a semiarid environment
 McLean, AL*, *The University of Adelaide*; Philp, B, *The University of Adelaide*; Lancaster, ML, *The University of Adelaide*; Carthew, SM, *The University of Adelaide*
- 77. Effects of Habitat Fragmentation on Monophagous Insects along an Altitudinal Gradient Damken, C*, School of Environment, University of Auckland; Beggs, JR, School of Biological Sciences, University of Auckland; Perry, GLW, School of Environment, University of Auckland
- 78. Effects of clam dredging on population density of the surf clam Paphia undulata in the eastern Gulf of Thailand
 Yeemin, T*, Ramkhamhaeng University; Saenghaisuk, C, Ramkhamhaeng University; Yuchareon, M, Ramkhamhaeng University;
 Donsomjit, W, Ramkhamhaeng University; Sutthacheep, M, Ramkhamhaeng University
- 79. How uncertain are climate impacts for African vertebrates? Exploring consensus in projections
 Garcia, RA*, Department of Biodiversity and Evolutionary Biology, National Museum of Natural Sciences, CSIC, Spain; Burgess, ND, Center for Macroecology, Evolution and Climate, Department of Biology, University of Copenhagen, Denmark; Cabeza, M, Metapopulation Research Group, Department of Biosciences, University of Helsinki, Finland; Rahbek, C, Center for Macroecology, Evolution and Climate, Department of Copenhagen, Denmark; Araujo, MB, Department of Biodiversity and Evolutionary Biology, National Museum of Natural Sciences, CSIC, Spain
- 80. Current status and distribution of the giant freshwater stingray, Himantura chaophraya, in Thailand Bhummakasikara, T*, Department of Biology, Faculty of Science, Mahidol University, Thailand; Chanse, N, Department of Veterinary Medicine, Faculty of Veterinary Science, Chulalongkorn University, Thailand; Siripunkaw, C, Mahidol University at Nakorn Sawan, Thailand; Khudamrongsawat, J, Department of Biology, Faculty of Science, Mahidol University, Thailand
- 81. Ecology and conservation of an Andean salamander (*Bolitoglossa aff. pandi*) in the eastern Andes of Colombia Chaves-Portilla G.*, *Fundación Ecodiversidad Colombia*
- 82. Community-let nest protection and Pagoda based head-starting of Cantor's Soft-shell Turtle in Cambodia Yoeung, SUN*, *Conservation International*

- 83. Modeling dispersion dynamics effects on spatial patterns of *Melocactus conoideus Buin. & Bred.* (Cactaceae) Sá-Neto, RJ, Universidade Estadual do Sudoeste da Bahia (UESB), Departamento de Ciências Naturais; Corrêa, MM*, Universidade Estadual do Sudoeste da Bahia (UESB), Departamento de Ciências Naturais; Brito-Kateivas, KS, Universidade Estadual do Sudoeste da Bahia (UESB), Departamento de Ciências Naturais; Cruz, LC, Universidade Federal da Bahia (UFBA), Instituto Multidisciplinar de Saúde, Av. Olivia Flores, 3000, CEP 45055-090, Vitória da Conquista - BA, Brazil; Freitas, LM, Universidade Federal da Bahia (UFBA), Instituto Multidisciplinar de Saúde, Av. Olivia Flores, 3000, CEP 45055-090, Vitória da Conquista - BA, Brazil; Castro, LM, Universidade Estadual do Sudoeste da Bahia (UESB), Departamento de Ciências Exatas; Miranda, JGV, Universidade Federal da Bahia, Instituto de Física, Departamento de Geofísica Nuclear, Campus de Ondina, Pituba, CEP 40210-340, Salvador - BA, Brazil
- 84. Marine Reserve effects on Catch Per Unit Effort (CPUE) of rock lobster (*Jasus edwardsii*)
 Rojas-Nazar, UA*, Centre for Marine Environmental and Economic Research, Victoria University of Wellington; Gardner, JPA, Centre for Marine Environmental and Economic Research, Victoria University of Wellington; Bell, JJ, Victoria University of Wellington
- Subsidiary Impacts of Stream Restoration: Bottom-up Effects of Aquatic Prey on Terrestrial Predators Bell, D*, Swedish University of Agricultural Sciences
- 86. Development of efficient technologies to capture invasive alien raccoons at low population density.
 Ikeda, T*, Hokkaido University; Nakai, M, Hokkaido University; Shimada, K, Hokkaido University; Yamashita, K, Karuizawa Dog Behavior; Kotani, E, Farmage Ltd.; Kawasaki, A, Farmage Ltd.
- 87. Are the Brazilian Conservation Units effective in protecting endangered species of the genus Callicebus (Primates; Pitheciidae)?
 Rosário, NA*, Departamento de Ciências Biológicas, Universidade Estadual de Santa Cruz; Assunção, AC, Departamento de Ciências Biológicas, Universidade Estadual de Santa Cruz; Campiolo, S, Departamento de Ciências Biológicas, Universidade Estadual de Santa Cruz
- Making the extra information count: incorporating auxiliary detection data in site occupancy studies.
 Lahoz-Monfort, JJ*, National Centre for Statistical Ecology, School of Mathematics, Statistics and Actuarial Science, Cornwallis Building, University of Kent, CT2 7NF, Canterbury (UK); Guillera-Arroita, G, National Centre for Statistical Ecology, School of Mathematics, Statistics and Actuarial Science, Cornwallis Building, University of Kent, CT2 7NF, Canterbury (UK);
- 89. Designing studies to detect a decline in species occupancy: power analysis under imperfect detection
 Guillera-Arroita, G*, National Centre for Statistical Ecology, School of Mathematics, Statistics and Actuarial Science, Cornwallis Building, University of Kent, CT2 7NF, Canterbury (UK)
- 90. Changing Climate and Ecosystem of the Trans-Himalaya in Nepal
 Aryal, A*, Massey University, NZ; David Raubenheimer, Massey University, NZ; Dianne Brunton, Massey University, NZ;
 Weihong JI, Massey University, NZ
- **91.** Quantification of carbon in grasslands, plantations and natural forests in the Markham-Ramu Valley, Papua New Guinea **Ken, Bensolo***, *Wildlife Conservation Society, Papua New Guinea Programme*
- 92. Experience and Results of Conservation of the White-headed duck (*Oxyura leucocephala*, EN/IUCN) in Russia Svetlana Nimirskaya*, *Deputy leader of Environmental Education*; Evgeniy Murzakhanov, *Leader of project*; Andrey Bazdyrev, *Member of project*
- **93.** Metabolomic fingerprint of Caiman yacare scales for the determination of geographic distribution and morpho-metric characters **Aranibar-Rojas, Nestor Hugo*,** *Mamaco Program, Asociación Armonía, La Paz, Bolivia;* **Rodirguéz-Fernadéz, Jaime Ivan,** *Department of Biochemistry and Molecular Biology, Federal University of Paraná, Brazil*
- 94. Distribution and Threat of Atlantic Forest Endemic Birds under Climate Change Scenarios
 Mariana M. Vale*, Federal University of Rio de Janeiro (UFRJ); Maria Alice S. Alves, University of the State of Rio de Janeiro (UERJ); Maria Lucia Lorini, Federal University of Rio de Janeiro (UFRJ); Tiago Vieira de Souza, Federal University of the State of Rio de Janeiro (UNIRIO); Cristiane M. Medeiros, University of the State of Rio de Janeiro (UERJ)
- 95. Estimation of carbon pools in primary and secondary rainforests indicate climate change mitigation schemes are viable for Papua New Guinea
 Arihafa, Arison *, Wildlife Conservation Society, Papua New Guinea Programme; Clements, Tom, Wildlife Conservation Society, Papua New Guinea Programme; Sinclair, J Ross, Wildlife Conservation Society, Papua New Guinea Programme
- 96. Identification of suitable areas for a Brazilian Atlantic Forest endemic bat the may help to finally establish its conservation status Tiago Souto Martins Teixeira, *State University of Rio de Janeiro (UERJ)*; Mariana M. Vale*, *Federal University of Rio de Janeiro*
- 97. Measurement uncertainty in tree census carried out by volunteers and its effect on above-ground carbon stock estimates **Butt, N*,** *University of Oxford;* **Riutta, T,** *University of Oxford;* **Malhi, Y,** *University of Oxford;* **Morecroft, M,** *Natural England*

98. Bushmeat, commodities and climate. An econometric analysis of the supply of bushmeat to an urban market in south west Ghana.

McNamara, J*, Imperial College, Zoological Society of London, Grantham Institute for Climate Change

- 99. Population and Community Characteristics of Wildlife Rescued During the Expansion of the Panama Canal Swan, JL*, Department of Forestry; Carver, AD, Department of Foresty; Correa, NJ, Asociación Panamericana para la Conservación; Nielsen, CK, Cooperative Wildlife Research Laboratory
- 100. Modeling Crayfish (*Procambarus fallax*) Population Growth Potential as a Function of Habitat
 Craig van der Heiden*, *Florida Atlantic University*; N. J. Dorn, *Florida Atlantic University*; E. G. Noonburg, *Florida Atlantic University*
- Range shifting by North American passerines in response to climate change Coristine, L*, University of Ottawa; Kerr, J. T., University of Ottawa
- 102. Combining Social Marketing with Improved Enforcement to protect Indochinese tigers in Lao PDR
 Brooke Sadowsky, Rare; Annalisa Bianchessi, Rare; Amielle DeWan*, Rare; Santi Saypanya, Wildlife Conservation Society Lao; Troy Hansel, Wildlife Conservation Society Lao
- 103. Genetic Status of 2 Isolated Populations Following a 96% Population Decline
 Powell, Christopher P*, Central Michigan University; Nelson, Eric, Minnesota Department of Natural Resources; Swanson, Bradley J, Central Michigan University
- 104. Can Acoustic Technology Help Monitor Threatened Grouper Spawning Aggregations?
 Appeldoorn, R.S.*, Department of Marine Sciences, University of Puerto Rico, Mayagüez; Schärer, M.T., Department of Marine Sciences, University of Puerto Rico, Mayagüez; Rowell, T.J., Department of Marine Sciences, University of Puerto Rico, Mayagüez; Nemeth, M., Department of Marine Sciences, University of Puerto Rico, Mayagüez; Mann, D.A., College of Marine Science, University of South Florida
- **105.** Biomimicry Inspires Conservation: Why biologists need to engage with engineers, designers, and entrepreneurs **Schuknecht**, **M**^{*}, *Biomimicry Group*; **Stier**, **S**, *Biomimicry Group*
- 106. Can social marketing techniques improve compliance to marine protected area regulations? A case study from Velondriake Madagascar

Bianchessi, Annalisa*, Rare; DeWan, Amielle, Rare; Andriamalala, Gildas, Blue Ventures; Peabody, Shawn, Blue Ventures; Harris, Alasdair, Blue Ventures

- 107. Indigeneous knowledge over distribution, threats and conservation of manatee in the douala-edea and lake ossa wildlife reserve Aristide, Kamla Takoukam*, *student;* Theodore, Mayaka, *supervisor;* Caryn, Self-Sullivan, *mentor*
- 108. Conserving Tallgrass Prairie in the USA with Prairie-Based Farming
 Kronberg, SL*, EcoSun Prairie Farms, Inc.; Johnson, WC, EcoSun Prairie Farms, Inc.; Boe, A, EcoSun Prairie Farms, Inc.;
 Schumacher, TE, EcoSun Prairie Farms, Inc.; Erickson, LM, USDA-NRCS
- 109. Territory size and habitat selection of a tropical passerine cinnamon-breasted rock bunting *Emberiza tahapisi* in Nigeria Atuo, F. A*, .P. Leventis Ornithological Research institute, University of Jos, Nigeria; Manu, S. A, .P. Leventis Ornithological Research institute, University of Jos, Nigeria
- **110.** Relative abundance estimation of the mountain tapir (*Tapirus pinchaque*) in the high-Andean forests of the Puracé National Park, Colombia.

Valderrama, Stephany*; Abud, Melissa; Duque, Sebastian; Calero, Humberto

- Evaluation of the introduction history and genetic diversity of serially introduced fish populations in New Zealand Kevin M. Purcell, North Dakota State University; Craig A. Stockwell, North Dakota State University; Nicholas Ling*, University of Waikato
- 112. Dietary Analysis of the Andean Fox (*Lycolopex culpaeus*) in the Ecuadorian Highlands Kristina Timmerman*, St. John's University; John Nelson, St. John's University; Benjamin Besasie, St. John's University
- 113. Habitat fragmentation accelerates the inter-specific hybridization of stream salmonids Koizumi, I*, *Hokkaido University*
- 114. The scientific and conservation value of a small protected area : the case of Muir ecological reserve, Canada. Brisson, Jacques*, *University of Montreal*
- 115. Conservation of Rhododendron (Ericaceae) in the Himalayas of Northwest Yunnan Province, Southwest China Elizabeth Georgian*, University of Wisconsin-Madison

- 116. An integrated avian habitat fragmentation assessment method using dispersal data and functional habitat categorization Nan Lu*, Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Chinese Academy of Sciences; Chenxi Jia, Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Chinese Academy of Sciences; Huw Lloyd, World Pheasant Association; Yuehua Sun, Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Institute of Zoology, Chinese Academy of Sciences
- Mate Choice and Population Structure of the Water Toad (*Bufo stejnegeri*) in South Korea Suk, Chamoon*, Seoul National University
- 118. Radioactive pollution in the South Atlantic as a possible stress factor in some incidents of penguin mortality Kevin Mathewson*, *Independent;* Félix Maldonado, *University of Chile*
- Impact of insecticide (Azardiracta indica) on immunological and physiological parameters of *Biomphalaria alexandrina* snails.
 Fayez A. Bakry*, *Prof.Dr. of Medical malacology;* Karem El-Hommossany, *Dr.of Medical malacology;* Hanan Mosalam, *Dr.of Medical malacology;*
- 120. Integrating local wildlife research and serious games to engage schoolchildren in wildlife conservation in the temperate forest of Southern Chile
 Gálvez, N.*, Pontificia Universidad Católica de Chile, Sede Villarrica, CEDEL Centre of Local Develpement, Culture and Education ; Gutiérrez, P., Pontificia Universidad Católica de Chile, Sede Villarrica, CEDEL Centre of Local Develpement, Culture and Education
- Managament effectiveness assessment of Brazilian protected areas
 Ferreira, MN*, WWF-Brasil; Hangae, L, ICMBIo; Kinouchi, M, ICMBIo; Drumond, MA, UFMG; Onaga, C, Manacá; Catapan, M, WWF-Brasil; Palazzi, G., ICMBio; LIma, L, ICMBio
- 122. Restoration of a rich fen by topsoil removal: temporal and spatial succession in plants and snails during ten years
 Evasdotter, L*, Dept Plant Ecology & Evolution, Uppsala University; Proschwitz, T von, Göteborg Natural History Museum; Nilsson, D, County Administrative Board of Östergötland, Sweden; Sundberg, S, Dept Plant Ecology & Evolution, Uppsala University
- 123. Bed habitat selection by wild boar (Sus scrofa) in Boroeeye wildlife sanctuary in Yazd province, Iran Aghanajafi zadeh, S*, Maybod branch, Islamic Azad University, Maybod, Iran; Naderi,G, Ardebil branch, Islamic Azad University, Ardebil, Iran; Heydari, F, Department of Environment, Khatam province, Yazd, Iran
- 124. Evidence-based management of rhino conservation and tourism in Namibia's northwest communal lands
 Muntifering, J.R.*, Minnesota Zoo & Save the Rhino Trust; Loutit, R., Save the Rhino Trust; Uri-Khob, S., Save the Rhino Trust; Brell, B., Save the Rhino Trust; Kasaona, K., Save the Rhino Trust; Bakkes, C., Wilderness Safaris; Beytell, P., Ministry of Environment and Tourism; du Preez, P., Ministry of Environment and Tourism
- 125. Conservation of Fungi threat status of fungi in New Zealand and globally Buchanan, PK*, Landcare Research, Auckland, New Zealand; Johnston, PR, Landcare Research, Auckland, New Zealand
- 126. Population and Density Estimate of Black Rat (*Ratts rattus*) in Mangrove Forest Taher*, ghadirian; Mahmood, Karami; Afshin, Danehkar; Mahmood Reza, Hemami
- Designing walls as ecosystems in urban environments Reay, SD*, Auckland University of Technology
- 128. Artificial bare patches increase oviposition habitat for the endangered Ohlone tiger beetle (*Cicindela ohlone*) Cornelisse, Tara M.*, Environmental Studies Department, University of California Santa Cruz; Vasey, Michael C., Environmental Studies Department, University of California Santa Cruz; Holl, Karen D., Environmental Studies Department, University of California Santa Cruz; Arnold, Richard A., Entomological Consulting Services, Ltd, Pleasant Hill, CA; Letourneau, Deborah K., Environmental Studies Department, University of California Santa Cruz
- 129. Motorboat noise and its effects on coastal fish growth Johansson, K*, Swedish University of Agricultural Sciences
- Restoration linkages
 Seabrook-Davison, M*, Massey University
- **131.** The genetic variation of Korean water deer (*Hydropotes inermis argyropus*; Cervidae, Hydropotinae) inferred from mitochondrial and nuclear microsatellite markers

Jeong-Nam Yu, National Institute of Biological Resources; Jumin Jun*, National Institute of Biological Resources; Changman Won, National Institute of Biological Resources; Byoung-Yoon Lee, National Institute of Biological Resources; Myounghai Kwak, National Institute of Biological Resources



- 132. Common farmland birds distribution in Poland. Predictive mapping from large-scale environmental elements Jakub Z. Kosicki*, Department of Avian Biology and Ecology, Faculty of Biology, Adam Mickiewicz University, ul Umultowska 89, 61-614 Poznań, Poland; Piotr Zduniak, Department of Avian Biology and Ecology, Faculty of Biology, Adam Mickiewicz University, ul Umultowska 89, 61-614 Poznań, Poland
- 133. Factors influencing colonization rates of native and invasive plant species on green roofs Butcher, CL*, Central Michigan University; Dannenhoffer, JM, Central Michigan University; Swanson, BJ, Central Michigan University
- **134.** Impact of disturbed areas in tadpoles of *Bokermannohyla saxicola* (Bokermann, 1964) from Minas Gerais, Brazil, through the index of fluctuating asymmetry.

Bar, LFF*, PUC Minas; Eterovick, PC, PUC Minas

135. Factors affecting the local occurrence of the near-threatened bitterling (*Tanakia lanceolata*): strong attachment to its potential host mussels

Akira Terui*, Dept of Ecosystem Studies, Graduate School of Agricultural and Life Sciences, Univ. of Tokyo; Shinichiro S Matsuzaki, National Institute for Environmental Studies; Kohji Kodama, Fukui Prefectural Fisheries Experimental Station; Masamitsu Tada, Fukui Prefectural Coastal Nature Center; Izumi Washitani, Dept of Ecosystem Studies, Graduate School of Agricultural and Life Sciences, Univ. of Tokyo

- **136.** Genetic structures of the rare alpine plants and the common congeneric plants **Harue Abe**, *Niigata University*; **Yoshihisa Suyama***, *Tohoku University*
- 137. Multi-scale habitat selection by reintroduced Eld's deer in a human-dominated landscape Zeng, ZG*, Institute of Zoology, Chinese Academy of Sciences; Yan, WB, Institute of Zoology, Chinese Academy of Sciences; Song, YL, Institute of Zoology, Chinese Academy of Sciences; Pan, D, Institute of Zoology, Chinese Academy of Sciences; Wang, TJ, Faculty of Geo-Information Science and Earth Observation, University of Twente; Xu, MQ, Institute of Zoology, Chinese Academy of Sciences
- 138. Relative loss of allelic varaition due to the founding event and subsequent drift in reintroduce carnivore populations Bickersmith, SA, *Central Michigan University;* Swanson, BJ*, *Central Michigan University*
- 139. Mitigating human-crane conflict in Driefontein Grasslands, central Zimbabwe: a test of scarecrow methods Fakarayi, T*, *Projects Officer- BirdLife Zimbabwe*; Chirara, C, *Director- BirdLife Zimbabwe*
- 140. Nest-parents needed! Adopt-a-nest to save Austria's only native turtle *Emys orbicularis* Pfistermueller, Regina*, *Zoo Vienna;* Schinder, Maria, *Danube flood-plain National Park;* Weissenbacher, Anton, *Zoo Vienna*
- 141. Absence of inbreeding in an isolated Moose (*Alces alces*) population over a 50-year period
 Hayes, KD*, Central Michigan University; Sattler, RA, Central Michigan University; Vucetich, JA, Central Michigan University;
 Swanson, BJ, Michigan Technological University
- 142. Genetic assessment of population decline in Wisconsin sharp-tailed grouse (*Tympanuchus phasianellus*)
 Malone, KM*, Central Michigan University; Hull, SD, Wisconsin Department of Natural Resources; Swanson, BJ, Central Michigan University
- 143. They fought the law and the law won: Impact of legislation on the anthropogenic spread of rusty crayfish Dresser, CM*, *Central Michigan University*; Swanson, BJ, *Central Michigan University*
- 144. Slow and steady: demographic and genetic trends of wood turtle populations
 McColl, CA*, Central Michigan University; Willoughby, JR, Central Michigan University; Lewis, TL, University of St. Thomas; Swanson, BJ, Central Michigan University
- 146. Evaluation on precision of habitat use monitoring data by line transect method based on GPS locations from collared takin Ge, BM, Institute of Zoology, Chinese Academy of Science; Guan, TP, College of Life Sciences, Beijing Normal University, Beijing, China; McShea, W, Conservation and Research Center, National Zoological Park, Front Royal, USA; Powell, Dl, Department of Mammalogy, Wildlife Conservation Society, UDA; Song, YL*, Institute of Zoology, Chinese Academy of Sciences, Beijing, China
- 147. Wildlife Responses to Black Rat Control in Sydney Harbour National Park Smith, HM*, The University of Sydney; Banks, PB, The University of Sydney
- 148. Crop-Raiding Patterns of Wildlife and Damage Mitigation around Moukalaba-Doudou National Park in Gabon Matsuura, N*, Kyoto University, Japan
- 149. Interannual changes in satellite-estimated vegetation around water points in Great Gobi A Strictly Protected Area, Mongolia Yunxiang Cheng*, Arid Land Research Center, Tottori University; Takehiko Y. Ito, Arid Land Research Center, Tottori University; Maki Asano, National Institute for Agro-Environmental Sciences, Tsukuba, Japan; Undarmaa Jamsran, Center for Ecosystem Study, Mongolian State University of Agriculture; Masato Shinoda, Arid Land Research Center, Tottori University

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- 150. Wildfire effect on an endangered island bird: The case of the Gran Canaria blue chaffinch (*Fringilla teydea polatzeki*) Suárez, NM*, Departamento de Genética, Facultad de Medicina, Universidad de Las Palmas de Gran Canaria; Betancor, E, Departamento de Genética, Facultad de Medicina, Universidad de Las Palmas de Gran Canaria; Fregel, R, Departamento de Genética, Facultad de Medicina, Universidad de Las Palmas de Gran Canaria; Rodríguez, F, Biodiversity Service, Gobierno de Canarias, Edf. Servicios Múltiples II, 4^a planta, E-35071 Las Palmas, Gran Canaria, Spain; Pestano, J, Departamento de Genética, Facultad de Medicina, Universidad de Las Palmas de Gran Canaria
- 151. Temporal change in the butterfly fauna in three wards of western Tokyo, Japan, and relevant ecological factors Maezumi, T*, Institute of Agricultural and Life Science, The University of Tokyo; Suda, S, Institute of Agricultural and Life Science, The University of Tokyo; Kadoya, T, National Insutitute for Environmental Studies; Izumi, W, Institute of Agricultural and Life Science, The University of Tokyo
- 152. Integrating conspecific attraction and conservation practice: lab rats as lures for invasive Norway rats Shapira, Idan*, Ecology and Conservation Group, Massey University, Auckland, New Zealand; Shanas, Uri, School of Biology, University of Haifa at Oranim, Tivon, Israel; Raubenheimer, David, Nutritional Ecology Research Group, Massey University, Auckland, New Zealand; Brunton, Dianne, Ecology and Conservation Group, Massey University, Auckland, New Zealand
- 153. Unexpected genetic population structure in the Kea (*Nestor notabilis*)
 Dussex,N*, University of Otago, Department of Zoology; Jamieson, I. G., University of Otago, Department of Zoology; Robertson, B. C., University of Otago, Department of Zoology
- **154.** Integration of Habitat and Metapopulation Models to Investigate the Potential Impacts of Climate Change on *Triunia robusta* (Proteaceae)

Shimizu, Y*, The University of the Sunshine Coast, Australia; Accad, A, Queensland Herbarium, Department of Environment and Resource Management, Queensland, Australia; Warrick, R, The University of the Sunshine Coast, Australia; Burnett, S, The University of the Sunshine Coast, Australia; Powell, M, The University of the Sunshine Coast, Australia; Shapcott, A, The University of the Sunshine Coast, Australia

- **155.** The Return of the Salt Marshes: Cultivating an Ecosystem while Cultivating Awareness **Porcheddu, Jennifer*,** *CUNY Graduate Center/ College of Staten Island*
- 156. Impact of alien Spartina alterniflora on the Breeding saltmarsh waterbirds in Yancheng National Nature Reserve, China Liu,CY*, Northeast Institute of Geography and Agricultural Ecology, Chinese Academy of Sciences; Jiang, HX, Research Institute of Forest Ecology, Environment and Protection, Key Laboratory of Forest Protection of State Forestry Administration, Chinese Academy of Forestry
- 157. Monitoring Source Population of Tigers (*Panther tigris tigris*) in Pench Tiger Reserve, Madhya Pradesh of Central Indian Landscape

Majumder, A*, Wildlife Institute of India; Sankar, K, Wildlife Institute of India; Qureshi, Q, Wildlife Institute of India; Jhala, Y.V, Wildlife Institute of India

- 158. Spider responses to grazing in an African savannah Mgobozi, M.P., Centre for Wildlife Management, Centre for Invasion Biology, University of Pretoria, South Africa; Somers, M.J.*, Centre for Wildlife Management, Centre for Invasion Biology, University of Pretoria, South Africa; Dippenaar-Schoeman, A.S., National Collection of Arachnida, Biosystematics Division, Agricultural Research Council, Plant Protection Research Institute, South Africa/Department of Zoology and Entomology, University of Pretoria, South Africa
- 159. Effects of snow cover on winter range selection of Mongolian gazelles Ito, TY*, Tottori University; Hata, S, Tottori University; Tsunekawa, A, Tottori University; Shinoda, M, Tottori University; Takatsuki, S, Azabu University; Lhagvasuren, B, WWF Mongolia; Buuveibaatar, B, Mongolian Academy of Sciences; Chimeddorj, B, WWF Mongolia
- 160. The return of a large carnivore: can Lynx and humans cohabit peacefully? Bouyer, Yaëlle*, Royal Belgian Institute of Natural Sciences, Belgium; Norwegian Institute for Nature Research, Norway; University of Liège, Belgium; Linnell, John, Norwegian Institute for Nature Research, Norway; Beudels-Jamar, Roseline, Royal Belgian Institute of Natural Sciences, Belgium
- Poverty and provisioning ecosystem services in the Solomon Islands
 Davies, T*, St Andrews University; Fazey, I, St Andrews University; Pettorelli, N, Institute of Zoology, ZSL
- **162.** Long Term Monitoring of Shorebirds in an Urban Setting: a community-based initiative **Coughlan, R.,** *Independent;* **Gallo-Cajiao, E.***, *OceanWatch Australia*
- **163.** Determining the Linkages between Mangrove Detritus and Ecosystem Functioning, in a Temperate New Zealand Estuary **Gladstone-Gallagher**, **RV***, *University of Waikato, NIWA Hamilton*

- 164. Experimental habitat rehabilitation for the Philippine Cockatoo Cacatua haematuropygia in Palawan, Philippines Widmann, IDL*, Katala Foundation; Widmann, P, Katala Foundation
- 165. Is forest disturbance always harmful to forest ecosystem? Evidence from Sal (Shorea robusta) forests in Nepal Terai Sapkota, IP*, *Ministry of Forests, Nepal Government*
- 166. Unintended consequences of conservation actions: managing disease in complex ecosystems Chauvenet, Alienor*, Institute of Zoology, ZSL, London NW1 4RY, UK; Durant, Sarah, Institute of Zoology, ZSL, London NW1 4RY; Hilborn, Ray, , School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA 98195-5020, USA; Pettorelli, Nathalie, Institute of Zoology, ZSL, London NW1 4RY
- 167. Molecular biodiversity inventory of the ichthyofauna of the Czech Republic Mendel, J*, Institute of Vertebrate Biology, v.v.i., Czech Republic; Papousek, I, Institute of Vertebrate Biology, v.v.i., Czech Republic; Vetesník, L, Institute of Vertebrate Biology, v.v.i., Czech Republic; Halacka, K, Institute of Vertebrate Biology, v.v.i., Czech Republic; Bartonova, E, Institute of Vertebrate Biology, v.v.i., Czech Republic; Sanda, R, National Museum, Czech Republic; Urbankova, S, Institute of Vertebrate Biology, v.v.i., Czech Republic; Konickova, M, Institute of Vertebrate Biology, v.v.i., Czech Republic;
- 168. Taxonomic and systematic revision of species of the genera Gobio and Romanogobio in the light of frequent hybridization Urbankova, S*, Institute of Vertebrate Biology, v.v.i., Czech Republic; Mendel, J, Institute of Vertebrate Biology, v.v.i., Czech Republic; Vasileva, E, Zoological Museum, Russia; Nowak, M, University of Agriculture in Krakow, Poland; Stefanov, T, National Museum of Natural History, Bulgaria; Sanda, R, National Museum, Czech Republic; Kosco, J, University of Presov, Slovakia; Halacka, K, Institute of Vertebrate Biology, v.v.i., Czech Republic
- 169. Evidence of inbreeding depression in a self-pollinated thistle Sefton, Leah*, Central Michigan University; McCann, Kelly, Central Michigan University; Dannenhoffer, Joanne, Central Michigan University; Swanson, Bradley, Central Michigan University
- 170. The impact of alien fish species on feeding behavior and shelter use in Alpine newt Winandy, L*, University of Liège; Denoël, M, University of Liège
- 171. How to mitigate the impacts of the deforestation on the vertebrate fauna in the Brazilian Amazon? Prist, P.*, Sao Paulo University; Michalski, F., Amapa Federal University; Metzger, J.P., Sao Paulo University
- 172. Reduced gene flow in ringed seals (*Pusa hispida*) caused by Hudson Bay Jacob J. Burkhart*, Central Michigan University; Stephanie Sell, Central Michigan University; Ole Nielsen, Fisheries and Oceans, Manitoba, Canada; Brendan P. Kelly, National Science Foundation; Bradley J. Swanson, Central Michigan University
- 173. Habitat selection of the endangered Hawaiian goose: a multi-scale approach Christina Cornett*, Tropical Conservation Biology & Environmental Science, University of Hawai`i, Hilo; Steven C. Hess, Pacific Island Ecosystems Research Center, U.S. Geological Survey, Kilauea Field Station, Hawai`i National Park, HI
- 174. Challenges in conserving the endangered and endemic Cochabamba Mountain-Finch in a rural Bolivian Andean landscape Huanca, N. E.*, Asociación Civil Armonía, Santa Cruz de la Sierra - Bolivia ; Cahill, J. R. A., Centro de Biodiversidad y Genética, Universidad Mayor de San Simón, Cochabamba - Bolivia; Vázquez, C. A., Asociación Civil Armonía, Santa Cruz de la Sierra -Bolivia; Davis, S., Asociación Civil Armonía, Santa Cruz de la Sierra - Bolivia
- House mouse research on Saddle Island, New Zealand: Population and invasion biology
 MacKay, JWB*, School of Biological Sciences, University of Auckland; Murphy, EC, Department of Conservation, New Zealand;
 Hauber, ME, Hunter College, City University of New York, USA; Clout, MN, School of Biological Sciences, University of Auckland
- 176. Wood density variation in an altitudinal gradient: a key component for determining above-ground biomass Mireia, Torello Raventos*, James Cook University; Bird, Michael, James Cook University; Saiz, Gustavo, James Cook University; Lloyd, Jon, James Cook University; Dan Metcalfe, CSIRO
- 178. Habitat requirements and spatial occurence patterns of specialist and generalist beetle species in a managed boreal forest landscape

Rubene, Diana*, Swedish University of Agricultural Sciences; Wikars, Lars-Owe, Swedish University of Agricultural Sciences; Ranius, Thomas, Swedish University of Agricultural Sciences

- 179. Gene flow and differentiation in the alpine archipelago of the New Zealand rock wren (*Xenicus gilviventris*) Weston, K.A*, *University of Otago;* Robertson, B.C, *University of Otago;* Jamieson, I, *University of Otago*
- 180. Biological Diversity in a Brazilian Hotspot
 - Sevilha, AC*, James Cook University and Embrapa Genetic Recources & Biotechnology; Williams, SE, James Cook University; Pressey, RL, James Cook University; Colli, GR, Universidade de Brasília; Constantino, R, Universidade de Brasília; Marinho-Filho, J, Universidade de Brasília; Marini, M, Universidade de Brasília; Tidon, R, Universidade de Brasília

- 181. Elevated Islands urban conservation potential on living roofs Renee Davies*, Unitec Institute of Technology; Robyn Simcock, Landcare Research Ltd; Richard Toft, Entecol Ltd; Graham Ussher, Tonkin & Taylor Ltd; Cris de Groot, Unitec Institute of Technology; Martin Boult, Unitec Institute of Technology
- 182. Effect of climate change on ectotherms and endotherms in mainland Spain Marquez, A.L.*, Universidad de Malaga; Real, R., Universidad de Malaga
- 183. Range size and habitat use of a naturally occurring island population of the northern quoll, *Dasyurus hallucatus* Vincent van Uitregt*, *The University of Queensland;* William Ellis, *The University of Queensland;* Sean Fitzgibbon, *The University of Queensland;* Robbie Wilson, *The University of Queensland*
- 184. How group size and roost switching behaviour of insectivorous bats influences predation risk in urban environments Threlfall, C*, Evolution and Ecology Research Centre, School of Biological Earth and Environmental Sciences, University of New South Wales, Sydney, NSW 2052, Australia; Law, B, Forest Science Centre, Industry and Investment, Beecroft, NSW 2119, Australia; Banks, P, School of Biological Sciences, University of Sydney, NSW 2006, Australia
- **185.** Characterization of an introduced population of cotton-top tamarins (*Saguinus oedipus*): From the myths to the conservation opportunities

Garcia, S*, Pontificia Universidad Javeriana; Amaya, JD, Pontificia Universidad Javeriana

- 186. Tourist perception of the 2010 coral bleaching event in Mu Koh Chang, Thailand
 Sutthacheep, M*, Ramkhamhaeng University; Pengsakun, S, Ramkhamhaeng University; Klinthong, W, Ramkhamhaeng University;
- 187. The effects of moose over-browsing on forest bird communities in Gros Morne National Park, Newfoundland and Labrador, Canada

Rae, LF*, Memorial University of Newfoundland; Whitaker, DM, Parks Canada; Warkentin, IG, Memorial University of Newfoundland

- 188. Discovery and implementation of charismatic species in the Chilean Long-Term Socio-Ecological Research (LTSER) Network Márquez-García, M*, Instituto Milenio de Ecología y Biodiversidad (IEB); Caballero, P, Instituto Milenio de Ecología y Biodiversidad (IEB), Parque Etnobotánico Omora; Díaz-Forestier, J, Instituto Milenio de Ecología y Biodiversidad (IEB), Fundación Senda Darwin; Hernández, CC, Instituto Milenio de Ecología y Biodiversidad (IEB), Centro de Estudios Avanzados en Zonas Áridas (CEAZA); Marcelo, W, Instituto Milenio de Ecología y Biodiversidad (IEB), Fundación Senda Darwin; Marticorena, FL, Museo Antropológico Martin Gusinde; Armesto, JJ, Instituto Milenio de Ecología y Biodiversidad (IEB), Pontificia Universidad Católica de Chile; Rozzi, R, Instituto Milenio de Ecología y Biodiversidad (IEB), University of North Texas
- 189. Rare plant populations on degraded and natural habitat do not respond equally to mitigation of pest and pathogen pressure Squires, S, of Environment and Conservation, Government of Newfoundland and Labrador, Corner Brook, NL, Canada; Hermanutz, L*, Department of Biology, Memorial University, St. John's, NL, Canada A1B 3X9; Dixon, P, 3Agriculture and Agri-Food Canada, St. John's, NL, Canada
- 190. When science is heard: ecological researches on an endemic and endangered bird, supporting the creation of a state protected area in Southeastern Brazil.
 Alves, MAS*, Universidade do Estado do Rio de Janeiro; Chaves, FG, Universidade do Estado do Rio de Janeiro; Vecchi, MB, Universidade do Estado do Rio de Janeiro
- 191. Structure and environmental relations of a forest fragment with monodominance of Euterpe edulis Mart.
 Higashikawa, EM*, Institute for Sustainable Development Mamiraua; Venturin, N, Federal University of Lavras; Machado, ELM, Federal University of Jequitinhonha and Mucuri Valley; Carlos, L, Federal University of Lavras
- **192.** The science, action and art of reconnecting with nature through meaningful experience **Zylstra**, **MJ***, *Dept. Conservation Ecology & Entomology, Stellenbosch University*
- 193. Survey of Native Plant Species Related to the Afro-Brazilian culture in the Urban Parks and Botanical Garden of Salvador Queiroz, EP*, Jardim Botânico de Salvador; Santos, LS, Jardim Botânico de Salvador; Oliveira, MZA, Empresa Baiana de Desenvolvimento Agricola
- 194. Natural history and population characteristics of *Actinote negra demonica* (Order: Lepitoptera); specie under commercial harvest in the National Park
 Tejeda Wendy*, *Institute of Ecology*
- **195.** Measuring reproductive success in a nocturnal and secretive species: A novel approach for little spotted kiwi (*Apteryx owenii*) **Taylor, HR*,** *Allan Wilson Centre for Molecular Ecology and Evolution, School of Biological Sciences, Victoria Univesity of Wellington*
- 196. Evaluation of the fruit production of three arecacea species in different amazon floodplain environments Sposito, RC*, Instituto de Desenvolvimento Sustentável Mamirauá

- 197. The vegetation of a protected area in the Brazilian Atlantic Forest: implications for its management plan Ivanauskas, NM, Instituto Florestal, Rua do Horto, 931, São Paulo, Brasil; SOUZA, FM*, Instituto Florestal, Rua do Horto, 931, São Paulo, Brasil; Godoy, JRL, Instituto Florestal, Rua do Horto, 931, São Paulo, Brasil; Kanashiro, MM, Instituto Florestal, Rua do Horto, 931, São Paulo, Brasil; Miashike, RL, Instituto Florestal, Rua do Horto, 931, São Paulo, Brasil; Franco, GADC, Instituto Florestal, Rua do Horto, 931, São Paulo, Brasil
- 198. Habitat modification by an invasive alien grass reduces native food availability of a grasshopper species endemic to Japan Yoshioka, A*, Graduate School of Agricultural and Life-Sciences, The University of Tokyo; Kadoya, T, Environmental Biology Division, National Institute for Environmental Studies; Suda, S, Graduate School of Agricultural and Life-Sciences, The University of Tokyo; Washitani, I, Graduate School of Agricultural and Life-Sciences, The University of Tokyo
- 199. Implications of behavioral plasticity for conservation of New Zealand tuatara Carter, Anna L.*, Victoria University of Wellington School of Biological Sciences, Allan Wilson Centre for Molecular Ecology and Evolution; Nelson, Nicola J., Victoria University of Wellington School of Biological Sciences, Allan Wilson Centre for Molecular Ecology and Evolutio
- 201. Global freshwater fish review: causes of endangerment and extinction Weiss, S, University of Graz; Mack, J, University of Graz; Geyer, E*, University of Graz
- 202. Dispersal and translocation of the endangered Pygmy Bluetongue Lizard (*Tiliqua adelaidensis*)
 Schofield, JA*, *Flinders University of South Australia*; Ebrahimi, M, *Flinders University of South Australia*; Gardner, MG, *Flinders University of South Australia*; Bull, CM, *Flinders University of South Australia*
- 203. The Predator's Dilemma: investigating the responses of central place foragers to changes in the abundance and distribution of their preyBoyd, C*, School of Aquatic and Fishery Sciences, University of Washington
- 204. Cherry-picking parrots: can the field of eco-immunology help managers to select individuals for release programs? Simon Tollington*, DICE, University of Kent; Jim Groombridge, DICE, University of Kent; Carl Jones, Durrell Wildlife Conservation Trust, Mauritian Wildlife Foundation; Andrew Greenwood, Wildlife Vets International
- 205. The application of infrared camera in monitoring animal biodiversity in Guanyinshan Nature Reserve, Shaanxi Pengfeng WU, College of Biological Science, China Agricultural University, Beijing 100193, China; Xuehua LIU*, School of Environment, Tsinghua University, Beijing 100084, China; Xiaoming SHAO, College of Biological Science, China Agricultural University, Beijing 100193, China
- 206. To fund or not to fund: a Bayesian Network decision support tool for investment in species conservation Gavin Stewart, University of York, York, UK; Kerrie Mengersen*, QUT, Brisbane, Australia; Georgina Mace, Imperial College, London, UK; Christopher Schmid, Tufts Medical Centre, Boston, USA; Jeff McNeely, IUCN, Switzerland; Jegar Pitchforth, QUT, Brisbane, Australia; Ben Collen, Zoological Society, London, UK





Abstract submission deadline - 14th December 2011

www.eccb2012.org



3rd European Congress of Conservation Biology

GLASGOW 2012

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Symposia submission deadline

- 30th September 2011

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GLASGOW 2012

3rd European Congress of Conservation Biology 28th August – 1st September

Conservation on the Edge SECC, Glasgow, Scotland

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Epsom 3	Epsom 1&2	Marlborough 1	Marlborough 2	Marlborough 3	New Zealand 1	New Zealand 2	New Zealand 3	New Zealand 4	Parnell
8:25 - 10:00 A.M.		4	lenary: Dee Boersma	Plenary: Dee Boersma, The Role of Natural History in Conservation: A case study of Magellanic penguins Awards Ceremony: Richard Primack <i>New Zealand Rooms</i>	of Natural History in Conservation: A Awards Ceremony: Richard Primack <i>New Zealand Rooms</i>	ion: A case study of l mack	Magellanic penguins		
			Ð	Coffee Break: 10:00-10:30 A.M., Auckland Room	10:30 A.M., Auckla	ind Room			
10:30 A.M 12:30 P.M	30 P.M								
Contr. Sess. Environmental & ecological economics	Speed Sess. Community- driven conservation	Symp. 35 Conservation Genomics	Contr. Sess. Communication, outreach, and education	Contr. Sess. Ecosystem/ conservation area management	Contr. Sess. Landscape Ecology	Contr. Sess. Population Dynamics (Conservation Modelling)	Symp. 33-1 Temperate Indigenous Grasslands	Symp. 34 Broadening the reach of SCB	Symp. 36 Natural solutions to climate change
		WS 14 (Discussion Group) Conservation actions in Indigenous Communities		WS 20 Conserving the largest salmon in the world			Symp. 33-2 Temperate Indigenous Grasslands		
2:00 P.M 4:00 P.M	P.M								_
Symp. 39 When adaptive management actually works	Speed Sess. Conservation economics & politics	Symp. 40 Genetic management of fragmented populations	Contr. Sess. Community-driven conservation	Symp. 41 Biocultural approach to conservation action	Contr. Sess. Landscape Ecology	Contr. Sess. Population Dynamics	Symp. 37 Balancing conservation & development	Symp. 38 Spatial conservation prioritization	Contr. Sess. Protected area planning & design
				Coffee Break: 4:00-4:30 P.M., Auckland Room	30 P.M., Auckland	Room			
4:30 P.M 6:30 P.M.) P.M.								
Contr. Sess. Protected area planning & design	Speed Sess. Restoration Ecology	Contr. Sess. Biogeography	Contr. Sess. Conservation genetics & medicine	Contr. Sess. Climate Change					Contr. Sess. Community-driven conservation
6:30 P.M. Onwards	vards		Final Banquet é	Final Banquet & 25th Anniversary Celebration with Special Speaker, Mac Hunter 6:30 P.M. to Midnight	tsary Celebration with Speces 6:30 P.M. to Midnight	cial Speaker, Mac H	lunter		9

Morning session: 8:25 A.M. to 10:00 A.M., New Zealand Rooms 1-4

Announcements 8:25-8:30

PLENARY SESSION 8:30-9:30

The Role of Natural History in Conservation: A case study of Magellanic penguins

P. Dee Boersma, Deptartment of Biology, University of Washington, and the Wildlife Conservation Society, Seattle, Washington, USA

Natural history and a species breeding biology can provide insight into conservation. For nearly 30 years we have intensively studied the largest breeding colony of Magellanic penguins in the world at Punta Tombo, Argentina. Penguins are recent to Punta Tombo. None colonized the area until the mid-1920's and by the 1980's their population was in decline. Over a 20 year period their population declined over 1%/yr at Punta Tombo. The rise and fall of a population reflects environmental conditions both on and off the breeding ground. Land use changes allowed penguins to colonize the area but shifts in their breeding distribution northward is likely because their prey is farther north. Their distribution is moving northward, not southward, contrary to climate warming predictions. Climate variation has a strong influence on Magellanic penguin breeding biology. Egg laying has shifted about 3 days later per decade, reproductive success is altered by rainfall, and foraging distance has lengthened. Magellanic reproductive success is determined by how far they must travel to find food for their chicks making them sentinels of the marine environment. Penguins and other seabirds can be useful tools in understanding petroleum pollution, fish abundance, fisheries management, and climate variation.

AWARD CEREMONY

9:30-10:00

Richard Primak is a Professor in the Department of Biology at Boston University. He was given the award for his extraordinary contribution to conservation education worldwide through his textbooks in English, and 27 locally-adapted textbooks in other languages.





COFFEE BREAK 10:00 to 10:30 Auckland Room



Late morning session: 10:30 A.M. to 12:30 P.M.

• <u>CS 82: ENVIRONMENTAL AND ECOLOGICAL ECONOMICS</u> Epsom Room 3 Friday, December 9, 10:30 to 12:30

- 10:30 Contrasted ecological responses to scenarios for public agricultural policies Mouysset Lauriane*, CNRS - French National Museum; Doyen Luc, CNRS - French National Museum; Jiguet Frédéric, CNRS - French National Museum
- 10:45 Acting optimally for biodiversity in a world obsessed with REDD+
 Venter, O*, James Cook University; Wilson, KA, University of Queensland; Hovani, L, The Nature Conservancy;
 Possingham, HP, University of Queensland

11:00 Does money grow on trees? Implications of livelihood heterogeneity for payments for environmental services in Amazonian extractive reserves.

Newton, P*, University of East Anglia; Nichols, L., Columbia University; Endo, W., Norwegian University of Life Sciences; Peres, C., University of East Anglia

11:15 The win-win services of Australia's vulnerable top predator, the dingo

Prowse, TAA*, Environment Institute, University of Adelaide; Brook, BW, Environment Institute, University of Adelaide; Lacy, RC, Chicago Zoological Society; Johnson, CN, School of Zoology, University of Tasmania

11:30 Illegal wildlife trade between South America and the United States

Asmüssen, M. V^{*}, Centro de Ecología, Instituto Venezolano de Investigaciones Científicas (IVIC). EcoHealth Alliance, New York, United States of America.; Ferrer-Paris, J.R., Centro de Ecología, Instituto Venezolano de Investigaciones Científicas; Zambrana-Torrelio, C., EcoHealth Alliance, New York, United States of America; Rodriguez-Clark, K. M., Centro de Ecología, Instituto Venezolano de Investigaciones Científicas (IVIC); Rodríguez, J.P., Centro de Ecología, Instituto Venezolano de Investigaciones Científicas (IVIC)

11:45 Cultural Ecosystem Services Require Special Treatment, and Most Ecosystem Services are Cultural Chan, KMA*, University of British Columbia; Satterfield, T, University of British Columbia; Goldstein, J, Colorado State University

12:00 Accounting for constraints in optimal resource allocation for mitigating multiple threats

Chooi Fei Ng*, The University of Queensland, School of Mathematics; Hugh P. Possingham, The University of Queensland, The Ecology Center; Deidré L. de Villiers, Queensland Department of Environment and Resource Management; Harriet J. Preece, Queensland Department of Environment and Resource Management; Clive A. McAlpine, The University of Queensland, Center for Spatial Environmental Research, School of Geography, Planning and Environmental Management; Jonathan R. Rhodes, The University of Queensland, Center for Spatial Environmental Research, School of Geography, Planning and Environmental Management

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• <u>SPEED 81: COMMUNITY-DRIVEN CONSERVATION</u> Epsom Rooms 1&2 Friday, December 9, 10:30 to 12:30

- 10:30 Conservation of wild yak for the benefits of hybridization with domestic yak on the Tibetan plateau, China Buzzard, PJ*, China Exploration & Research Society
- 10:34 Incipient, but efficient? Ecological outcomes of fishers' involvement in co-management of floodplain lakes in the Tocantins River, Brazilian Amazon

Silvano, RAM*, Dep. Ecologia, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil; Hallwass, G, Pósgraduação em Ecologia, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil; Lopes, PF, Depto. Botânica, Ecologia e Zoologia, Centro de Biociências, Universidade Federal do Rio Grande do Norte, Natal, RN, Brazil; Juras, AA, Centrais Elétricas do Norte do Brasil S.A - Eletronorte, Brasília, DF, Brazil; Ribeiro, AR, Dep. Ecologia, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil; Lima, RP, Dep. Fisiologia, Instituto de Biociências, Universidade de São Paulo; Begossi, A, Fisheries and Food Institute (FIFO), ECOMAR, UNISANTA and Universidade Estadual de Campinas (Unicamp), Campinas, SP, Brazil

- 10:42 Aloha Aina: Successfully Integrating Traditional Ecological Knowledge into Conservation Efforts Watson, TK*, *Honua Consulting*
- 10:46 Quantifying the parameters of primate crop-raiding behaviour to mitigate farmer-wildlife conflict in Uganda
 Wallace, GE*, Anthropology Centre for Conservation, Environment and Development, Oxford Brookes University, Oxford, UK;
 Hill, CM, Anthropology Centre for Conservation, Environment and Development, Oxford Brookes University, Oxford, UK
- 10:50 The Asian Crocodile Crisis van der Ploeg, J*, Leiden University; van Weerd, M, Leiden University
- 10:54 Protecting Snow Leopard by maintaining the Traditional Tibetan Culture
 Dajun Wang *, School of Lfe Sciences, Peking University, China; Juan Li, School of Lfe Sciences, Peking University, China; Hang Yin, San Shui Conservation Center, Beijing, China; Sun Shan, San Shui Conservation Center, Beijing, China
- 10:58 Socio-cultural protection of endemic tree species in humanised landscapes a community driven approach Rajasri Ray*, Center for Ecological Sciences; M.D.Subhash Chandran, Center for Ecological Sciences; T.V.Ramachandra, Center for Ecological Sciences
- 11:02 Identifying preconditions for community participation in marine conservation. A case study. Hauptfeld, RS*, NOAA Coral Reef Management Fellow - PR DNER
- 11:06 How landholders have organized to lead conservation efforts on Kolombangara Island, Solomon Islands Vaghi, F*, Coordinator, Kolombangara Island Biodiversity Conservation Association; Cox, AS, Technical Officer, Kolombangara Island Biodiversity Conservation Association

^{12:15} Stewardship Credit Program Pilot—A new Grassbanking tool for Canada Blouin, D.*, *Nature Conservancy of Canada*

- 11:10 Advocacy coalitions in the formation of conservation and environmental legislation in New Zealand Vaughter, PCD*, University of Minnesota-Twin Cities
- 11:14 Involving participation of local community in conservation: an effective strategy for endangered bird conservation in Assam, India
 Purnima Devi Barman*, Aaranyak
- 11:18 Interventions for Human-elephant Conflict Mitigation: their Use and Effectiveness in Assam, India Hazarika, N*, EcoSystems-India, Guwahati 781028, Assam, India; Zimmermann, A, Wildlife Conservation Research Unit, University of Oxford, Tubney, Abingdon, OX13 5QL; Wilson, S, North of England Zoological Society, Chester Zoo, Chester, CH2 1LH, UK.; Davies, TE, St Andrews, Fife KY16 9AJ, Scotland, UK
- 11:22 Long-term Planning for Marine Sustainability in Southwest Haiti Schill, Steven*, The Nature Conserancy; Zenny, Nathalie, The Nature Conservancy; Dominguez, Elianny, The Nature Conservancy; Kleiberg, Marianne, The Nature Conservancy
- 11:26 Community surveys increase the awareness and habitat restoration for the endangered Southern brown bandicoot (Isoodon obesulus) by landholders Jasmin Packer*, University of Adelaide

Discussion follows last presentation until end of session

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<u>SY 35: CONSERVATION GENOMICS</u>

Marlborough Room 1

Friday, December 9, 10:30 to 12:30

ORGANIZER(S): Kristina M Ramstad, Hilary C Miller and Charles H Daugherty; Allan Wilson Centre, Victoria University of Wellington

Sponsored by The Allan Wilson Centre for Molecular Ecology and Evolution (AWC)

- 10:30 Genomics and the Future of Conservation Genetics F.W. Allendorf*, University of Montana; P.A. Hohelohe, University of Oregon; G. Luikart, University of Montana
- 11:00 Genomic information reveals threatened species isolated before European settlement: implications for reintroduction efforts.

Michael K. Schwartz*, USDA Forest Service, Rocky Mountain Research Station; Brian Knaus, USDA Forest Service Pacific Northwest Research Station; Aaron Liston, Department of Botany & Plant Pathology, Oregon State University; Kristy Pilgrim, USDA Forest Service, Rocky Mountain Research Station; Richard Cronn, USDA Forest Service, Rocky Mountain Research Station

11:15 Using genomics to manage inbreeding effects in New Zealand's rarest kiwi

Ramstad, KM*, Allan Wilson Centre, Victoria University of Wellington; Robertson, HA, New Zealand Department of Conservation; Colbourne, RM, New Zealand Department of Conservation; Kay, D, New Zealand Department of Conservation; Daugherty, CH, Allan Wilson Centre, Victoria University of Wellington; Ryder, OA, Institution for Conservation Research, San Diego Zoo; Allendorf, FW, University of Montana

- **11:30** Genetics of Devil Facial Tumour Disease Belov, K*, University of Sydney
- 11:45 Discovering variable DNA markers for plants: does next generation sequencing hold the key? Shepherd, LD*, Massey University; Atherton, RA, Massey University; Cox, SJ, Massey University; de Lange PJ, Department of Conservation; Lockhart, P, Massey University
- 12:00 Population genomics of a conservation dependent deep-sea fish species, orange roughy (Hoplostethus atlanticus) Gonçalves da Silva, Anders*, CSIRO Marine and Atmospheric Research; Barendse, William, CSIRO Livestock Industry; Kijas, James, CSIRO Livestock Industry; Barris, Wes, CSIRO Livestock Industry; McWilliam, Sean, CSIRO Livestock Industry; Bunch, Rowan, CSIRO Livestock Industry; Hoelzel, Rus A., Durham University; England, Phillip R., CSIRO Marine and Atmospheric Research

Discussion follows last presentation until end of session

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• <u>CS 84: COMMUNICATION, OUTREACH AND EDUCATION</u> Marlborough Room 2 Friday, December 9, 10:30 to 12:30

- 10:30 Gender, Social Capital and Participation in Sea Turtle Conservation in NE Brazil Rinkus, MA*, Michigan State University
- 10:45 Using the theory of planned behaviour to assess the effectiveness of training on cultivation of over-harvested species Sophie Williams*, Bangor University and Royal Botanic Gardens, Kew; James Gibbons, Bangor University; Julia Jones, Bangor University; Colin Clubbe, Royal Botanic Gardens, Kew

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11:00 Engaging stakeholders in the selection of flagship species

Veríssimo, D*, Durrell Institute of Conservation and Ecology; Smith, RJ, Durrell Institute of Conservation and Ecology; Pongiluppi, T, SAVE Brasil; Santos, C, SAVE Brasil; Develey, PF, SAVE Brasil; MacMillan, DC, Durrell Institute of Conservation and Ecology

- 11:15 Block Managements Areas: Engaging Agriculturalists in Conservation of the Yellowstone River's Ecosystem Services Horton, Cristi C.*, Tarleton State University; Peterson, Markus J., Texas A&M University; Hall, Damon, University of Maine-Orono; Gilbertz, Susan, Montana State University-Billings
- 11:30 Achieving positive ecological and social outcomes through a participatory wildlife conservation project in a deprived urban area

Hobbs, SJ, University of York; White, PCL*, University of York

- 11:45 Evaluating an eradication program for the northern Pacific seastar, Asterias amurensis, in Victoria, Australia. Millers, Kimberley*, University of Melbourne; McCarthy, Michael, University of Melbourne; Carey, Jan, University of Melbourne
- 12:00 The Monterey Bay Aquarium Seafood Watch Program: Transforming Seafood Markets by Incentivizing Conservation through Consumers and Major Buyers Norden, W.S*, *Monterey Bay Aquarium*
- 12:15 PROJECT ECHO: An Initiative Aimed At Engaging Urban Society In The Conservation Of Cryptic Long-Tailed Bats (*Chalinolobus tuberculatus*)

PARIS, BEN*, Project Echo; Le Roux, Darren, Department of Conservation

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• <u>CS 85: ECOSYSTEM/CONSERVATION AREA MANAGEMENT</u> Marlborough Room 3 Friday, December 9, 10:30 to 12:30

10:30 How does Eucalyptus wandoo decline influence reptile abundance and species richness?

Moore, T.L.*, Murdoch University; Valentine. L. E., Murdoch University; Craig, M. D., Murdoch University; Hardy, G. E. St. J., Murdoch University; Fleming, P. A., Murdoch University

10:45 A Novel Approach for Global Mammal Extinction Risk Reduction

Di Marco, **M***, Department of Biology and Biotechnology, Sapienza University of Rome; **Cardillo**, **M**, Centre for Macroevolution and Macroecology, Research School of Biology, Australian National University, ; **Possingham**, **HP**, School of Biological Sciences, The University of Queensland; **Wilson**, **KA**, School of Biological Sciences, The University of Queensland; **Blomberg**, **SP**, School of Biological Sciences, The University of Queensland; **Boitani**, **L**, Department of Biology and Biotechnology, Sapienza University of Rome; **Rondinini**, **C**, Department of Biology and Biotechnology, Sapienza University of Rome.

11:00 Conservation Status of the Terrestrial Ecosystems of Venezuela

Rodriguez, JP*, Instituto Venezolano de Investigaciones Cientificas and Provita; Oliveira-Miranda, M A, Provita; Huber, O, Fundacion Instituto Botanico de Venezuela; De Oliveira-Miranda, R, Provita; Rodriguez-Clark, KM, Instituto Venezolano de Investigaciones Cientificas; Zambrano-Martinez, S, Instituto Venezolano de Investigaciones Cientificas; Rojas-Suarez, F, Provita; Giraldo-Hernandez, D, Provita

- 11:15 Prioritising conservation areas using species surrogate measures: consistent with ecological theory? Saetersdal,M*, Norwegian Forest and Landscape Institute; Gjerde,I, Norwegian Forest and Landscape Institute
- 11:30 Beyond win-win: interrogating ecosystem service dynamics Howe, C*, Department of Geography, University of Cambridge; Vira, B, Department of Geography, University of Cambridge
- 11:45 The influences of vegetation, flow and climate on stream macroinvertebrates: lessons from the big dry. Jim Thomson*, Monash University; Leon Metzeling, Environment Protection Authority, Victoria; Ross Thompson, Monash University; Nick Bond, Monash University; Ralph Mac Nally, Monash University
- 12:00 Is river regulation a problem for frogs in Australia?

Ocock, JF*, Australian Wetlands and Rivers Centre, University of New South Wales; **Kingsford, RT,** University oAustralian Wetlands and Rivers Centre, University of New South Walesf Wollongong; **Penman, TP,** University of Wollongong; **Rayner, T,** Australian Wetlands and Rivers Centre, University of New South Wales; **Rowley, JJR,** Australian Museum

Discussion follows last presentation until end of session

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10:30 Impact of artificial and natural barriers on space use and movements of four large African carnivore species: implications for spatial coexistence

Cozzi, G*, Zurich University; **Broekhuis, F,** Oxford University; **McNutt, JW,** Botswana Predator Conservation Trust; **Schmid, B,** Zurich University

- 10:45 Interacting edge effects around abandoned cattle corrals in an African savanna Porensky, Lauren McGeoch*, UC Davis
- 11:00 Conservation Management of Complex Edge Effects Pryke, J. S.*, Stellenbosch University; Samways, M.J., Stellenbosch University
- 11:15 Prairie dogs and ecosystem services: A key element in the maintenance of Mexican grasslands
 Martinez-Estevez, Lourdes*, Laboratorio de Ecología y Conservación de Fauna Silvestre, Instituto de Ecología, Universidad
 Nacional Autónoma de México (UNAM) Circuito Exterior S/N, Ciudad Universitaria, Coyoacán, 04510 México, D.F.
 México.; Pacheco, Jesús, Laboratorio de Ecología y Conservación de Fauna Silvestre, Instituto de Ecología, Universidad
 Nacional Autónoma de México (UNAM) Circuito Exterior S/N, Ciudad Universitaria, Coyoacán, 04510 México, D.F.
 Méxicoal Autónoma de México (UNAM) Circuito Exterior S/N, Ciudad Universitaria, Coyoacán, 04510 México, D.F. México.;
 Ceballos, Gerardo, Laboratorio de Ecología y Conservación de Fauna Silvestre, Instituto de Ecología, Universidad
 Nacional Autónoma de México (UNAM) Circuito Exterior S/N, Ciudad Universitaria, Coyoacán, 04510 México, D.F. México.;
 Ceballos, Gerardo, Laboratorio de Ecología y Conservación de Fauna Silvestre, Instituto de Ecología, Universidad Nacional
 Autónoma de México (UNAM) Circuito Exterior S/N, Ciudad Universitaria, Coyoacán, 04510 México, D.F. México.;
 Ceballos, Gerardo, Laboratorio de Ecología y Conservación de Fauna Silvestre, Instituto de Ecología, Universidad Nacional
 Autónoma de México (UNAM) Circuito Exterior S/N, Ciudad Universitaria, Coyoacán, 04510 México, D.F. México.
- 11:30 Land cover change and human population trends in the Serengeti ecosystem, Tanzania from 1984-2003 Estes, AB*, University of Virginia; Kuemmerle, T, Potsdam Institute for Climate Impact Research; Radeloff, VC, University of Wisconsin - Madison; Shugart, HH, University of Virginia
- 11:45 Gene flow barriers for the endangered Northern Prairie Skink (*Plestiodon septentrionalis*) in disjunct populations in Canada

Rutherford, PL*, Brandon University; Sui, J, Queen's University; McFadden, WCJ, Brandon University; Hoysak, DJ, Brandon University; Lougheed, SC, Queen's University

- 12:00 Fire-sensitive vegetation and fire feedbacks in an Australian savanna Trauernicht, Clay*, University of Tasmania; Murphy, Brett P., University of Tasmania; Portner, Talia E., University of Tasmania; Bowman, David M.J.S., University of Tasmani
- 12:15 Reassessing global conservation priorities with species richness estimates Lucas N. Joppa*, Microsoft Research; David Roberts, Durrell Institute of Conservation and Ecology, School of Anthropology and Conservation, University of Kent; Stuart Pimm, Nicholas School for the Environment, Duke University

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• <u>CS 87: POPULATION DYNAMICS (CONSERVATION MODELLING)</u> New Zealand Room 2 Friday, December 9, 10:30 to 12:30

- 10:30 Species Ability to Forestall Extinction (SAFE) index for IUCN Red Listed species
 Bradshaw, CJA*, The University of Adelaide; Clements, GR, James Cook University; Laurance, WF, James Cook University;
 Brook, BW, The University of Adelaide
- 10:45 Threat diagnostics: inferring causation from vertebrate population declines Martina Di Fonzo*, Imperial College London and Institute of Zoology, Zoological Society of London; Ben Collen, Institute of Zoology, Zoological Society of London; Georgina Mace, Imperial College London
- 11:00 The use of population viability analysis to inform small-scale monitoring projects Pickett, EJ*, University of Newcastle; Stockwell, MP, University of Newcastle; Pollard, CJ, University of Newcastle; Garnham, JI, University of Newcastle; Clulow, J, University of Newcastle; Mahony, MJ, University of Newcastle
- 11:15 Designing sampling strategies for conservation genetics studies: a simulation tool for conservation managers Hoban, Sean*, Laboratoire d' Ecologie Alpine, Universite Joseph Fourier; Gaggiotti, Oscar, Laboratoire d' Ecologie Alpine, Universite Joseph Fourier; Bertorelle, Giorgio, Department of Biology and Evolution, University of Ferrara
- 11:30 The African lion (Panthera leo leo): A continent-wide species distribution study and population analysis Riggio, Jason S.*, Big Cats Initiative, National Geographic Society; Duke University; Jacobson, Andrew, Big Cats Initiative, National Geographic Society; Duke University; Pimm, Stuart, Duke University; Dollar, Luke, Big Cats Initiative, National Geographic Society; Duke University; Pfeiffer University
- 11:45 Analysis of transient population dynamics of the endangered *Penstemon haydenii* Brigitte Tenhumberg*, University of Nebraska Lincoln; Richard Rebarber, University of Nebraska Lincoln; Kay Kottas, University of Nebraska Lincoln
- 12:00 Growth rates of juvenile Broad-snouted caiman at Pirapitinga Ecological Station, Southeast Brazil. Passos, L. F*, *Puc Minas;* Coutinho, M.E., *RAN/ICMBio*

12:15 Simple decision analyses for metapopulation viability of an endangered Australian amphibian

Heard, GW*, School of Botany, University of Melbourne; McCarthy, MA, School of Botany, University of Melbourne; Parris,
 KM, School of Botany, University of Melbourne; Scroggie, MP, Arthur Rylah Institute for Environmental Research, Victorian Department of Sustainability and Environment

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• SY 33-1: CONSERVATION AND SUSTAINABLE MANAGEMENT OF TEMPERATE INDIGENOUS GRASSLANDS, PART 1

New Zealand Room 3

Friday, December 9, 10:30 to 12:30

ORGANIZER(S): Mark, Alan F, University of Otago, Halloy, Stephan R.P., TNC, Santiago, Chile; Dickinson, Katharine J.M., University of Otago

Temperate indigenous grassland are the world's poorest protected terrestrial biome, despite the important ecosystem services and cultural/social values in many countries. The Temperate Grasslands Conservation Initiative (TGCI) of the IUCN has convened earlier symposia and workshops at international meetings. At this symposia we consider aspects of the conservation, sustainable management and assessments of ecosystem services and other values of temperate grasslands.

10:30 The world's temperate indigenous grasslands: their conservation, values and sustainable management, from a New Zealand perspective.

Mark, AF*, Alpine Ecology Research Group, University of Otago and Temperate Grasslands Conservation Initiative, IUCN; Dickinson, KJM, Alpine Ecology Research Group, Department of Botany, University of Otago; Schwendenmann, L, School of Environment, University of Auckland

- 10:45 Conservation Prioritisation in a changing landscape New Zealand's indigenous grasslands a case study Weeks, ES*, University of Waikato; Walker, S, Landcare Research; Overton, J, Landcare Research; Clarkson, B, University of Waikato
- 11:00 Identifying priority areas for conserving biodiversity across 830,000 km² of Patagonian steppe and monte, Argentina

Didier, K*, Wildlife Conservation Society; Chehebar, C, Administración de Parques Nacionales ; Tammone, MN, Project "Identificación de áreas de alto valor para la biodiversidad en Patagonia Árida"; Novaro, A, CONICET-INIBIOMA and WCS Patagonian and Andean Steppe Program; Ibañez, M, The Nature Conservancy, Southern Andes Program; Iglesias, G, The Nature Conservancy, Southern Andes Program; Walker, S, WCS Patagonian and Andean Steppe Program; Funes, M, WCS Patagonian and Andean Steppe Program

11:15 Interpreting the status of biodiversity in grasslands with different management and climate change using ground measures and remote sensing

Halloy, S*, The Nature Conservancy; Ibáñez, M, The Nature Conservancy; Touval, J, The Nature Conservancy; Boucher, T, The Nature Conservancy; Bran, D, Instituto Nacional de Tecnología Agropecuaria, INTA; Gaitán, J, Instituto Nacional de Tecnología Agropecuaria, INTA; Iglesias, G, The Nature Conservancy

11:30 MARAS: a system for monitoring structure, function and biodiversity in Patagonia rangelands. First data obtained in North Patagonia.

 $Gaitan, J^*, {\it INTA}, {\it EEA Bariloche}; Bran, D, {\it INTA}, {\it EEA Bariloche}; Oliva, G, {\it INTA}, {\it EEA Santa Cruz}$

- 11:45 Bryophyte contribution to ecosystem services in New Zealand indigenous tussock grasslands Michel, P*, Manaaki Whenua-Landcare Research; Lee, WG, Manaaki Whenua-Landcare Research
- 12:00 Consumer effects on exotic plant invasions in native grasslands of south-eastern Australia Morgan, JW*, La Trobe University; Scott, AJ, La Trobe University; Schultz, NL, University of New England; Lunt, ID, Charles Sturt University
- 12:15 Land reform, grassland conversion, and species habitat loss in New Zealand's remaining indigenous grasslands Walker, S*, Landcare Research, Private Bag 1930, Dunedin 9054, New Zealand

New Zealand Room 4

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Friday, December 9, 10:30 to 12:30

ORGANIZER(S): Gedan, K, Smithsonian Environmental Research Center, Aslan, C., University of California Santa Cruz; Joseph, L., Wildlife Conservation Society

Scientific research can help develop technical solutions to management problems, understand biological or social processes, and drive conservation philosophy. However, scientific findings often fail to be employed by policymakers or practitioners due to lack of access, understanding, acceptance or will. According to its 5-year strategic plan, the Society for Conservation Biology aims to overcome these obstacles and has declared its goals to facilitate the creation and dissemination of conservation science and to

[•] SY 34: BROADENING THE REACH OF THE SCB: ALTERNATIVES FOR SOCIETY ACTION TO ACHIEVE CONSERVATION RESULTS

increase application of science to management and policy. These goals are reflected in the theme of this ICCB conference, "Engaging Society in Conservation." Our symposium explores the work of past and present David H. Smith Conservation Research Fellows to illustrate the role of science in conservation action and to discuss the ability of SCB to facilitate this process. The Smith Fellowship program, administered by SCB, aims to foster creative and successful applications of science to the practice of conservation. Presenters will discuss their research and focus on the ways in which they have actively participated in political and social avenues of conservation. The presenters will also discuss specific paths by which individual members and committees of the SCB can more effectively engage in their focal conservation issue. The 25th anniversary celebration is an apropos time to examine these questions.

10:30 Introduction

- 10:45 Evaluating the potential of non-native mutualists to rescue native species from extinction Aslan, CE*, Department of Environmental Studies, University of California-Santa Cruz
- 11:00 Viability of shellfish restorations across a water quality gradient Gedan, KB*, Smith Fellow, Smithsonian Environmental Research Center
- 11:15 Wild thing, I'm just not that into you: Examining exotic pet owner's preference for captive-bred or wild-caught animals

Joseph, Liana*, Wildlife Conservation Society; Courchamp, Franck, Université Paris Sud; Redford, Kent, Wildlife Conservation Society

- 11:30 Conservation Science Expertise for Local Land Use Planning and Residential Development REED, SE*, Colorado State University/Wildlife Conservation Society
- 11:45 Communicating Salamander Science to Rural and Urban Audiences
 Terrell, KA*, Smithsonian Conservation Biology Institute (SCBI); Sevin, J, Center for Conservation Education and
 Sustainability, SCBI; Murphy, J, National Zoological Park, SCBI; Bronikowski, E, National Zoological Park, SCBI; Evans,
 M, National Zoological Park, SCBI; Quintero, R, National Zoological Park, SCBI; Grant, EH, United States Geological
 Survey, Patuxent Wildlife Research Center; Dallalio, E, United States Geological Survey, Patuxent Wildlife Research Center
- 12:00 Soil microbes as a restoration tool to improve degraded landscapes Sikes, BA*, University of Texas at Austin

Discussion follows last presentation until end of session

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SY 36: MAKING THE CASE FOR CONSERVATION: NATURAL SOLUTIONS TO CLIMATE CHANGE Parnell Room

Friday, December 9, 10:30 to 12:30

ORGANIZER(S): Dr Kathy MacKinnon, IUCN. World Commission on Protected Areas

Although climate change will have profound impacts on biodiversity, responses to date have largely focused on mitigation through cleaner energy and adaptation through investment in hard infrastructure such as dams, irrigation and sea walls. Protected areas are the cornerstones of biodiversity conservation but also serve a critical, though often unrecognized role, in mitigation and adaptation to climate change. Protected areas store 15% of terrestrial carbon and safeguard essential ecosystem services such as water and food supplies, coastal protection, and flood control, all of which reduce human vulnerability to disaster and increasingly dramatic climatic events. More than 180 nations have ratified international conventions on both biodiversity and climate change yet policymakers are still failing to implement development strategies that meet these dual agendas. This symposium will draw on experiences of conservation practitioners and pilot programs to emphasize the importance of ecological integrity and make the case that protecting natural habitats provides cost-effective, proven and "green" solutions to climate change, providing both biodiversity and socio-economic benefits.

10:30 Natural Solutions: Protected areas helping people to cope with climate change Mackinnon, Kathy, *IUCN/WCPA*; Dudley, Nigel, *IUCN/WCPA*; Sandwith, Trevor*, *IUCN*

11:00 Connectivity conservation across landscape and across nations for life's sake

Chassot, O*, Tropical Science Center / World Commission on Protected Areas, International Union for Conservation of Nature; **Howling, G,** Office of Environment and Heritage, Department of Premier and Cabinet; **Worboys, G,** Jagumba Consulting Pty Ltd / World Commission on Protected Areas (Mountains Biome and Connectivity Conservation), International Union for Conservation of Nature

- 11:15 Protected Area Restoration: Investing in Ecological Integrity and Resilience in a Changing World Keenleyside, K.A.*, Parks Canada; Pellatt, M.G., Parks Canada; McLennan, D, Parks Canada; Dumouchel, C, Parks Canada; Woodley, S, Parks Canada
- 11:30 A forest carbon project in practice in the Ankeniheny-Zahamena Corridor, Madagascar Hanta Ravololonanahary*, Conservation International; Bruno Rajaspera, Conservation International; James MacKinnon, Conservation International

11:45 Land-use change in the face of global climate change: a win-win solution for the environment and farming communities of the Eastern Cape, South Africa Sigwela, A.M.*, Nelson Mandela Metropolitan University; Cowling, R.M.C., Nelson Mandela Metropolitan University; Mills, A.M., Stellenbosch University; Marais, C., Department of Environment Affairs

12:00 The role of marine protected areas in mitigating climate change and providing ecosystem services Dudley, Nigel*, *Equilibrium Research*

Discussion follows last presentation until end of session



• WORKSHOP 14 (DISCUSSION GROUP): Best practice principles for planning and implementing conservation actions in Indigenous and Traditional communities

12:30 to 14:00, Marlborough 1

Organizer(s): Alana Grech and Bob Pressey, ARC Centre of Excellence for Coral Reef Studies, James Cook University; Helene Marsh, James Cook University

Effective conservation of biodiversity in regions of Indigenous and Traditional use requires meaningful engagement of communities in the design and implementation of conservation actions. It also requires acknowledgement and strengthening of Indigenous and Traditional cultures that are vital for the effective management and conservation of biodiversity. However, conservation actions to protect Indigenous and Traditional culture and the ecosystems upon which this culture depends have had mixed success due in part, to a dearth of culturally-acceptable and effective conservation planning tools. In preparation for this discussion group, we used case studies to identify processes that contribute to successful conservation initiatives in Indigenous and Traditional communities around the world. We then drafted a series of generic principles designed to promote effective implementation of conservation actions in Indigenous and Traditional communities. The ICCB discussion group will use these draft principles as a starting point, discussing and critiquing the principles and allowing feedback from specialists in conservation biology and representatives of Indigenous and Traditional communities. The published principles that result from the discussion group will provide globally-relevant guidance on the effective engagement of Indigenous and Traditional communities in conservation actions.

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WORKSHOP 20: Conserving the largest salmon in the world: Challenges and opportunities to protect taimen as threats escalate throughout northern Eurasia 12:30 to 14:00, Marlborough 3

Organizer(s): Peter Rand, Wild Salmon Center; CE ZImmerman, USGS Alaska Science Center, S.Weiss; University of Graz.

Taimen (species in the genus *Hucho* or *Parahucho*) are coldwater salmonids found throughout northern Eurasia. *Taimen* are the largest salmonids in the world, with maximum lengths possibly exceeding 2 m. They have recently been recognized as one of 20 global freshwater megafishes that are under threat resulting from overfishing, habitat loss, and climate change. They are charismatic, apex predators that occupy a globally unique ecological niche. Throughout their natural range these fish have engendered mystery and intrigue, reflected in their common names, including "devil fish" and "river wolf". They represent an extremely important ecological legacy, yet threats to these species are escalating, and two species may already be extinct in the wild. While our understanding of Pacific salmon *Oncorhynchus* spp. and other salmonids (particularly those of commercial value) has increased markedly in the past 50 years, research on *taimen* has been limited. It has been over 20 years since the last research synthesis was undertaken on this group of fishes. Here we propose a symposium to update our understanding of the species through innovative ecological, fisheries, and conservation-related studies. This convening will provide an opportunity to discuss the prospect of a broader international initiative to help motivate new research with the application of cutting-edge techniques, and undertake needed conservation actions to ensure the species will persist over the next 100 years. On Saturday there will be a fuller round table discussion focusing on a new international initiative and sorting out writing roles and responsibilities for a post-conference publication.

 SY 33-2: CONSERVATION AND SUSTAINABLE MANAGEMENT OF TEMPERATE INDIGENOUS GRASSLANDS, PART 2 New Zealand Room 3 Friday, December 9 *ORGANIZER(S)*: Mark, Alan F, University of Otago, Halloy, Stephan R.P., TNC, Santiago, Chile; Dickinson, Katharine J.M., University of Otago

Temperate indigenous grassland are the world's poorest protected terrestrial biome, despite the important ecosystem services and

cultural/social values in many countries. The Temperate Grasslands Conservation Initiative (TGCI) of the IUCN has convened earlier symposia and workshops at international meetings. At this symposia we consider aspects of the conservation, sustainable management and assessments of ecosystem services and other values of temperate grasslands.

12:30 Indigenous management and the ecological role of Andean peatlands (bofedales) in the context of global environmental change.

Yager, KA*, Biospheric Sciences, NASA Goddard Space Flight Center; Tupayachi, A, Vargas Herbarium, UNSAAC; Meneses, RI, National Herbarium of Bolivia and National Natural History Museum of Bolivia, , UMSA; García, C, ECOBIOSIS, Universidad de Concepción; Beck, S, National Herbarium of Bolivia, UMSA

- 12:45 Potential impacts of climate change on the environmental services of humid tropical alpine regions.
 Buytaert, W, Wouter Buytaert; Cuesta, FC*, Consortium for the Sustainable Development of the Andean Ecoregion CONDESAN, Quito, Ecuador; Tobón, C, Universidad Nacional de Colombia con sede Medellin, Medellín, Colombia
- 13:00 Long-term monitoring of change in temperate grasslands- GLORIA network in the Andes Halloy, S*, , The Nature Conservancy and Universidad Nacional de Chilecito; Beck, S, Herbario Nacional, Universidad Mayor de San Andrés; Cuesta, F, Condesan; Yager, K, NASA
- 13:15 Will global change alter mast seeding in tussock grasslands? Kelly, D*, Biological Sciences, University of Canterbury; Geldenhuis, A, Mathematics and Statistics, University of Canterbury; Byrom, AE, Landcare Research; James, A, Mathematics and Statistics, University of Canterbury; Holland, EP, Landcare Research; Lee. WG, Landcare Research; Plank, M, Mathematics and Statistics, University of Canterbury; Cowan, PE, Landcare Research

Early afternoon session: 2:00 P.M. to 4:00 P.M.

SY 39: WHEN ADAPTIVE MANAGEMENT ACTUALLY WORKS: IMPROVING CONSERVATION, ENHANCING SOCIETY Epsom Room 3

Friday, December 9, 14:00 to 16:00

ORGANIZER(S): Montambault, JR and Groves, CR, The Nature Conservancy

Adaptive management -- how can it at once be so banal, so important, so controversial and so often poorly done? Using information to plan and adapt our conservation efforts isn't just common sense; it is also critical given the persistent uncertainty of the state of ecological knowledge and the dynamic social, political, cultural and economic arenas within which we work. Yet there are nearly as many definitions of adaptive management as there are government agencies, universities and non-profit organizations involved in conservation. The only thing everyone seems to agree on about adaptive management is that we fail to do it well. Conservation projects never start with a clean slate and a perfectly isolated setting, so any experimental approach will always be in some way confounded by the real world. But the feedback provided by measures has produced pockets of largely unsung excellence in planning and adapting conservation efforts. In our symposium, we present five case studies highlighting different aspects of the plan-do-check-adapt cycle-- projects where adaptive management is working in the real world and where its application is making a tangible difference to the conservation of systems and species as well as to human society. From payments for ecosystem services to mountain gorilla conservation, we draw lessons and synthesis about conditions that foster adaptive management's success around the globe and propose a better definition of the term.

- 14:00 Redefining Adaptive Management for Conservation in Action Groves, CR*, The Nature Conservancy; Montambault, JR, The Nature Conservancy
- 14:30 Improving Conservation Outcomes Through Adaptive Management on the Connecticut River, USA Lutz, K*, The Nature Conservancy; Zimmerman, J, US Fish and Wildlife Service; Hatfield, C, US Army Corps of Engineers; Palmer, R, University of Massachusetts
- 14:45 Conservation in a human dominated landscape of Rwanda: What can we learn from the last decade of conservation of Nyungwe National Park?
 Masozera, Michel*, Wildlife Conservation Society
- 15:00 The need for adaptive management of collaborative approaches to conservation: A case study from the Cordillera Azul National Park, Peru
 Rodriguez, E. I.*, School of Geography, Environment and Earth Sciences, Victoria University of Wellington, New Zealand; Gavin, M. C., School of Geography, Environment and Earth Sciences, Victoria University of Wellington, New Zealand
- 15:15 Water Producer: Enhancing The Decision Public Policy Component Based On Strategy Measures In A Brazilian Water Fund

Diederochsen, Anita*, The Nature Conservancy; Veiga Neto, Fernando, The Nature Conservancy; Guimarães, João, The Nature Conservancy; Petry, Paulo, The Nature Conservancy; Padovezi, Aurélio, The Nature Conservancy; Araujo, Albano, The Nature Conservancy; Benini, Rubens, The Nature Conservancy; Klemz, Cláudio, The Nature Conservancy

15:30 Adaptive approach to marine conservation: Scaleup of a Philippine model

D'Agnes, LA*, PATH Foundation Philippines Inc.; Castro, JR, PATH Foundation Philippines Inc.

Discussion follows last presentation until end of session

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Friday

• <u>SPEED 92: CONSERVATION ECONOMICS & POLITICS</u> Epsom Rooms 1&2 Friday, December 9, 14:00 to 16:00

- 14:00 Valuation of protected areas in Uganda: case study of Murchison Falls Conservation Complex Mwaura, FM*, Economic Policy Research Centre ; Muramira, TE, National Environment Management Authority, Uganda ; Ogwal, FS, National Environment Management Authority, Uganda ; Guloba, M, Economic Policy Research Centre
- 14:04 Predicting ecosystem function from ecosystem structure: Implications for valuation of ecosystem services and development of policy instruments

Kadykalo, Andrew N.*, Department of Biology, University of Ottawa; Findlay, C. Scott, Department of Biology & Institute of the Environment, University of Ottawa

- 14:08 Bio-economic modelling for the viable management of mixed fisheries Gourguet, Sophie*, CSIRO Marine and Atmospheric Research, Australia; Doyen, Luc, CNRS-MNHN Departement of Ecology and Biodiversity Management, Paris, France; Macher, Claire, Ifremer, Departement of Maritime Economics
- 14:12 The Value of Extralimital Species to Ecotourism in the Eastern Cape Maciejewski, K*, Nelson Mandela Metropolitan University; Kerley, G. I. H, Nelson Mandela Metropolitan University
- 14:16 Large Dams on Brahmaputra: Threat to Eco-system Services and Indigenous and Tribal Communities in Arunchal Pradesh and Assam

Bose, Devashis*, Department of Economics, DDR College (govt. of Assam), Chabua (Assam-India)

14:20 Paying for big cats: the carbon opportunity

Macdonald EA*, University of Oxford; De Barros AE, University of Oxford; Malhi YM, University of Oxford; Macdonald DW, University of Oxford

14:24 Efficient conservation in a global recession

Knapp, John*, Native Range, Inc.; Cory, Coleen, The Nature Conservancy; Vermeer, Lotus, The Nature Conservancy; White, Mike, Tejon Ranch Conservancy; Walker, Kelvin, Native Range, Inc.; Macdonald, Norm, Native Range, Inc.

14:28 Conflicting Management Mandates and Ecological Impacts of Bison: Implications for Cross-Jurisdictional Wildlife Management

Reimondo, EL*, School of Earth Sciences and Environmental Sustainability, Northern Arizona University; **Theimer, TC,** Department of Biology, Northern Arizona University; **Sisk, TD,** School of Earth Sciences and Environmental Sustainability, Northern Arizona University

- 14:32 Approaches to Ungulate Control in New Zealand and United States National Parks Dratch, PA*, U.S. Fish & Wildlife Service; Hanson, B, New Zeland Department of Conservation
- 14:36 Impact of landmines on the Environment and Biodiversity, the case of Tigray, Ethiopia

Edem eniang *, university of uyo, Nigeria; Amleset Haile, Mekelle University, Ethiopia; Teshale Yihdego, Tigray research center

14:40 California's MLPA Initiative: Transitioning A Science-driven and Stakeholder-based Planning Process to Decisionmakers and Resource Managers

Miller-Henson, Melissa*, California Marine Life Protection Act Initiative; Fox, Evan, California Marine Life Protection Act Initiative

14:44 The drivers of tropical deforestation: a comprehensive review of the literature May-Tobin, Calen*, Union of Concerned Scientists; Boucher, Doug, Union of Concerned Scientists; Elias, Pipa, Union of Concerned Scientists; Lininger, Katherine, Union of Concerned Scientists; Roquemore, Sarah, Union of Concerned Scientists; Saxon, Earl, Union of Concerned Scientists

- 14:48 Performance evaluation of species prioritisation methods accounting for social and governance aspects Kim, MK*, School of Earth and Environmental Sciences, James Cook University; Marsh, H, School of Earth and Environmental Sciences, James Cook University
- 14:52 From policy to practice via the science of invasion biology McGeoch, MA*, South African National Parks and Centre for Invasion Biology
- 14:56 Reading between the Stripes: Results of a Content Analysis of Media Resources for Tiger Conservation Archi Rastogi^{*}, Department of Natural Resource Sciences, McGill University, Canada; Gordon M Hickey, Department of Natural Resource Sciences, McGill University, Canada; Ruchi Badola, Wildlife Institute of India, Dehradun, India; S A Hussain, Wildlife Institute of India, Dehradun, India

Discussion follows last presentation until end of session

SY 40: GENETIC MANAGEMENT OF FRAGMENTED ANIMAL AND PLANT POPULATIONS

Marlborough Room 1

Friday, December 9, 14:00 to 16:00

ORGANIZER(S): Emeritus Prof Richard Frankham, Macquarie University; Dr Katherine Ralls & Dr Jonathan D. Ballou, Smithsonian Conservation Biology Institute; Dr Mark Eldridge, Australian Museum; Dr Michele Dudash & Professor Charles Fenster, University of Maryland; Dr Robert Lacy, Chicago Zoological Society

Genetic management of fragmented animal and plant populations is a major issue in conservation biology. Many isolated animal and plant populations are going extinct unnecessarily largely for genetic reasons. The importance of this issue has been recognized by conservation geneticists (Frankham 2010a & b), but its importance is poorly understood by the broader conservation community and it is critical that they become aware of the issue. A major impediment to rational management of fragmented populations (especially restoration of gene flow) is fear of outbreeding depression. We have made significant contributions to this field, including a novel recent paper providing a method for predicting the risk of outbreeding depression (Frankham et al. 2011). The Symposium on Genetic Management of Fragmented Populations will address loss of genetic diversity, inbreeding and outbreeding depression, predicting the risk of outbreeding depression, and genetic translocations of fragmented populations to assist in adapting to climate change. It encompasses cutting edge conservation science, clear connections to conservation management, an educational role, and novely. This issue is timely as initiatives are finally underway to implement conservation of genetic diversity (designated by IUCN as one of the 3 levels of diversity requiring conservation). Further, there is growing activity on the potential use of genetic translocations to assist species to adapt to climate change.

- 14:00 Genetic issues in fragmented populations Eldridge, MDB*, Australian Museum
- 14:15 The Benefits of Augmented Gene Flow Genetic rescue in the self-incompatible herb *Rutidosis leptorrhynchoides* Young, A.*, CANBR, CSIRO Plant Industry; Pickup, M., Deaprtment of Ecology and Evolutionary Biology, University of Toronto; Dudash, M., Department of Biology, University of Maryland
- 14:30 Augmented gene flow for plant population persistence in a highly fragmented landscape
 Coates, D J*, Dept Environment and Conservation Western Australia; Byrne, M, Dept Environment and Conservation Western Australia; Brown, A, Dept Environment and Conservation Western Australia
- 14:45 Predicting the risk of outbreeding depression: critical information for managing fragmented populations
 Frankham, R*, Macquarie University; Ballou, JD, Smithsonian Conservation Biology Institute; Eldridge, MDB, Australian Museum; Lacy, RC, Chicago Zoological Society; Ralls, K, Smithsonian Conservation Biology Institute; Dudash, MR, University of Maryland, College Park; Fenster, CB, University of Maryland, College Park

15:15 Managing gene flow in species with fragmented distributions Ballou, J*, Smithsonian Conservation Biology Institute, Washington, DC, USA

15:30 Genetic translocations of fragmented populations to cope with climate change Weeks AR*, The University of Melbourne; Sgro CM, Monash University; Hoffmann AA, The University of Melbourne

Discussion follows last presentation until end of session

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CS 95: COMMUNITY-DRIVEN CONSERVATION

Marlborough Room 2 Friday, December 9, 14:00 to 16:00

- 14:00 Natural Community Conservation Planning: A quantitative assessment of the factors that lead to successful conservation planning in California
 - Erickson, PB, UC Davis; Deiner, KL*, UC Davis; Lubell, M, UC Davis; Schwartz, MW, UC Davis
- 14:15 What have we learned from 20 years of conservation projects in Papua New Guinea? Zeriga-Alone, T*, Wildlife Conservation Society, Papua New Guinea Programme; Sinclair, JR, Wildlife Conservation Society, Papua New Guinea Programme
- 14:30 Participatory research in honey production and fisheries in a protected area under pressure by RR soybean and forestry plantations in Uruguay

Rios M^{*}, Vida Silvestre Uruguay; Zaldúa N, Vida Silvestre Uruguay; Carrasco-Letelier L., Programa de Producción y Sustentabilidad Ambiental. INIA La Estanzuela, Uruguay; Santos C, Extensión Universitaria, Universidad de la República. Uruguay; Teixeira de Mello F, Grupo de Ecología y Rehabilitación de Sistemas Acuáticos, Departamento de Ecología y Evolución, CURE, Universidad de la República. Uruguay.

14:45 The importance of community-based involvement for managing cetacean watching in a developing country: Lovina (Bali) dolphin watching as a case study MUSTIKA, PUTU LIZA *, School of Earth and Environmental Sciences, James Cook University, Townsville 4811, Australia;

MUSTIKA, PUTU LIZA *, School of Earth and Environmental Sciences, James Cook University, Townsville 4811, Australia; Alastair Birtles , School of Business, James Cook University, Townsville 4811, Australia; Helene Marsh, School of Earth and Environmental Sciences, James Cook University, Townsville 4811, Australia

- 15:00 Collaborative fisheries research enhances assessments and fosters stakeholder support for marine science Kay, MC*, UC Santa Barbara; Lenihan, HS, UC Santa Barbara; Wilson, JR, UC Santa Barbara; Miller, CJ, California Lobster and Trap Fisherman's Association
- 15:15 Socioeconomic drivers of sea turtle interactions with artisanal fisheries in the western Indian Ocean islands Cunningham, E*, C3 Madagascar and Indian Ocean Islands Programme; Poonian, CNS, Community Centred Conservation (C3), 17 Northcliffe Drive, London, N20 8JX; Whitty, T, Scripps Institution of Oceanography, San Diego
- 15:30 Local People Perception and Involvement in Biodiversity Conservation in some National Parks in Nigeria Osunsina I. O.O*, Department of Forestry & Wildlife Mgt, University of Agriculture, Abeokuta; Ogunjinmi, A. A., 2Department of Wildlife and Environmental Resources Management, College of Agriculture, Osun State University, Osogbo; Jayeola O. A., Department of Forestry & Wildlife Mgt, University of Agriculture, Abeokuta; Oduntan O., Department of Forestry & Wildlife Mgt, University of Agriculture, Abeokuta; Yisau M. A., Department of Forestry & Wildlife Mgt, University of Agriculture, Abeokuta
- 15:45 Evaluation of awareness programmes towards wildlife conservation
 Abi-Said, MR*, President, Animal Encounter; Abi-Said Marrouche, D, American University of Beirut, Faculty of Agricultural and Food Sciences; Leader-Williams, N, Director of Conservation Leadership, University of Cambridge, Department of Geography

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SY 41: OPPORTUNITIES AND CHALLENGES OFFERED BY A BIOCULTURAL APPROACH TO CONSERVATION ACTION Marlborough Room 3 Friday Descended 0, 14/00 to 16/00

Friday, December 9, 14:00 to 16:00

ORGANIZER(S): Michael Gavin, Victoria University of Wellington; Rick Stepp, University of Florida

Biological and cultural diversity share similar geographic patterns (e.g., more species and ethnolinguistic groups in the tropics), face similar threats (e.g., land-use change, urbanisation, spread of global economies), and are rapidly declining (e.g., five species extinction per hour and a language extinct every two weeks). National and international policies, including the Convention on Biological Diversity, often note the links between biodiversity and cultural diversity. Unfortunately, conservation actions for cultural and biological diversity tend to occur in parallel, each form of diversity with its own set of conservation programs. At best, this model is inefficient, spreading limited resources thinly. At worst, these separate conservation agendas oppose each other (e.g., conflicts between indigenous groups and protected areas) creating conflict that further perpetuates loss of diversity. In this symposium we will investigate alternative pathways for conservation that embrace a biocultural approach and attempt to conserve both cultural and biological diversity. We seek to address four fundamental questions: (i) What constitutes a biocultural approach to conservation? (ii) Under what circumstances should a biocultural approach be the preferred conservation model?; (iii) How can a biocultural approach be adopted (i.e. what policy and management mechanisms promote biocultural conservation)?; and (iv) What are the major challenges to implementing biocultural conservation?

- 14:00 Biocultural diversity and biocultural approaches to conservation: what, where, and why? Gavin, Michael*, Victoria University of Wellington; Stepp, Rick, University of Florida
- 14:30 A New Conservation Ethic Can conservation survive without indigenous peoples? Mead, ATP*, *IUCN CEESP, Maori Business (VMS)*
- 14:45 Partnerships and Institutional Linkages for Biocultural Conservation Berkes, F*, University of Manitoba
- 15:00 Strengthening biodiversity conservation by integrating local values in nature into the design and management of protected areas

Infield, M*, Fauna & Flora International; Mugisha, A, Fauna & Flora International

15:15 Valuing biocultural conservation: can ecological economics assist coastal forest restoration in northern Aotearoa/ New Zealand?

Phipps, H, Landcare Research; Akins, A, Centre for the Study of Agriculture, Food & Environment, University of Otago; Moller, H*, Centre for the Study of Agriculture, Food & Environment, University of Otago; Lyver, PO'B, Landcare Research; Kahui, V, Department of Economics, University of Otago, PO Box 56, Dunedin 9025, New Zealand; Towns, D, Department of Conservation, Private Bag 68908, Newton, Auckland, 1145, New Zealand

15:30 The role of legislation and formal education in the conservation of biocultural diversity

Tang, R*, Victoria University of Wellington; McCarter, J, Victoria University of Wellington; Gavin, M, Victoria University of Wellington

Discussion follows last presentation until end of session

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Friday, December 9, 14:00 to 16:00

- 14:00 Quantitative and qualitative effects of loss of large frugivores on seed dispersal patterns: a New Zealand example Jana, RC*, School of Biological Sciences, University of Canterbury; Kelly, D, School of Biological Sciences, University of Canterbury; Richardson, SJ, Landcare Research, Lincoln; Garcia, D, Universidad de Oviedo, Spain; Ladley, J, School of Biological Sciences, University of Canterbury; Clout, MN, School of Environment, University of Auckland; Karl, BJ, Landcare Research, Lincoln; Tilley, J, School of Environment, University of Auckland
- 14:15 Spatio-temporal changes in the landscape structure of old-growth forests in northern Sweden Ecke, F, Research Assistant; Magnusson, M*, Postgraduate Student; Hörnfeldt, B, Professor
- 14:30 Implications of bird vs. monkey seed dispersal behavior for genetic structuring of palm populations Karubian, J, Tulane University; Ottewell, K*, Tulane University; di Fiore, A, New York University; Link, A, New York University
- 14:45 Using citizen-reported data to predict invasive insect distributions Ahrné, Karin , Swedish University of Agricultural Sciences; Ahlbäck, Lina, Swedish University of Agricultural Sciences; Berggren, Åsa*, Swedish University of Agricultural Sciences
- 15:00 The influence of riparian corridors on movements and residency of non-flying mammals in tropical remnants Geurts, Katrien*, School of Earth and Environmental Sciences, James Cook University; Goosem, Miriam, School of Earth and Environmental Sciences, James Cook University; Wilson, Robyn, School of Earth and Environmental Sciences, James Cook University; Laurance, Susan, School of Marine and Tropical Biology, James Cook University; Turton, Steve, School of Earth and Environmental Sciences, James Cook University
- 15:15 Priorities for continental connectivity conservation to facilitate bird migrations in eastern Australia Howling, GM*, NSW Office of Environment & Heritage; O'Connor, J, Birds Australia
- 15:30 Habitat selection by brown bears in Deosai National Park, Pakistan, and implications for park management Muhammad Ali Nawaz*, Department of Wildlife and Ecology, University of Veterinary and Animal Sciences, Pakistan; Jodie Martin, Department of Ecology and Natural Resource Management, Norwegian University of Life Sciences, Norway; Jon E. Swenson, Université de Lyon, F-69000, Lyon ; Université Lyon 1 ; CNRS, UMR5558, Laboratoire de Biométrie et Biologie Evolutive, F-69622, Villeurbanne, France

15:45 The song of the North Island kokako: From island to island on an island

Valderrama, SV*, Department of Biological Sciences, The University of Waikato, Hamilton, New Zealand; Molles, LE, Agriculture and Life Sciences Division, Lincoln University, Christchurch, New Zealand; Slabbekoorn, H, Institute of Biology, Leiden University, Sylvius Laboratory, Leiden, The Netherlands; Waas, J, Department of Biological Sciences, The University of Waikato, Hamilton, New Zealand

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<u>CS 98: POPULATION DYNAMICS</u>

New Zealand Room 2 Friday, December 9, 14:00 to 16:00

Hawaii at Manoa

14:00 Does supplemental feeding affect the viability of translocated populations? The example of the hihi (*Notiomystis cincta*)

Chauvenet, Alienor*, Institute of Zoology, ZSL, London NW1 4RY, UK; Ewen, John G., Institute of Zoology, ZSL, London NW1 4RY, UK; Armstrong, Doug P., Wildlife Ecology Group, Institute of Natural Resources, Massey University, Private Bag 11222, Palmerston North, New Zealand; Coulson, Tim, Division of Biology, Imperial College London, Silwood Park Campus, Ascot, Berkshire SL5 7PY, UK; Blackburn, Tim M., Institute of Zoology, ZSL, London NW1 4RY, UK; Pettorelli, Nathalie, Institute of Zoology, ZSL, London NW1 4RY, UK

- 14:15 Identifying Trade-offs Between Management for Palm Harvest and Livestock Grazing and Conservation of Plant Diversity in the Western Ghats, India
 Mandle, Lisa*, Botany Department and Ecology, Evolution and Conservation Biology Program, University of Hawaii at Manoa; Ticktin, Tamara, Botany Department and Ecology, Evolution and Conservation Biology Program, University of
- 14:30 New Insights into the Feeding Ecology and Home Range Patterns of the Critically Endangered Cross River Gorilla Sawyer, Sarah*, University of California, Berkeley

14:45 The effect of senescence on population dynamic of Griffon Vulture

Chantepie,S*, Museum National d'Histoire Naturelle, CERSP (UMR 7204); **Robert, A**, Museum National d'Histoire Naturelle, CERSP (UMR 7204); **Teplitsky, C**, Museum National d'Histoire Naturelle, CERSP (UMR 7204); **Sarrazin, F**, Museum National d'Histoire Naturelle, CERSP (UMR 7204)

15:00 Biases in comparative analyses of extinction risk: mind the gap

González-Suárez, M*, Estación Biológica de Doñana EBD-CSIC; **Lucas, P.M.,** Estación Biológica de Doñana EBD-CSIC; **Revilla, E.,** Estación Biológica de Doñana EBD-CSIC

15:15 Investigating the decline of the Kaikoura red billed gulls population: phenotypic and population dynamics perspectives

Celine Teplitsky*, Natural History Museum; Alexandre Robert, Natural History Museum; John Yarrall, Work and Write; James A. Mills, Independent researcher; Juha Merilä, University of Helsinki

15:30 Identification of Putative Wintering Areas and Ecological Determinants of Population Dynamics in Trans-saharan migrant birds

Roberto Ambrosini*, Department of Biotechnology and BiosciencesDepartment of Environmental and Landscape Sciences, University of Milano-Bicocca ; Valerio Orioli, Department of Environmental and Landscape Sciences, University of Milano-Bicocca; Dario Massimino, Department of Environmental and Landscape Sciences, University of Milano-Bicocca; Luciano Bani, Department of Environmental and Landscape Sciences, University of Milano-Bicocca

15:45 Agriculture, timing and climate: interactions reduce breeding success in a threatened tropical forest bird Cartwright, SJ*, Centre for Agri-Environmental Research, School of Agriculture, Policy and Development, University of Reading; Nicoll, MAC, Centre for Agri-Environmental Research, School of Agriculture, Policy and Development, University of Reading; Norris, K, Centre for Agri-Environmental Research, School of Agriculture, Policy and Development, University of Reading: Norris, K, Centre for Agri-Environmental Research, School of Agriculture, Policy and Development, University of Reading

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SY 37: BALANCING CONSERVATION AND DEVELOPMENT: IMPACTS OF CONSERVATION STRATEGIES ON HUMAN SOCIETIES AND BIODIVERSITY

New Zealand Room 3

Friday, December 9, 14:00 to 16:00

ORGANIZER(S): Vanessa M Adams and Robert L Pressey, ARC Centre of Excellence for Coral Reef Studies

The establishment of comprehensive networks of protected areas has long been the focus of conservation planning. However, with increasing population size and reliance on natural resources for survival, strict reserves are not viable in many regions. Therefore, the challenge for conservation planners is to develop a larger suite of conservation tools that address human and social needs while still achieving conservation outcomes. At the forefront of this challenge has been the ongoing discussion of how conservation and development can be balanced to achieve joint outcomes for biodiversity and human well-being. Central to this discussion is whether conservation projects have positive or negative impacts on local residents, and what the implications are for the need to supplement livelihoods for those impacted. At the heart of the meeting's theme, "engaging society in conservation,", is the challenge for conservation projects on both local communities and ecological systems to examine whether conservation and livelihood objectives are being met. Talks will present progress to date of both traditional protected areas and more recently developed conservation incentive programs to meet both conservation and development objectives. The case studies will discuss the evidence for both positive and negative impacts as these conservation projects progress.

- 14:00 Moving out of the shallows: getting to grips with trade-offs between conservation and development Smith, RJ*, DICE, University of Kent; Abram, NK, DICE, University of Kent; Metcalfe, K, DICE, University of Kent; Davies, ZG, DICE, University of Kent
- 14:30 Do stewardship payment programs work: designing monitoring programs to measure social and ecological impacts Adams, VM*, ARC Centre of Excellence for Coral Reef Studies, James Cook University; Pressey, RL, ef Studies, James Cook University
- 14:45 REDD and cap and trade: why and how to include forestry on a large scale Kerr, S*, *Motu Economic Research*
- 15:15 Exploring the impacts of protected area and PES policies on local poverty in the Northern Plains of Cambodia Clements, T.J.*, WCS, University of Cambridge
- 15:30 Marine protected areas and poverty alleviation: Insights from Papua, Indonesia Mascia, Michael B.*, WWF-US; Pakiding, Fitryanti, UNIPA; Fox, Helen E., WWF-US; Glew, Louise, WWF-US

Discussion follows last presentation until end of session

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SY 38: MEETING THE CHALLENGES IN SPATIAL CONSERVATION PRIORITIZATION IN THE 21ST CENTURY New Zealand Room 4

Friday, December 9, 14:00 to 16:00

ORGANIZER(S): Loyola, RD, Federal University of Goiás, Brazil

Spatial conservation prioritization uses quantitative techniques to create spatial information on conservation priorities. Recent trends include the development of methods to cope with data and model uncertainties, and methods for understanding the

consequences of climate change to biodiversity. Talks will address trending topics, providing the audience with cutting edge issues for which standardized methods are still being developed. We will discuss multi-action planning methods accounting for multiple costs; inclusion of system dynamics, stochasticity and uncertainty in conservation planning; incorporation of ecological and evolutionary processes in spatial planing; and how to engage all elements of the society into conservation planning development and application. This fits perfectly with the goals of the SCB meeting. Further, the symposium should provide the scientific information and recommendations needed to conserve biological diversity at different spatial scales both to conservation practitioners and managers. Finally, this symposium brings together lead scientists in the field (arising from five different countries and four different continents), whose contribution to the meeting will deliver new and significant cutting-edge knowledge both to the scientific community and to the a broad audience (conservation practitioners and managers, NGOs staff, politicians, journalists) attending the ICCB 2011.

14:00 Meeting the challenges in spatial conservation prioritization in the 21st century Loyola, RD*, Universidade Federal de Goiás

14:30 The current and future distribution of mammalian habitat

Rondinini, C, Global Mammal Assessment program, Department of Biology and Biotechnologies, Sapienza University of Rome; Di Marco, M*, Global Mammal Assessment program, Department of Biology and Biotechnologies, Sapienza University of Rome; Visconti, P, Global Mammal Assessment program, Department of Biology and Biotechnologies, Sapienza University of Rome; Boitani, L, Global Mammal Assessment program, Department of Biology and Biotechnologies, Sapienza University of Rome; Boitani, L, Global Mammal Assessment program, Department of Biology and Biotechnologies, Sapienza University of Rome; Boitani, L, Global Mammal Assessment program, Department of Biology and Biotechnologies, Sapienza University of

14:45 Climate change conflicts and biodiversity conservation Wilson, KA*, The University of Queensland

15:00 Dealing with risk, uncertainty and dynamics in setting spatial conservation priorities

Possingham, H.P.*, The University of Queensland; **Wilson, K.A.**, The University of Queensland; **Watts, M.**, The University of Queensland; **Beger, M.**, The University of Queensland; **Carwardine, J.**, CSIRO; **Carvalho, S.**, Centro de Investigação em Biodiversidade e Recursos Genéticos da Universidade do Porto; **Segan, D.**, The University of Queensland; **Game, E.**, The Nature Conservancy

15:15 Multi-criteria analysis in the design of conservation area networks Sarkar, S.*, University of Texas

Discussion follows last presentation until end of session

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• <u>CS 101: PROTECTED AREA PLANNING AND DESIGN</u> Parnell Room Friday, December 9, 14:00 to 16:00

14:00 Mapping conservation priority areas for threatened species within a rapidly changing multi-use landscape in Sabah, Borneo

Abram, NK*, Durrell Institute for Conservation and Ecology, School of Anthropology and Conservation, University of Kent;
Smith, RJ, Durrell Institute for Conservation and Ecology, School of Anthropology and Conservation, University of Kent;
Ambu, LN, Sabah Wildlife Department, Sabah, Malaysia.; Ong, R, Sabah Forestry Department, Headquarters, Sabah, Malaysia; Ancrenaz, M, HUTAN, D61, Taman Kinanty, Lorong Angsa 12, 88300 Kota Kinabalu, Sabah, Malaysia.;
Lackman, I, HUTAN, D61, Taman Kinanty, Lorong Angsa 12, 88300 Kota Kinabalu, Sabah, Malaysia.;
Danau Girang Field Centre c/o Sabah Wildlife Department, 5th Floor, Block B, Wisma Muis, 88100, Kota Kinabalu, Sabah, Malaysia

14:15 The effectiveness of contrasting protected areas in Madre de Dios, Peru

Vuohelainen, A*, University of Oxford; **Coad, L.,** University of Oxford; **Marthews, T.,** University of Oxford; **Malhi, Y.,** University of Oxford; **Killeen, T.,** Conservation International

- 14:30 Conserving biodiversity under climate change: a 'next-generation' modelling approach Mokany, K*, CSIRO Ecosystem Sciences; Harwood, T, CSIRO Ecosystem Sciences; Ferrier, S, CSIRO Ecosystem Sciences
- 14:45 Optimizing reserve adequacy for the conservation of amphibians in the Brazilian Atlantic Forest under climate change

Lemes, P.*, Laboratório de Ecologia Aplicada e Conservação, Departamento de Ecologia, ICB, Universidade Federal de Goiás, Brasil. ; **Loyola, R.D.,** Laboratório de Ecologia Aplicada e Conservação, Departamento de Ecologia, ICB, Universidade Federal de Goiás, Brasil.

- 15:00 Nature's last Edens: Why some landscapes have escaped the extinction crisis Sanjayan, M., The Nature Conservancy; Samberg, L*, The Nature Conservancy; Boucher, T, The Nature Conservancy; Newby, J, University of Montana
- 15:15 GIS Marine Connectivity Modeling for Protected Area Conservation Planning Raber, George*, The University of Southern Mississippi; Schill, Steven, The Nature Conservancy

15:30 Disentangling the correlates of African protected area conservation performance

Craigie, I. D.*, University of Cambridge; Balmford, A., University of Cambridge; Carbone, C., Institute of Zoology, London

15:45 Protected areas in a crowded planet

Fuller, RA*, University of Queensland; Boakes, EH, Imperial College; Carwardine, J, CSIRO; Clark, NE, University of Reading; Grantham, HS, Conservation International; Klein, CJ, University of Queensland; McDonald-Madden, E, CSIRO; McGowan, PJK, World Pheasant Association

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COFFEE BREAK 16:00 to 16:30 • Auckland Room



• <u>CS 103: PROTECTED AREA PLANNING AND DESIGN</u> Epsom Room 3 Friday, December 9, 16:30 to 18:30

16:30 Improving the Robustness of Approaches for Setting Habitat Targets based on the Species-area Relationship: An example from the English Channel.

Metcalfe, K*, Durrell Institute of Conservation and Ecology, University of Kent, Canterbury, Kent, CT2 7NR, United Kingdom; Garcia, C, The Centre for Environment, Fisheries and Aquaculture Science (Cefas), United Kingdom; Foveau, A, Institut Francais de Recherche pour l'exploitation de la Mer (Ifremer), Laboratoire Resources Halieutiques, Boulogne-sur-Mer, France; Dauvin, JC, Universite de Caen Basse Normandie, Laboratoire Morphodynamique Continentale et Cotiere, UMR CNRS 6143 M2C, 2-4 rue des Tilleuls, F-14000 Caen, France; Coggan, R, The Centre for Environment, Fisheries and Aquaculture Science (Cefas), United Kingdom; Vaz, S, Institut Francais de Recherche pour l'exploitation de la Mer (Ifremer), Laboratoire Resources Halieutiques, Boulogne-sur-Mer, France; tharrop, SR, Durrell Institute of Conservation and Ecology, University of Kent, Canterbury, Kent; Smith, RJ, Durrell Institute of Conservation and Ecology, University of Kent, Canterbury, Kent, CT2 7NR, United Kingdom

- 17:00 An experimental test of environmental decision theory McCarthy, MA*, *The University of Melbourne*
- 17:15 Science Narratives: Inspiring participation in large landscape conservation Wyborn, C*, Fenner School of Environment and Society, ANU
- 17:30 Reciprocal effects of fire management inside and outside protected areas on regional conservation goals Leroux, S.J.*, University of Ottawa; Cumming, S.G., Universite Laval; Krawchuk, M.A., University of California, Berkeley; Schmiegelow, F.K.A., University of Alberta
- 17:45 Conservation and climate change adaptation: identifying synergies and tensions Rickards, L.*, *Uni Melb*
- 18:00 Cumulative impacts to ecosystem services: a review of frameworks and decision tree for practical application Singh, Gerald G.*, Institute for Resources, Environment and Sustainability, University of British Columbia; Martone, Rebecca G., Institute for Resources, Environment and Sustainability, University of British Columbia; Chan, Kai M.A., Institute for Resources, Environment and Sustainability, University of British Columbia

Discussion follows last presentation until end of session

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• <u>SPEED 102: RESTORATION ECOLOGY</u> Epsom Rooms 1&2 Friday, December 9, 16:30 to 18:30

16:30 The road to extinction is paved with the good intentions: the vanish of Formosa landlocked salmon (*Oncorhynchus formosanus*) genetic diversity

Gwo, J.-C.*, Department of Aquaculture, Taiwan National Ocean University

16:34 Welfare and ethics in animal reintroductions

Lauren A. Harrington*, WildCRU, Oxford University; Axel Moehrenschlager, Calgary Zoo; Merryl Gelling, WildCRU, Oxford University; Joelene Hughes, WildCRU, Oxford University; Rob Atkinson, RSPCA, UK (now: The Elephant Sanctuary, USA); David W. Macdonald, WildCRU, Oxford University

16:38 Re-wilding an illegally captured Caracal (Caracal caracal) in Iran

Khaleghi Hamidi, Amirhossein^{*}, Plan for the Land Society; Ghadirian, Taher, Plan for the Land Society; Memarian, Iman, Faculty of Veterinary Medicine, University of Tehran; Hooman, Farbod, Department of Environment of Iran, Fars Provience; Marzieh Mousavi, Department of Environment of Iran, Wildlife Bureau

16:42 Return of the fauna: Brown Treecreeper reintroduction in eucalypt woodland Sheean, V.*, Australian National University; Lindenmayer, D., Australian National University; Manning, A., Australian National University; Doerr, V., CSIRO Ecosystem Services; Doerr, E., CSIRO Ecosystem Services

16:46 An open-ended approach to conservation: A case study at Wicken Fen, UK Hughes, FMR*, Department of Life Sciences, Anglia Ruskin University, Cambridge, UK; Stroh, PA, Department of Life Sciences, Anglia Ruskin University, Cambridge, UK; Warrington, S, National Trust, UK; Adams, WM, Department of Geography, University of Cambridge, UK

- 16:50 Higher survival and site fidelity of subadult than adult saddlebacks translocated to the New Zealand mainland Masuda, Bryce M.*, Department of Zoology, University of Otago; Jamieson, Ian G., Department of Zoology, University of Otago
- **16:54** Competitive Impacts of an Invasive Nectar Thief on a Pollinator Community Hanna, Cause*, University of California Berkeley; Kremen, Claire, University of California Berkeley
- 16:58 Introduced species and ecosystem restructuring on a sub-Antarctic World Heritage Island Shaw, J.D.*, Australian Antarctic Division; Terauds, A., Australian Antarctic Division; Bergstrom, D.M., Australian Antarctic Division; Possingham, H.P., Spatial Ecology Lab, University Queensland
- 17:02 Playing conservation catch up for data deficient organisms data mining for Queensland macrofungi McMullan-Fisher, SJM*, *Fungimap;* May, TW, *RBG Melbourne*
- 17:06 Climate change and Invasions: The "Green cancer" opportunities to invade the world Bellard, C.*, University Paris XI; Courchamp, F., University Paris XI
- 17:10 Predicting the fate of farmland bird communities under agriculture and climate change scenarios Princé, K.*, Muséum national d'Histoire naturelle - CERSP UMR7204; Jiguet, F., Muséum national d'Histoire naturelle -CERSP UMR7204

Discussion follows last presentation until end of session

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<u>CS 104: BIOGEOGRAPHY</u>

Marlborough Room 1 Friday, December 9, 16:30 to 18:30

16:30 Marine mammals global distribution patterns: implications for conservation

Pompa, S.*, Laboratorio de Ecología y Conservación de Fauna Silvestre, Instituto de Ecología, Universidad Nacional Autónoma de México.; **Ehrlich, P.,** Center for Conservation Biology, Biology Department. Stanford University; **Ceballos, G.,** Laboratorio de Ecología y Conservación de Fauna Silvestre, Instituto de Ecología, Universidad Nacional Autónoma de México.

Friday

- 16:45 Clarifying international management responsibilities for wide-ranging marine species Harrison, A-L.*, University of California, Santa Cruz; Costa, D.P., University of California, Santa Cruz; Shaffer, S, San Jose State University
- 17:00 Using biodiversity prediction to identify areas of importance for conservation.
 Piers K Dunstan*, CSIRO Marine and Atmospheric Research; Nicholas J Bax, CSIRO Marine and Atmospheric Research;
 Scott D Foster, CSIRO Mathematics, Infomatics and Statistics; Ross Darnell, CSIRO Mathematics, Infomatics and Statistics
- 17:15 Necessity spawns plasticity: Siberian Cranes abandon specialist foraging behaviors after an extreme flood event and implications for conservation James Burnham^{*}, University of Wisconsin-Madison
- 17:30 Cave ecology in the Philippines, a conservation perspective: linking surface and subsurface ecosystems Husana, Daniel Edison*, Yokohama National University Global Center of Excellence for Environmental Studies; Kase, Tomoki, National Museum of Science and Nature; Yamamuro, Masumi, The University of Tokyo
- 17:45 Do broad scale changes in UV radiation correlate with global amphibian declines? Gibbs, KE*, University of Ottawa; Currie, DJ, University of Ottawa
- 18:00 An Integrated Approach for Predicting Fates of Reintroductions using Demographic Data from Multiple Populations Parlato, EH*, Massey University; Armstrong, DP, Massey University

18:15 The persecuted alpine parrot, kea (Nestor notabilis), is an essential seed disperser for alpine plants Young, L.M*, University of Canterbury; Kelly, D, University of Canterbury; Nelson, X.J, University of Canterbury

<u>CS 105: CONSERVATION GENETICS AND MEDICINE</u>

Marlborough Room 2 Friday, December 9, 16:30 to 18:30

- 16:30 Mate preference and genetic rescue of the critically endangered Mountain Pygmy Possum (Burramys parvus) Parrott, M*, Department of Wildlife Conservation and Science, Zoos Victoria, Victoria 3052, Australia; Watson, P, Threatened Species Department, Healesville Sanctuary, Victoria 3777, Australia; West, M, Threatened Species Department, Healesville Sanctuary, Victoria 3777, Australia; Koch, J, Threatened Species Department, Healesville Sanctuary, Victoria 3777, Australia; Weeks, A, CESAR, Bio21 Institute, University of Melbourne, Victoria 3010, Australia
- 16:45 Captive Facilities as a Safe Harbour Saving New Zealand Native Frogs from Extinction Waldman, Bruce*, Seoul National University
- 17:00 The long and the short of it; historic and contemporary genetic structure of an endangered Australian marsupial, the long-nosed potoroo (*Potorous tridactylus*)

Frankham, GJ*, Department of Zoology, University of Melbourne, Victoria, 3010; **Handasyde, KA,** Department of Zoology, University of Melbourne, Victoria, 3010; **Eldridge, MDB,** Evolutionary Biology Unit, Australian Museum, Sydney, NSW 2010

- 17:15 Genetic Structure and Connectivity of Tiger (Panthera tigris tigris) Populations in Central Indian Forests Joshi A*, Post-Graduate Programme in Wildlife Biology and Conservation, Bangalore; Ramakrishnan U, National Centre for Biological Sciences, bangalore; Edgaonkar A, Indian Institute of Forest Management, Bhopal
- 17:30 Does inbreeding reduce fitness in a hatchery salmon population? Naish, Kerry*, University of Washington; Seamons, Todd, University of Washington; Hauser, Lorenz, University of Washington; Quinn, Tom, University of Washington
- 17:45 Drift and selection result in greater loss of adaptive MHC diversity compared to loss of neutral genetic diversity following population bottlenecks.

Sutton, JS*, University of Otago; Nakagawa, S, University of Otago; Robertson, BC, University of Otago; Jamieson, IG, University of Otago

18:00 Interaction Biodiversity Underpins a Novel Parasitic-Mutualism Between Black Rhinoceros and Red-billed Oxpeckers

Plotz, RD*, Centre for Biodiversity & Restoration Ecology, School of Biological Sciences, Victoria University of Wellington, NZ & Centre for African Conservation Ecology, Department of Zoology, Nelson Mandela Metropolitan University, Port Elizabeth, R.S.A.; Linklater, WL, Centre for Biodiversity & Restoration Ecology, School of Biological Sciences, Victoria University of Wellington, NZ & Centre for African Conservation Ecology, Department of Zoology, Nelson Mandela Metropolitan University, Port Elizabeth, R.S.A.

Discussion follows last presentation until end of session

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• <u>CS 106: CLIMATE CHANGE</u> Marlborough Room 3 Friday, December 9, 16:30 to 18:30

16:30 Better use of ecological information in modelling climate change impacts on the distribution of small mammal populations

Haby, NA*, University of Adelaide

- 16:45 Optimal restoration in a changing climate: trading off the benefits of connectivity and the risks of fire spread Mustin, Karen*, The Ecology Centre, University of Queensland; Possingham, Hugh, The Ecology Centre, University of Queensland; Wilson, Kerrie, The Ecology Centre, University of Queensland
- 17:00 Historic Data Informs Dynamics of Bird Distributions in Response to Climate Change Epanchin, PE*, University of California, Berkeley; Beissinger, SR, University of California, Berkeley; Moritz, C, University of California, Berkeley
- 17:15 Predicting insect phenology using temperature-based growing degree days Lessig, Heather*, North Carolina State University; Ries, Leslie, University of Maryland; Haddad, Nick M., North Carolina State University
- 17:30 Habitat loss and climate change refugia in four threatened and endemic Fijian tree species Keppel, G*, Curtin University; Van Niel, K, University of Western Australia
- 17:45 Efficacy of field data for calculating emissions reductions from above and below ground in a miombo dry land Forest

Sibanda, M*, Geography Dept., University of Cambridge ; Kapos, V, UNEP WCMC, Cambridge; Miles, L, UNEP WCMC, Cambridge; Coomes, D, Plant Sciences, University of Cambridge



18:00 Impacts of an alien grass on native coastal plant communities

Gooden, B.*, Institute for Conservation Biology & Environmental Management, School of Biological Sciences, University of Wollongong; French, K., Institute for Conservation Biology & Environmental Management, School of Biological Sciences, University of Wollongong

Discussion follows last presentation until end of session

• CS 107: COMMUNITY-DRIVEN CONSERVATION

Parnell Room Friday, December 9, 16:30 to 18:30

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- 16:30 The Impact of Religious Bodies on Private Land Conservation Abiala, A.A*, University of Ibadan, Nigera
- 16:45 Gender differences in local residents' relationships with protected areas in Asia Allendorf, TD*, University of Wisconsin-Madison; Allendorf, K, University of Illinois-Urbana Champaign
- 17:00 Into the arms of the devil: unintended consequences of churches and schools for conservation in Papua New Guinea Sinclair, J Ross*, Wildlife Conservation Society, Papua New Guinea Programme
- 17:15 Villagers and REDD+: better understanding the issues for local people will improve the success of forest conversation projects in Papua New Guinea

Kuange, John^{*}, Wildlife Conservation Society, Papua New Guinea Programme; Arihafa, Arison, Wildlife Conservation Society, Papua New Guinea Programme; Samson, Mellie, Wildlife Conservation Society, Papua New Guinea Programme; Zeriga-Alone, Tanya, Wildlife Conservation Society, Papua New Guinea Programme; Sinclair, J Ross, Wildlife Conservation Society, Papua New Guinea Programme

- 17:30 Kiwis saving kiwi Recovery of a New Zealand icon Impey, Michelle*, BNZ Save the Kiwi Trust; Holzapfel, Avi, Department of Conservation; Robertson, Hugh, Department of Conservation
- 17:45 An applied study of scale mismatches and social networks in biodiversity conservation Guerrero, A.M.*, University of Queensland; Wilson, K.A., University of Queensland; McAllister, R.R.J, CSIRO; Corcoran, J., University of Queensland
- 18:00 Analysing the Chinese Black Market in Tiger Parts: A Transaction Cost Economics Approach Moyle, B*, Massey University

Discussion follows last presentation until end of session

Special Evening Events

Final banquet and 25th Anniversary Celebration

18:30 to 24:00, New Zealand Rooms. Bar opens at 18:30, seating at 19:00

Join us to celebrate SCB's 25th Anniversary at the final ICCB 2011 anniversary event! The celebration is free for registered attendees, but you must register for this event in order to obtain a complimentary ticket. You may also purchase guests tickets to this event. Our entertainment for the final evening consist of a 1 hour performance with 25 band members, dancers, drummers, and costume people. They are the best multicultural Pacific dance group in NZ and the Pacific. Their drummers are often seen at sports games and at Pasifika festivals all around the Pacific and New Zealand. After the dance performance their band will entertain us with a variety of songs, from all walks of the Pacific as well as Palagi songs and reggae. This is island music at its best so come dressed in your best sulu, lavalava, sarong, island shirt, and island attire (no formal clothes allowed)!!! So come for a party to remember.

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Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Wartentin, IG Warren Y. Brockelman Warrick, R Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J Watson, J.E.M Watson, J.E.M. Watson, P Watson, TK Watson, TK	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\end{array}$
Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Wartentin, IG Warren Y. Brockelman Warrick, R Warrick, R Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J Watson, J.EM Watson, J.EM Watson, P Watson, TK Watso, TK Watso, CH	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\\end{array}$
Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Wartentin, IG Warren Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J Watson, J.EM Watson, J.E.M. Watson, P Watson, TK Watso, TK Wats, CH Wats, M.	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\end{array}$
Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Wartentin, IG Warren Y. Brockelman Warrick, R Warrick, R Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J Watson, J.EM Watson, J.EM Watson, P Watson, TK Watso, TK Watso, CH	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\\end{array}$
Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Wartentin, IG Warren Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J Watson, J.EM Watson, J.E.M. Watson, P Watson, TK Watso, TK Wats, CH Wats, M.	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\end{array}$
Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Warkentin, IG Warren Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J Watson, J.E.M Watson, J.E.M Watson, TK Watson, TK Watson, TK Watts, CH Watts, M. Watts, MJ Wates, A	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\\97\\162\end{array}$
Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Warkentin, IG Warren Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J Watson, J.E.M. Watson, J.E.M. Watson, P Watson, P Watson, TK Watson, TK Watts, CH Watts, M. Watts, MJ Weeks, A Weeks AR	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\\97\\162\\155\end{array}$
Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Wartentin, IG Wartent Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J Watson, J.E.M Watson, J.E.M. Watson, J.E.M. Watson, J.E.M. Watson, P Watson, TK Wats, CH Watts, MJ Watts, MJ Weeks, A Weeks, A Weeks, AS	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\\97\\162\\155\\150\end{array}$
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Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Wartentin, IG Wartent Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J Watson, J.E.M Watson, J.E.M. Watson, J.E.M. Watson, J.E.M. Watson, P Watson, TK Wats, CH Watts, MJ Watts, MJ Weeks, A Weeks, A Weeks, AS	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\\97\\162\\155\\150\end{array}$
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Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Wartentin, IG Warren Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watari, Y Watson, J. Watson, J. Watson, J. EM Watson, J.E.M. Watson, P Watson, P Watson, P Watson, TK Watts, M. Watts, S. Weeks, R Weeks, R. Weeks, R. Weeks, R.	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\\97\\162\\155\\150\\68,119,126\\68\\131\\113\end{array}$
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Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Wartentin, IG Warren Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J Watson, J Watson, J.EM Watson, J.EM Watson, J.E.M. Watson, P Watson, P Watson, TK Watson, P Watson, TK Watts, M. Watts, M. Watts, M. Watts, M. Watts, M. Watts, M. Watts, M. Watts, M. Watts, A Weeks, A Weeks, R Weeks, R Weeks, R Weeks, R Weeks, R. Weeks, R Weeks, R.	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\\97\\162\\155\\150\\68,119,126\\68\\131\\113\\70\end{array}$
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Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Warkentin, IG Warren Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J. Watson, J. Watson, J. Watson, J. E.M. Watson, J. E.M. Watson, J. E.M. Watson, J. E.M. Watson, J. Watson, J.	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\\97\\162\\155\\150\\68,119,126\\68\\131\\113\\70\\135\\80\\105\\138\end{array}$
Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Warkentin, IG Warren Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J. Watson, J. Watson, J. Watson, J. E.M. Watson, J. E.M. Watson, J. E.M. Watson, J. E.M. Watson, J. Watson, J. Watson, TK Watson, TK Watts, M. Watts, M. Watts, M. Watts, M. Watts, M. Watts, M. Watts, A. Weeks, A Weeks, A Weeks, A Weeks, R Weeks,	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\\97\\162\\155\\150\\68,119,126\\68\\131\\113\\70\\135\\80\\105\\138\\81\end{array}$
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Wang,XG Warburton, B Ward, E. Wardell-Johnson, GW Ward, G Warkentin, IG Warren Y. Brockelman Warrick, R Warrington, S Washitani, I Wasserstrom, H Watson, J. Watson, J. Watson, J. Watson, J. E.M. Watson, J. E.M. Watson, J. E.M. Watson, J. E.M. Watson, J. Watson, J. Watson, TK Watson, TK Watts, M. Watts, M. Watts, M. Watts, M. Watts, M. Watts, M. Watts, A. Weeks, A Weeks, A Weeks, A Weeks, R Weeks,	$\begin{array}{c} 133\\127\\125\\115\\79\\141\\118\\139\\161\\108,142\\134\\69\\68,117,126,130\\98\\126\\117\\162\\146\\133\\127\\159\\97\\162\\155\\150\\68,119,126\\68\\131\\113\\70\\135\\80\\105\\138\\81\end{array}$
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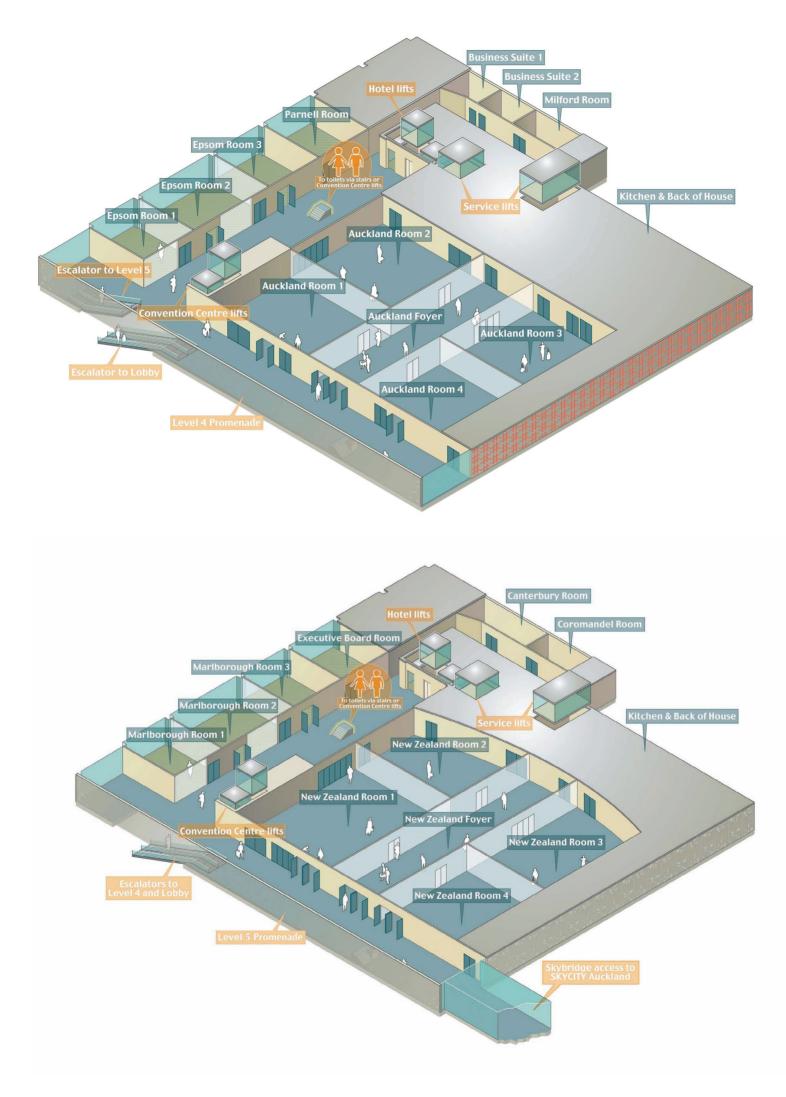
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