

Pronatura Noreste Announces the Purchase of Cueva de la Boca

The Mexican environmental conservation organization, **Pronatura Noreste**, has announced the purchase of a cave near Monterrey, Mexico, known as "Cueva de la Boca". The objective of this ownership is to preserve bats and other species of high ecological value that inhabit the cavern. This means research projects will carry on, along with conservation efforts, while promoting ecotourism and environmental education.

In partnership with the Citizen Council for the Tourist Promotion of Santiago ("Consejo Ciudadano para el Fomento Turístico de Santiago") and thanks to donations and a loan, Pronatura Noreste has been able to fulfill the dream of becoming **owner of this environmental priority site**, **in order to place it under conservation**. The property comprises 20 acres that include the cave and the land in front of it, where visitors will be able to learn about the **environmental services bats provide to society**.

Cueva de la Boca used to be home to one of the largest populations in the world of Mexican free-tailed bat (*Tadarida brasiliensis*), with some 20 million individuals. Unfortunately, due to human impacts, such as uncontrolled tourism, pollution and vandalism (bonfires, fireworks, etc.), bat population has been reduced in more than 95% of its original size.

Pronatura Noreste has been working on the site since 1999, with the obtaining of the mining permit, in order to prevent future guano extractions, and its associated disturbances.

Environmental and Economic Importance of the Cave

Bats represent nearly a third of all mammals that live in the state of Nuevo Leon, Mexico. The target species to protect, the insectivore bat, *Tadarida brasiliensis*, has a distribution that goes from southern United States, all the way down to Brazil. The colony arrives to Cueva de la Boca on May, and migrates once more in October. Nevertheless, its exact migrating route is still unknown.

The environmental role, as well as the economic impact, of these flying mammals is considerable. They **regulate insect populations, benefiting the region's agriculture**, by controlling pests and avoiding the use of pesticides. They feed on moths, fall armyworm, mosquitoes, and beetles. Each night, a Mexican free-tailed bat can eat a quarter of its weight in insects. Therefore, the inhabitants of Cueva de la Boca eat tons of insects every day.

www.pronaturane.org



These bats are hunted by peregrine falcons (*Falco peregrinus*), a species protected by Mexican laws, and whose survival greatly depends on the conservation of Mexican free-tailed bats.

On the bank of San Juan River, that flows in the lower part of the property, in front of the entrance to the cave, lives a threatened cypress species, as well as lost couples of American beaver (*Castor canadiensis*) that are endangered. Other species of high environmental value and endemic to the site are a blind cave crustacean and a pillbug.

Along with the large population of Mexican free-tailed bat, Cueva de la Boca is home to four other bat species. These are the ghost-faced bat, the cave myotis, the naked-back bat and the toltec fruiteating bat.

Moreover, Cueva de la Boca has fossil deposits. Remains of extinct mammals have been found, including bat, goat and camel species.

Conservation Efforts

Presently, access to the interior of the cave has been restricted, with support of Santiago's Municipal Government. Only authorized personnel performing scientific research may enter.

Sasha Carvajal, Coordinator of the Ecoregional Program, Sierra Madre Oriental, of Pronatura Noreste, along with Dr. Arnulfo Moreno, from the Instituto Tecnológico de Ciudad Victoria, are monitoring Mexican free-tailed bats in order to determine the current size of the colony. In addition, the Instituto Tecnológico y de Estudios Superiores de Monterrey is doing research on the mammal's diet.

Wider knowledge on the status and requirement of the inhabitants of the cave, will allow the planning of efficient conservation strategies.

In the near future, a viewpoint platform will be built in order for tourists to be able to enjoy watching the bats exit at sunset, similar to the existing infrastructure next to the Congress Avenue bridge in Austin, Texas. The former, combined with environmental education on the ecological importance of the site and the plants and animals that live there, will promote actions that will not only benefit the ecosystem on a radius of several miles, but will also attract investments such as ecotourism, that will favor the local economy.

www.pronaturane.org



The organization is currently looking for donations in order to pay for the loan and other maintenance expenses to keep the cave well protected from external threats.

Pronatura Noreste is a Mexican nongovernmental, nonprofit organization whose mission is the conservation of flora, fauna and priority ecosystems in Northeastern Mexico by promoting the development of society in harmony with nature. One of its main targets for conservation is the Sierra Madre Oriental Ecoregion. Pronatura Noreste is one of six regional offices of Pronatura, one of the most effective and prestigious conservation organizations in Latin America.

www.pronaturane.org Pronatura Noreste

<u>www.pronatura.org.mx</u> Pronatura, A.C.