San Quintín Kangaroo Rat Fact Sheet

Background

Researchers from the San Diego Natural History Museum (The Nat), along with experts from Mexico, have rediscovered a small mammal that was previously presumed extinct, the San Quintín kangaroo rat (*Dipodomys gravipes*).

The species is related to, and very similar in appearance to, the Dulzura kangaroo rat (*Dipodomys simulans*), but the San Quintín kangaroo rat is considerably larger and heavier with a thicker tail (Figure 1).

This surprise discovery will be highlighted in an article by Scott Tremor, Sula Vanderplank, and Dr. Eric Mellink (see author bios for additional information and titles) in the scientific journal *Bulletin of the Southern California Academy of Sciences.*

This is a very important discovery for the region because it was previously believed to have been driven to extinction by agriculture, and it is now proving there can be balance and sustainability in the agricultural valley.

The Discovery

Despite active searches and monitoring over the years, there had been no sign of the animal until this past summer, when Museum Mammalogist Scott Tremor and Research Associate Sula Vanderplank were in the field conducting routine monitoring of small mammal communities. Having read the field notes of the person who had seen it decades ago, they were aware of its former occurrence in the area, but were amazed to find four individuals using traditional field techniques and live traps.

Since the initial discovery, the San Quintín kangaroo rat has been found to also persist inside the Valle Tranquilo Nature Reserve just south of San Quintín, and the Monte Ceniza Natural Reserve in the San Quintín bay, both of, which are owned and managed by the local non-profit organization Terra Peninsular A.C. These reserves are recognized as areas voluntarily destined for conservation by the National Commission of Natural Protected Areas (CONANP) and will help protect the future of the species into perpetuity.

The Nat will work with Terra Peninsular and Exequiel Ezcurra, director of the University of California's Institute for Mexico and the United States (UC MEXUS), on a conservation plan for the small mammal communities of the area, with an emphasis on the San Quintin kangaroo rat.

History and Status

The first description of the San Quintín kangaroo rat (*Dipodomys gravipes*) was made in 1925 by Laurence M. Huey (1892–1963), an American zoologist. At that time, there were two large colonies of this kangaroo rat, but since then the area they occupied has been largely converted to agriculture. Prior to this rediscovery, specimens had not been found since 1986 and the IUCN had listed the species as "critically endangered" and possibly extinct.

Distribution and Ecology

The San Quintín kangaroo rat is endemic to Mexico, where it is known only to exist in western Baja California. It occupies a 12-mile wide strip of coastal land from San Telmo to El Rosario and there seem to be two separate populations. Its natural habitat is arid lowlands with sparse vegetation. It is nocturnal and lives in burrows with multiple entrances. Runways originate from the burrow and extend to foraging ground, often very long distances. Most kangaroo rats are primarily seed eaters but it is believed that this species consumes large amounts of leafy vegetation.

The San Quintín kangaroo rat prefers to live in open areas and creates trails from its burrows to its favorite foraging spots. These trails are sometimes visible and may sometimes contain scat from the animal in the pathway. Sometimes the trails connect between burrow systems and over large distances. This animal is only active at night and uses these trails to find its way quickly home when it feels threatened. It runs the risk of falling prey to many predators including snakes, birds of prey, coyotes, bobcats, and foxes.

Conservation

The San Quintín kangaroo rat is on the International Union for Conservation of Nature's (IUCN) Red List of Threatened Species, listed as critically endangered, and is included on the Mexican Endangered Species list (NOM-059-SEMARNAT-2010). Its rediscovery is important not only because scientists now know the species is alive, but also because it proves the San Quintín valley must have valuable conservation areas that have sustained the species. The land trust Terra Peninsular AC in Mexico owns two natural reserves in areas where this kangaroo rat has recently been found. Their efforts ensure that this species will survive in perpetuity.

Is This Species Aggressive?

Kangaroo rats are rarely aggressive, and although they have sharp teeth, it is very unusual for them to bite people. This particular species of kangaroo rat loves to kick and can kick its way out of your hands

pretty easily. It is surprisingly feisty compared to its kangaroo rat cousins. Mammalogist Scott Tremor was amazed when the first large male kicked its way free of his experienced grip.

Why You Should Care About this Rat

Kangaroo rats have little in common with the black rat or Norwegian rat, which terrorize some people by invading their basements or attics. These amazing desert-adapted creatures live in sandy burrows and hop around in open spaces looking for food. Some can go without drinking water their entire lives, getting all their moisture from food. The San Quintín kangaroo rat is a friendly creature who shares its burrow with numerous other animals. So far, it has been observed dwelling alongside at least three other species of mice and another species of kangaroo rat.

Description and Size

The San Quintín kangaroo rat (*Dipodomys gravipes*) is a species of rodent in the family Heteromyidae. This is a large species of kangaroo rat with head-and-body lengths to 30 centimeters (11.8 inches) and beyond, and weights in excess of 100 grams (3.5 ounces).

The tail has a large tuft of hairs on the end and is longer than the body. The tail provides balance while jumping and is used as a prop when stationary. The fur on the head and back is a pale brown with some longer black hairs. The underparts are white and there is a white spot above the eye, and white stripes running down either side of the tail.

Like other kangaroo rats, the hind legs are powerful and propel the animal in a series of large bounds. The front legs however are small and are used for manipulating food and cleaning the cheek pouches.

Figure 1

A San Quintin kangaroo rat (*Dipodomys gravipes*) at rest in the field.