



# Coquí Llanero

## Summary of the Rule to List the Coquí Llanero as Endangered

The coquí llanero is in danger of extinction mostly because of habitat destruction and modification. Also, the species has very low population numbers and its distribution is restricted to a single seasonally flooded wetland in Toa Baja, Puerto Rico. The U.S. Fish and Wildlife Service listed this species as endangered under the Endangered Species Act of 1973, effective on November 5, 2012. “Endangered” is defined by the Act as “in danger of extinction throughout all or a significant portion of its range.”

The coquí llanero is a small frog, the smallest of the 17 coquí species in Puerto Rico. Unlike most amphibians, it spends its entire life in a herbaceous wetland. The plants in that space, ferns, bulltongue arrowhead, flatsedges, spike rushes, vines, and grasses are essential for its survival.

### Population Status

Species experts estimate the frog’s population within its wetland habitat is about 192 individuals per acre. This estimate is based on population counts performed on five transects of 90 square meters each, and individuals are not evenly distributed throughout the wetland.

### Threats

The primary threat to the species is from habitat modification in the form of urban development and ongoing threats of habitat destruction and modification. Predation may also present a current threat to the coquí llanero, particularly at the dryer edges of the wetland, and its isolation makes it particularly susceptible to disease and predation. The inadequacy of existing regulatory mechanisms is currently a threat because no legal protection is in place for the species. Other natural or manmade factors affecting its continued existence, particularly its specialized ecological requirements, also may be threats to the species. All these factors pose imminent threats to the species because they are currently occurring. Other potential threats to the species include, water and soil pollution, the use of herbicides and climate change.

### Critical Habitat

The Act requires the Service to designate critical habitat at the time of listing unless it is not prudent or not determinable.

The Service has determined that designating the location where the coquí llanero is currently known to exist is a necessary conservation measure. The designated critical habitat is a herbaceous wetland located within the former Sabana Seca Naval Base in Toa Baja, Puerto Rico. This site is comprised of 615 acres of a palustrine herbaceous wetland with ferns, bulltongue arrowhead, flatsedges, spike rushes, vines and grasses.

### Conservation Measures

First, adding the coquí llanero to the Threatened and Endangered Species list raises awareness of the species’ vulnerability. Agencies and groups use this list to help prioritize their funding and management. Secondly, for every listed species the Service must prepare a recovery plan that outlines and prioritizes actions necessary to restore the species. Recovery plans are also used by agencies and groups to help guide their funding and conservation activities. Third, grants are available specifically for listed species conservation. The Service would be able to grant funds to the government of Puerto Rico for coquí llanero conservation. Lastly, listing the coquí llanero provides it with the strength of a federal law that prohibits its “taking” and prohibits federal agencies from jeopardizing its existence.

Designating critical habitat helps ensure that the biological and ecological factors of the wetland designated as critical habitat, will not be destroyed or adversely modified by projects with federal funds or permits.

## **Activities Affected by Listing and Critical Habitat Designation**

Activities that kill or harm the coquí llanero would be in violation of section 9 of the Act and thus illegal, unless a permit or incidental take statement is issued. We believe the following activities, unless authorized by a permit or incidental take statement, would result in section 9 violations. This list is not all inclusive.

- (1) Killing, collecting, handling, or harassing individual of coquí llanero at any life stage;
- (2) Selling or offering to sell coquí llaneros in addition to delivering, receiving, carrying, transporting, or shipping in interstate or foreign commerce any coquí llanero;
- (3) Destroying or altering the species habitat (e.g., discharging fill material, dredging, removing vegetation, (ferns, bulltongue arrowhead, flatsedges, spike rushes, vines, and grasses) could alter the hydrology or plant composition of the wetland. In addition, the discharge of fill material may kill or injur individual coquí llanero or the plants that the coquí llanero needs;
- (5) Discharging or dumping toxic chemicals or other pollutants into the wetland may threaten the plant composition of the wetland.
- (6)Using insecticides or herbicides within the designated critical habitat.

## **Additional Information**

If you have questions or would like more information, please see our website at <http://www.fws.gov/es/coquillanero.html> or contact Carlos Pacheco at the U.S. Fish and Wildlife Service, Ecological Services, 787-851-7297 ext. 221