

30 YEARS OF THE ENDANGERED SPECIES ACT

MASKED BOBWHITE QUAIL

One of Arizona's most famous birds, the masked bobwhite quail was saved from extinction by the Endangered Species Act.

HISTORY OF ENDANGERMENT

The known range of the masked bobwhite in the United States includes the Altar and Santa Cruz valleys in Arizona. The masked bobwhite was first identified in 1884 and was recognized as highly endangered just a short while later. The primary cause of this bird's imperilment was cattle grazing, which depleted native grasses and forbs vital for bobwhite nesting and foraging cover. In addition, cattle grazing caused the invasion of scrub into the desert grassland almost irreversibly destroying masked bobwhite habitat.

By the early 1900s, the masked bobwhite was feared extinct. Occasional sightings continued through the early 20th century, and a population was found in the wild near Sonora, Mexico



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in 1964. Some masked bobwhites were captured from the Sonora site to provide a breeding stock for a captive propagation program in the United States.

ROAD TO RECOVERY

The masked bobwhite quail was first listed under the Endangered Species Conservation Act of 1969 and was subsequently designated as an endangered species under the Endangered Species Act of 1973. The masked bobwhite recovery plan provides for the establishment of two viable populations in the United States, cooperation with the Mexican government to reintroduce two or more

populations to Mexico, and the maintenance or increase of the existing population in Mexico.

In 1985, Arizona's Buenos Aires National Wildlife Refuge, containing approximately 118,000 acres of savannah grassland in the Altar Valley, was created for the masked bobwhite. It contains the only population of the birds in the United States.

CONSERVATION TODAY

There are nearly 1,000 masked bobwhites in a breeding facility on the Buenos Aires National Wildlife Refuge, the chicks from which are annually released into the wild. Population estimates in the wild at the refuge are approximately 300 to 500 individuals. No cattle grazing or quail hunting is permitted on the Buenos Aires refuge. In addition, habitat restoration on the refuge includes prescribed burning to restore native grasses, inhibit woody vegetation, and stimulate the growth of important bobwhite food plants. However, the refuge has not been able to sustain a viable, breeding population. Although recent prescribed burns have resulted in some native grasses re-emerging, more habitat restoration is urgently needed.

ECOLOGICAL & ECONOMIC VALUE

Conservation of the masked bobwhite has provided collateral protection to a wide range of wildlife species in the southwest. The Buenos Aires National Wildlife Refuge provides refuge to more than 325 bird species, 53 species of reptiles and amphibians, and 58 mammal species, many of which are endangered. In a 2001 survey, the U.S. Fish and Wildlife Service found that some 66 million American adults watch wildlife annually and spend \$38.4 billion per year in expenses related to this activity. In addition to its striking appearance and high public profile, the masked bobwhite is very popular to bird watchers in the southwestern United States.

OUTLOOK FOR THE FUTURE

The recovery plan for the masked bobwhite estimates that downlisting should be initiated in 2003. However, downlisting criteria have not been met. In particular, only one population of masked bobwhites exists in the wild in the United States, and this population persists only because of repeated release of captive-bred birds. Without any viable populations of masked bobwhites in the United States, and decreasing populations in Mexico, there is grave cause for concern. In addition, dependence on captive breeding as a longterm recovery strategy is problematic given the potential for genetic problems related to captive propagation.

However, without the protective provisions of the Endangered Species Act, masked bobwhites would likely have vanished altogether. With more habitat protection and continued conservation efforts, the masked bobwhite can have a second chance.



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Prescribed burning. FWS