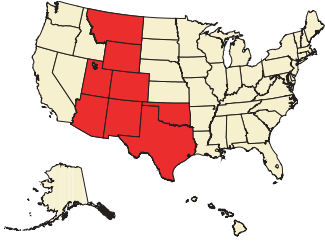


Diverse Challenges in the Intermountain Region



The California condor (*Gymnogyps californianus*), rising above one problem after another as it struggles back from near extinction, exemplifies the challenges facing the National Park Service's Intermountain Region. The Intermountain Region is vast, including diverse ecosystems in eight states from Texas to Montana, and it contains more than 20 percent of the areas managed by the Park Service. These areas provide habitats for many endangered and threatened species. Conservation activities carried out in the Intermountain Region include genetic research, reducing visitor impacts, and participating in national resource inventories.

The California condor reintroduction project in northern Arizona began in 1996 when the U.S. Fish and Wildlife Service and The Peregrine Fund—in cooperation with the National Park Service and a number of other federal and state agencies, Native American tribes, and private wildlife conservation organizations—released six captive-propagated condor chicks at the Vermilion Cliffs, just north of Grand Canyon National Park. By 1999, the project had succeeded in establishing 26 juvenile condors. As with previous condor reintroduction efforts, however, early success was followed by setbacks. In 2000, several birds died from lead poisoning. The remaining birds had to be captured for treatment and were eventually released. Now, one of the most important tasks in the condor restoration effort is finding a way to discourage the curiosity of young birds towards humans and human activity. Condors that come into close contact with people often become casualties.

During the past 15 years, Padre Island National Seashore in southern Texas has provided protected habitat for the endangered Kemp's ridley sea turtle (*Lepidochelys kempii*). (See "Turtle Patrol on Padre Island," page 22.) Each summer from 1978 to 1988, biologists shipped approximately 2,000 turtle eggs to Padre Island from the species' main nesting beach at Rancho Nuevo, Mexico, in an attempt to establish a secondary breeding colony. After the hatchlings were released at Padre Island so that they would imprint on the beach, they were sent to the National Marine Fisheries Service laboratory in Galveston, Texas, for captive rearing and eventual release at Padre Island.

The transfer of Kemp's ridley eggs to Padre Island from Rancho Nuevo ended in 1988, and scientists waited for the released turtles to mature and nest in southern Texas. In 1996, two turtles experimentally imprinted on Padre Island as hatchlings returned there to nest. By 1999, biologists had found 16

Kemp's ridley nests on the Texas coast, 13 of them at Padre Island. Efforts to promote recovery in southern Texas include monitoring and protecting nesting sea turtles and their nest sites, and satellite tracking of adult Kemp's ridleys.

In southern Arizona, an endangered fish, the Quitobaquito pupfish (*Cyprinodon macularius eremus*), inhabits the springs, stream, and pond at Quitobaquito on Organ Pipe Cactus National Monument. It also occurs in several isolated pools in the ephemeral Rio Sonoyta in Mexico. Researchers recently found unique mitochondrial DNA markers that differentiate this fish from other desert pupfish in the region. Census results for 2000 were below average compared to previous surveys (1992-1996) and the cause of the decline is not clear. Researchers found many young fish and the overall reproduction looked good, and observers did not detect nonnative fish or other obvious threats. The park is continuing with its monitoring to learn more about fluctuations in the Quitobaquito pupfish population.

Parks in the Intermountain Region provide habitat for endangered and threatened plants as well. One example is the sentry milk-vetch (*Astragalus cremnophylax* var. *cremnophylax*), a plant endemic to the limestone rim rock and vertical cliffs of the Kaibab Plateau in northern Arizona. The Park Service has monitored the population that grows on the South Rim of Grand Canyon National Park since 1983. We found that one of the primary causes for the population's decline was trampling by visitors to the park. To protect the site, the Park Service constructed a fence in 1990. As a result, the population increased steadily during the next decade from 240 plants to 510 plants.

A threatened orchid species, the Ute ladies'-tresses (*Spiranthes diluvialis*), occurs in Dinosaur National Monument, which straddles the Colorado-Utah border. Inventories that were conducted in 1998 and 1999 and funded by the Bureau of Reclamation found this orchid growing along the Green River. Because



California condor

Photo by Elaine Leslie/NPS

the species' survival could be affected by water releases from the upstream Flaming Gorge Reservoir, the National Park Service is collaborating with Utah State University geomorphologists to determine the likely impacts on the plant if dam operations change.

National parks in the Intermountain Region provide important sanctuary for listed plants and animals by protecting particular sites and actively restoring and monitoring populations.

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Dinosaur National Monument provides important habitat for the Ute ladies'-tresses, a rare orchid.

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