



Mexican Gray Wolf Recovery Plan

When the Mexican Gray Wolf Recovery Plan was approved in 1982, the only known Mexican gray wolves in existence were those held in a captive breeding facility under a joint US/Mexican agreement. They originally included four males and one pregnant female who had been extracted from Mexico between 1977 and 1980. There were no longer any Mexican gray wolves in the wild. The four males, called effective founders, offered enough genetic diversity to make the captive breeding portion of the recovery program viable, but not ideal.

Then, in 1995, two more lineages were added to the recovery plan gene pool. Genetic testing determined that two other wolf populations, in captivity since the 1960's, were pure *Canus lupus baileyi*. This brought additional, valuable genetic diversity to the recovery plan's captive breeding program. There were now eight effective founders.

The Plan

The stated objective of the Mexican Gray Wolf Recovery Plan, adopted in 1982, was to “conserve and ensure the survival of *Canus lupus baileyi* by maintaining a captive breeding program and reestablishing a viable, self-sustaining population of at least 100 Mexican wolves in the middle to high elevations of a 5,000-square-mile area within the Mexican wolf's historic range.” Its goal was to support the reestablishment of the Mexican wolf in the wild through captive breeding, public education, and research. In addition, the U.S. Fish and Wildlife Service (USFWS) identified the Mexican gray wolf as “the most critically endangered mammal in North America” in 1986.

Under the Environmental Impact Statement of 1995, it was planned that Mexican gray wolves would be reintroduced to the Blue Range Wolf Recovery Area (BRWRA), which consists of the Apache National Forest in east central Arizona and the adjacent Gila National Forest in west central New Mexico. The Blue Range was chosen as the primary release site because its 4,386,245 acres (nearly 7,000 square miles) of mountains, forests, and grasslands lie within the historic range of the Mexican gray wolf, it is resistant to drought, it carries a sufficient and varied large hoofed mammal population, and analyses indicate it can support a population of at least 100 wolves.

The 1995 EIS plan also designated reintroduced wolves as an “experimental population” that was “nonessential” to the continuation of the species. These two designations meant that permanent land use restrictions in the release areas were not imposed and that increased flexibility in the management of reintroduced animals was allowed so that the needs of specific animals or the concerns of local citizens could be responded to quickly. It would be illegal to kill a wolf unless it is in the act of attacking livestock.

Maintaining genetic diversity is vital for the success of the recovery plan. Therefore, only animals whose genes are already well represented in captive populations, who have proven reproductive performance, and who exhibit certain behavior criteria would be considered for release.

The First Three Years

The first 13 Mexican gray wolves were released in the BRWRA in 1998. In the recovery plan’s three-year review in July 2001, it was reported that a total of 69 wolves had been released into the BRWRA. They were killing natural prey, reproducing, and forming pairs on their own, proving that captive-bred and -reared wolves can be successfully reintroduced to the wild.

However, the review also showed that there were only 35 wolves remaining. Some had been illegally shot or trapped, hit by cars, or died of natural causes. Others had been recaptured and returned to captivity, often because of livestock depredation. The fate of some was simply unknown; they may have slipped out of their collars or been shot and their collars destroyed.

Three-Year Review: Biologists’ Recommendations

As part of the three-year review process, biologists were asked to submit a report. They strongly recommended reforms to the existing program in order to bring the protection of these wolves up to the standards of protection provided to other endangered species.

Currently, Mexican gray wolves are only releasable directly from program facilities into the State of Arizona, despite the fact that two-thirds of the BRWRA is in New Mexico. This necessitates the subsequent relocation of some wolves into New Mexico. Relocation is always stress-inducing and may result in injuries to the animals.

Biologists recommended that releases directly from program facilities be allowed in New Mexico. They also recommended rescinding the regulation that requires all wolves living outside of the boundaries of their recovery area be removed, relying instead upon the discretion of local agents in each individual case. Their final suggestion was to implement regulations that require ranchers to remove carcasses of livestock that die of non-wolf causes before wolves are able to scavenge on them.

To date, none of these recommendations has been incorporated into the Recovery Plan.

Adaptive Management

In 2003, USFWS finalized a Memorandum of Understanding between federal and state government agencies that provided for the formation of the Adaptive Management Oversight Committee (AMOC), chaired by the Arizona Department of Game & Fish. Although the USFWS would continue to be responsible for the overall recovery of the Mexican gray wolf, the AMOC gives more management and implementation control to local agencies such as the New Mexico and Arizona Departments of Game & Fish and the White Mountain Apache Tribe.

By 2005, the AMOC had developed Standard Operating Procedures (SOPs) for the BRWRA reintroduction project. These SOPs are expected to provide guidance for more consistent management practices by the Interagency Field Team and may be created or updated as necessary.

The AMOC holds Quarterly Adaptive Management Working Group meetings, in which any interested members of the public may participate. According to the Arizona Dept of Game & Fish, this management approach “provides opportunities for participation by local governments, nongovernmental organizations, and individuals from all segments of the public.”

New Recovery Team Formed

Also in 2003, a new recovery team for wolves in the Southwest was formed. They were charged with developing a recovery plan to replace the 1982 Mexican Gray Wolf Recovery Plan. Team meetings are closed to the public and members are prohibited from disclosing the contents of team discussions.

The 5-Year Review

By 2003, Mexican gray wolves had been in the BRWRA for 5 years. The AMOC recently submitted its 5-year review to USFWS. This review reports that there had been 79 initial releases into the BRWRA and that the wolf population consisted of approximately 55 wolves: 25 collared adults, 12 uncollared subadults, and more than 20 pups. There were 13 packs (a pack is defined as 2 or more wolves traveling together) and 5 lone individuals.

“With the birth of the first wild-born litter from a wild-born parent, in 2002, the reintroduction project evolved into a new phase” according to Paul Overy, the Arizona Department of Game & Fish wolf project field team leader. During 2002 & 2003, reproduction replaced releases as the primary factor in the population increase of wolves in the BRWRA. In 2003, 7 packs produced wild-conceived and wild-born litters. However, litter size continued to be small, averaging 2.1 pups per litter as opposed to the norm of 4.2-6.9 pups/litter.

One continuing obstacle to the program is the illegal killing of wolves. In 2003, seven wolves in Arizona and New Mexico were killed between March 9 and September 28 alone. Rewards of \$10,000 were offered by USFWS for information regarding these deaths.

The total number of livestock depredations (including confirmed, probable, or possible incidents) during the first 5 years of the program was 47, well below the anticipated rate of 34 per year. Experience has shown that when adequate native prey is available, overall livestock losses are minimal. In addition, a private conservation group, Defenders of Wildlife, directly reimburses ranchers the market value for livestock lost to verified wolf depredation. Twenty-two wolves were translocated due to cattle depredation.

Two hybrid litters, both the product of a female wolf and male dog, have been discovered. One litter was born in 2002, and the other during the preparation of the review, in 2005. According to the review’s technical component, both litters were “promptly discovered...as a result of ongoing management and monitoring” (Technical Component, page 22) (“TC-22”) and were humanely euthanized. In addition, there “is no genetic evidence to date that suggests introgression with dogs or any other canids is occurring in the free-ranging Mexican wolf population” (TC-22).

Five-Year Review Recommendations

The five-year report states that the number of removed wolves exceeded the projected levels, in large part to the Recovery Plan’s requirement that wolves establishing a home range outside of the BRWRA be removed. “These policies conflict with normal wolf movements...and differ from management of wolves elsewhere in the United States” (TC-23-24). The review recommends modifications to the Plan that would allow wolves to expand into areas adjacent to the BRWRA.

Review data strongly suggests that those wolves who have spent a greater portion of their lives in the wild are more likely to be successful and have lower mortality and removal rates. Another recommendation in the review is that “wolves with wild experience continue to be translocated after their first removal event, except in extreme situations” (TC-24).

It was further recommended that more effort be placed on appropriate centralized Recovery Plan databases in order to continue improving the efficiency, reliability, and accessibility of those databases and that the research opportunities afforded by the BRWRA project be explored and funded. Both these recommendations would increase insight into overall Mexican gray wolf biology and project effectiveness.

Spring 2006

The BRWRA monthly report indicated that there were 20 wolves with functional collars as of April 30, 2006. These wolves, along with uncollared wolves, were dispersed among 10 packs (six in AZ and four in NM) and

two lone wolves (both in NM). As of May 24, 2006, the USFWS estimated that there are 32-46 wolves in the BRWRA, not including any pups from 2006 litters.

To view the most recent monthly report, go to the U.S. Fish & Wildlife Service website: www.gov/southwest/es/mexicanwolf/BRWRP_notes.cfm.

A Rarity

According to Arizona Game & Fish, "The Mexican wolf is an endangered-species rarity. Its major needs are not habitat management/restoration. Reintroduced wolves show very clearly what is needed to achieve recovery." These needs include increased education, heightened law enforcement, and adequate funding for management, research, monitoring, and field surveys.

"Although the reintroduced Arizona-New Mexico population is growing, supplemented by releases, population objectives are jeopardized by human-caused and other mortalities," according to the Arizona Game & Fish. One continuing obstacle to the program is the illegal killing of wolves. In 2003, seven wolves in Arizona and New Mexico were killed between March 9 and September 28 alone. The USFWS, Arizona Game and Fish Department Operation Game Thief, and a variety of public interest groups are offering rewards totaling up to \$46,000, depending on the information provided, for information leading to the conviction of the individual(s) responsible for the shooting deaths of Mexican gray wolves.

Recovery Plan Facilities

Southwest Wildlife Rehabilitation & Educational Foundation, a wildlife sanctuary located in the Rio Verde Foothills, is a **Mexican Gray Wolf Recovery Plan holding facility**. Holding facilities play three major roles in the recovery program. They provide homes for animals that have been retired from the captive breeding program, where they will live out the remainder of their lives. They may also care for potential breeding animals until the recovery program is ready to use them as breeding stock. In addition, holding facilities provide homes for recaptured animals.

Mexican gray wolves may also be held at captive breeding facilities or management facilities. Captive breeding facilities are responsible for animals actively breeding as part of the recovery program. Management facilities are designed to prepare wolves for release by minimizing human contact, simulating the natural environment, and encouraging wild behavior characteristics.

Additional Resources

For additional information on Mexican gray wolves, their current status as an endangered species, or the Mexican Gray Wolf Recovery Program, visit the following websites:

Center for Biological Diversity:

www.biologicaldiversity.org/swcbd/species/mexwolf/index.html

Sierra Club

www.sierraclub.org (search: Mexican gray wolf)

Defenders of Wildlife:

www.defenders.org (go to wildlife)

Animal Defense League of Arizona:

www.adlaz.org (search: Mexican gray wolf)

Arizona Department of Game & Fish:

www.azgfd.gov/w_c/es/wolf_reintroduction.shtml

U.S. Fish & Wildlife Service:

www.fws.gov/southwest/es/mexicanwolf