



TELEMETRY, TRACKING AND TOOLS

THE DAY-TO-DAY BUSINESS OF
MANAGING MEXICAN WOLVES

By Chris Bagnoli | Photographs by George Andrejko



MANAGING ANY THREATENED OR ENDANGERED WILDLIFE SPECIES REQUIRES DEDICATED PROFESSIONALS, WHO POSSESS UNIQUE SKILLS, EXPERIENCE AND TRAINING, TO PERFORM SPECIALIZED FIELD ACTIVITIES.

The Interagency Field Team (IFT) for the Mexican Wolf Reintroduction Project (project) is responsible for the day-to-day management of wolves.

The IFT consists of full-time and seasonal staff from the five agencies included in a special Memorandum of Understanding that governs how the project is implemented in the field. Those five entities are the U.S. Fish and Wildlife Service (FWS), Arizona Game and Fish Department (department), U.S.D.A. Forest Service (USFS), U.S.D.A. Animal and Plant Health Inspection Service — Wildlife Services (WS), and the White Mountain Apache Tribe (WMAT).

The department has been involved with the reintroduction of Mexican wolves into the Blue Range Area's primary recovery zone in Arizona even before the first wolves were released in 1998. The FWS originally outlined the concept of an IFT in the 1998 Interagency Mexican Wolf Management Plan. The original IFT was comprised of a team leader from the FWS, a wolf biologist from the department, and a wolf management specialist from WS. In 1999, New Mexico joined the IFT, adding a wolf biologist to the team. As the project evolved further, USFS and WMAT members were added to the team. Currently, the department provides five full-time biologists, including the team leader, to the IFT.

A key provision of the IFT approach involves having an operations base for on-the-ground wolf management that is within the recovery area. The Mexican wolf field office is located in Alpine, Ariz. IFT members live within the local community, which helps them cultivate relationships with community members and local project stakeholders, and better understand the issues. This is not always an easy undertaking. Reintroducing wolves into portions of their historical range is not an effort supported by many area residents. It takes dedicated individuals with "thick skin" to successfully accomplish the various field tasks amid conflicting attitudes and perceptions.

While each individual IFT member may represent one of the five participating agencies, the most effective team members understand the balance between having a professional commitment to manage wolves and the importance of understanding the perspectives of the people who share the land with wolves. It is not easy, and not all personnel selected for these positions understand the unique challenges involved with this work. The ability to seek progress on contentious issues with people who have diverse perspectives is as important as having appropriate field skills.

IFT members are required to monitor telemetry signals from the ground using a radio receiver, map and compass. IFT members must learn the local terrain and each wolf's habits. Team members also apply the same techniques while circling a collared wolf a thousand feet overhead from an airplane.

When wolves are captured for collaring, their vitals and measurements are recorded. Telemetry collars put on wolves capture data such as: home range, denning locations, predation and depredation behaviors and dispersal patterns.

Many think that IFT work involves following Mexican wolves around day and night in backcountry forests. If it were only that simple! Managing wolves involves a variety of duties like developing and implementing wolf release and translocation proposals; monitoring wolf locations from the ground and air, and, trapping animals to affix radio telemetry collars for monitoring movements. The IFT also investigates wolf-sighting reports, conducts depredation investigations, removes wolves for management purposes and analyzes wolf predation on native prey. The list of duties continues with responding to nuisance wolf reports, coordinating with stakeholders on proactive management efforts, conducting annual population counts, writing project reports, and coordinating with local governments and land management agencies. Basically, the team is responsible for almost every aspect of on-the-ground wolf management.

One very important activity the IFT undertakes is capturing wolves to affix telemetry collars. The monitoring data obtained from the collars assists in understanding basic wolf life history, including home range size, territory location, seasonal use patterns, denning locations, predation and depredation behaviors, and dispersal patterns. Wolf captures are accomplished primarily by the use of humane, padded leg-hold traps. Trapping wolves requires patience and perseverance from team members, along with a willingness to pass along their knowledge of trapping techniques as new members are recruited.

Team members also must understand and learn the art and science of wolf handling. Mexican wolves are an endangered



subspecies that require specialized handling procedures. Biologists must know how to administer capture drugs, monitor vital signs, obtain biological information, attach the collar correctly, reverse the effect of capture drugs (if used), and release the wolf safely. Once the collar is attached and the wolf is released, an IFT member is then required to monitor the telemetry signal from the ground using a radio receiver, map and compass. IFT members must learn the local terrain and each wolf's habits.

Aerial monitoring is another important component of wolf management. Once a team member has mastered tracking wolves on the ground, he applies the same techniques while circling a collared wolf a thousand feet overhead from an airplane. He must be able to accurately place that location on a map. This allows biologists to more quickly obtain an animal's location. The IFT repeats this exercise over thousands of square miles of rugged, forested terrain to complete the weekly telemetry monitoring flight assignment.



The IFT member is then responsible for updating a flight location document on the department's website that serves as a resource for local stakeholders.

Often, when an IFT member's day seems to be winding down, he may receive a call from a member of the public reporting a wolf sighting. After gathering information and entering it into the project database, the IFT member will try to verify the sighting. If he does not recall locating any collared wolves in the vicinity of the report, and if there is snow on the ground for tracking, an investigation may show the reported animal was a wolf or simply a large coyote. Responding quickly helps ensure that possible signs



may still present when the IFT member arrives. So, with the last bit of daylight, off goes the IFT member to investigate the sighting. Welcome to the day-to-day business of an IFT member managing Mexican wolves. Working conditions may not be ideal, and there is never a dull moment when working on the project, but team members are rewarded knowing they contributed to restoring a key component of Arizona's diverse wildlife heritage. 🌿

■ Chris Bagnoli is the regional supervisor for Game and Fish's Pinetop office. Prior to this position, he was the Mexican Wolf Interagency Field Team leader.

COUNTING WOLVES

One of the most important operations the Interagency Field Team (IFT) conducts is end-of-year Mexican wolf population counts that coincide with the wolves' breeding season. The goal is to develop a minimum estimate of wolf numbers in Arizona and New Mexico, and report on the size, productivity, and extent of the Mexican wolf population. The data are used to assess the overall progress of the Mexican Wolf Reintroduction Project (project).

The process to develop a minimum population estimate occurs over several months. The IFT follows a procedure for deriving this estimate that was formed in consultation with leading wolf biologists from around the country. Starting in November, project personnel begin to closely monitor wolves with radio telemetry collars to document how wolves are using their territories and which wolves may be dispersing to locate new mates, and establish new territories and packs.

The effort to search for wolf sign in areas outside of established territories is critical because biologists know that only a portion of the population wears telemetry collars and accounting for the uncollared portion is an important task. In any given year, the uncollared portion of the population (not associated with known wolf packs) may be as high as a quarter of all the wolves.

The visual wolf population count occurs during a 10-day period in January and is conducted by helicopter. Specially trained IFT personnel fly over every radio-collared wolf and visually document each animal present. Usually there are uncollared wolves traveling with collared animals, and these sightings assist the IFT with determining pup recruitment and pack dynamics.

The helicopter team also consists of experts trained to capture wolves using capture drugs fired from dart guns. This allows the IFT to replace old telemetry collars that may have non-functioning batteries, attach new collars, and treat injured wolves.

While this may sound exciting, remember this operation occurs in winter in the White Mountains in a helicopter with no doors. Exciting? Yes ... but bone-chillingly cold!