



Mexican Wolf Recovery Program Quarterly Update

First Quarter 2023 (January, February, March)

The following is a summary of Mexican Wolf Recovery Program activities in the Mexican Wolf Experimental Population Area (MWEPA) in Arizona, including the Fort Apache Indian Reservation (FAIR), San Carlos Apache Reservation (SCAR), and New Mexico. Additional Program information can be obtained by calling (928) 339-4329 or toll free at (888) 459-9653, or by visiting the Arizona Game and Fish Department website at azgfd.gov/wolf or by visiting the U.S. Fish and Wildlife Service website at fws.gov/southwest/es/mexicanwolf. For information on the FAIR, call (928) 338-4385 ext. 226 or visit wmatoutdoor.org. Past updates may be viewed at these websites. Interested parties may [sign up](#) to receive this update electronically by visiting azgfd.com and clicking on the E-news Signup tab on the top left corner of the webpage. This update is a public document and information in it can be used for any purpose. The Mexican Wolf Recovery Program is a multi-agency cooperative effort among the Arizona Game and Fish Department (AZGFD), New Mexico Department of Game and Fish (NMDGF), USDA Forest Service (USFS), USDA-Animal and Plant Health Inspection Service, Wildlife Services (WS), U.S. Fish and Wildlife Service (USFWS), White Mountain Apache Tribe (WMAT), Bureau of Land Management (BLM), and the U.S. National Park Service (NPS).

To view semi-monthly wolf location information please visit <https://arcg.is/bLyPO>

Please report any wolf sightings or suspected livestock depredations to: the Alpine wolf office (928) 339-4329, Pinetop wolf office (928) 532-2391 or toll free at (888) 459-9653. For sightings or suspected depredations on the FAIR, please call the WMAT wolf office in Whiteriver at (928) 338-4385 ext. 226. To report incidents of take or harassment of wolves, please call the AZGFD 24-hour dispatch (Operation Game Thief) at (800) 3520700.

Overall Mexican Wolf Recovery Program Quarterly Updates

In January 2023, the Service received a petition to list the coyote as endangered under the Endangered Species Act due to similarity of appearance, prompting the Service to consider the requirements for designating coyotes as endangered based on a similarity of appearance to the Mexican wolf as a rulemaking action under the Administrative Procedures Act.

In its evaluation, the Service found the coyote did not meet any of the three criteria required to make a similarity of appearance designation:

- Their degree of resemblance is not significant enough to render the species indistinguishable, and law enforcement personnel do not have substantial difficulty in differentiating between Mexican wolves and coyotes.
- Since differentiation between the two species is not substantially difficult for law enforcement, this is not an additional threat to the Mexican wolf's survival and recovery, as illegal take can be investigated and legal action taken.
- A designation would not substantially further the enforcement and policy of the ESA.

Numbering System: Mexican wolves are given an identification number recorded in an official studbook that tracks their history. Capital letters (M = Male, F = Female) preceding the number indicate adult animals 24 months or older. Lower case letters (m = male, f = female) are used to indicate wolves younger than 24 months. A lowercase letter "p" preceding the number is used to indicate a wolf pup born in the most recent spring. The capital letter "A" preceding the letter and number indicates breeding wolves.

Definitions: A "wolf pack" is defined as two or more wolves that maintain an established territory. In the event that one of the two breeding (dominant) wolves dies, the remaining breeding wolf, regardless of pack size, retains the pack status. The packs referenced in this update contain at least one wolf wearing a radio telemetry collar. The Interagency Field Team (IFT) recognizes that wolves without radio telemetry collars may also form packs. If the IFT confirms that wolves are associating with each other and are resident within the same home range, they will be referenced as a pack.

CURRENT POPULATION STATUS

The end of year count for 2022 generated a minimum abundance of 241 Mexican wolves in the wild (105 in AZ and 136 in NM). At the end of 2022, there were a minimum of 59 packs documented (19 in AZ and 40 in NM). This was a 23% increase in the population from the 2021 end of year count. Annual counts are conducted in the winter as this is when the population experiences the least amount of natural fluctuation (i.e., the population

increases dramatically in the spring with the birth of new pups and declines throughout the summer and fall as pup mortality generally occurs in this period). Thus, the IFT summarizes the total number of counted wolves in winter. Counting the population at the end of each year allows for comparable year-to-year trends at a time of year when the Mexican wolf population is most stable.

WOLF PACK UPDATES:

For each documented wolf pack in the table below, wolves fitted with functioning collars at the end of the quarter are listed by studbook number. Studbook numbers of wolves without collars or with non-functioning collars are not listed in the pack updates. Not all wolves in the population are collared or have assigned studbook numbers. Captures, mortalities, removals, and food caching are listed in the corresponding column for the given time period. If a pack was food cached at any time within the quarter, the food cache column will indicate the type of food cache. The primary reason for food caching will be noted with “S” for supplemental and “D” for diversionary; the reason for a food cache may change over time. If a wolf dies, becomes fate unknown, or is removed in the current time period, its studbook number will be removed from the pack column in the following time period. After three months of consistent dispersal behavior away from pack territory, a dispersing wolf is no longer considered a member of its originating pack and will be added to a new row as a single wolf or member of a different pack. Packs that have raised pups in the quarter will be listed as “Yes” in the “Raising pups” column. This will remain for the calendar year if the pack was documented rearing pups in the period of April through September. Any fields that require further comment will be annotated with “*” and further comments are listed in the “Comments” column.

ARIZONA:

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
Bear Canyon AM2563, AF1823	0	0	0	0	N/A	N/A	
Castle Rock M1921, AF1686*, f2632	1*	0	0	0	N/A	N/A	In January, AF1686 was captured, recollared and released during annual helicopter count and capture operations.
Eagle Creek M1477, F1548	0	0	0	0	N/A	N/A	
Elk Horn	0	1*	0	D	N/A	N/A	AF1294 was found dead in January in AZ. The cause of death was vehicle strike.

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
AF1294*, AM1838, F1866							
Hoodoo AF1333, M1789, M1893, F2752*	1*	0	0	0	N/A	N/A	In January, F2752 was captured, collared and released during annual helicopter count and capture operations.
Juniper Bench F1920, fp2757	0	0	0	0	N/A	N/A	
Noble Mountain AF1918, m2597*	0	0	0	0	N/A	N/A	m2597, a captive born cross foster dispersed from the Hoodoo pack and joined the Noble Mountain pack in February.
Pancho Spring F1889, M2770	1*	0	0	0	N/A	N/A	After being documented traveling together, F1889 and an uncollared wolf were named the Pancho Spring pack. In February, M2770, the uncollared traveling with F1889, was captured, collared and released during annual helicopter count and capture operations.
Panther Creek f2768*	1*	0	0	0	N/A	N/A	In January, m2755 dispersed out of the Panther Creek pack and was documented with F2694, forming the Lonesome pack in NM. In January f2768 was captured, collared and released during annual helicopter count and capture operations.
Prime Canyon	0	0	0	0	N/A	N/A	In January, M2701 was captured, collared and translocated from the SCAR into NM by USFWS per tribal request during annual helicopter count and capture operations. In March, M1881 dispersed from the Prime Canyon pack.
Rocky Prairie AM1383, F2536, f2754*, mp2762, fp2769*	2*	0	1*	0	N/A	N/A	In January, f2754 dispersed from the Rocky Prairie pack into areas north of I-40 in NM where the wolf was captured by the IFT and held in captivity. In February, fp2769 was captured, collared and released during annual helicopter count and capture operations.
Rose M1704	0	0	0	0	N/A	N/A	

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
Saffel M1852, AM1854, AF1939	0	0	0	0	N/A	N/A	
Sierra Blanca AF1550, AM1571	0	0	0	0	N/A	N/A	
Warm Springs F1938*	1*	0	0	0	N/A	N/A	In January, F1938 was captured, recollared and released during annual helicopter count and capture operations.
Single f2603	0	0	0	0	N/A	N/A	In January, f2603 dispersed from the Hoodoo pack and became a Single.
Single F2759	0	0	0	0	N/A	N/A	In January, F2759 dispersed from the Baldy pack and became a Single.
Single f2771	0	1*	0	0	N/A	N/A	An uncollared female wolf, assigned studbook number f2771, was located dead in January. The cause of death was vehicle strike.
Single M2545	0	0	0	0	N/A	N/A	

FAIR:

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food Cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
Baldy AM1347, f2767*	1*	0	0	0	N/A	N/A	In January, f2767 was captured, collared and released during annual helicopter count and capture operations.
Slade f2691*	0	1*	0	0	N/A	N/A	F2691 was located injured in January and died of natural causes after being transported to veterinary care.
Tsay-O-Ah AM2698, AF1283*, m2766*	2*	0	0	0	N/A	N/A	In January, m2766 and AF1283 were captured, collared and released during annual helicopter count and capture operations.
Tu dil hil AM1338, AF1679, fp2758		0	0	0	N/A	N/A	

NEW MEXICO:

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food Cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
Agua Frio AF1936, AM1875	0	0	0	0	N/A	N/A	
Aldo AM2561, AF1712	0	0	0	0	N/A	N/A	
Beaver Point AM1949, F2753*	0	0	0	0	N/A	N/A	In January, F2753 dispersed from the Lava Pack and joined the Beaver Point pack
Blue Canyon M1953	0	0	0	0	N/A	N/A	
Burnt Peaks F1692, M2557*	0	0	0	0	N/A	N/A	In February Single M2557 joined the Burnt Peaks pack.
Buzzard Peak AM1831, AF1726, fp2713, mp2709*	1*	0	0	0	N/A	N/A	In January, mp2709, a cross foster from 2022, was captured, collared, and released during the annual helicopter count and capture operations.
Canovas Creek AF2569, AM1584	0	0	0	0	N/A	N/A	
Centerfire AF1916, AM2697	0	0	0	0	N/A	N/A	
Cimmaron Mesa AF1705, AM2702	0	0	0	0	N/A	N/A	
Colibri AM1856	0	0	0	0	N/A	N/A	
Cottonwood Canyon AF2503, AM1859	0	0	0	0	N/A	N/A	
Dark Canyon AM1354, AF1456,, fp2743, mp2739*	1*	0	0	0	N/A	N/A	In January, mp2739 was captured, collared, and released during the annual helicopter count and capture operations.
Flying Draw M2750*	0	0	0	0	N/A	N/A	In January, M2750 dispersed and joined the Lava pack. The Flying Draw pack no longer exists due to no remaining members

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food Cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
Frieborn AF1443, AM2765*	1*	0	0	0	N/A	N/A	In January, AM2765 was captured, collared, and released during the annual helicopter count and capture operations.
Gallinas Canyon F2588, M2700	0	0	0	0	N/A	N/A	
Hail Canyon F2690, M2764*	1*	0	0	0	N/A	N/A	In January, M2764 was captured, collared, and released during the annual helicopter count and capture operations.
Iron Creek AM1240, AF1278, M2549, f2756, fp2746, mp2722*	1*	0	0	0	N/A	N/A	In January, mp2722, a cross foster pup from 2022, was captured, collared, and released during the annual helicopter count and capture operations.
Lava AF1405, M2750	0	0	0	0	N/A	N/A	In January, M2750 dispersed and joined the Lava pack.
Leon AM1824, AF1578, fp2763*	1*	0	0	0	N/A	N/A	In January, fp2763 was captured, collared, and released during the annual helicopter count and capture operations.
Leopold AF1346*, M1855	0	0	0	0	N/A	N/A	In February, the IFT observed Single M1855 with formerly fate unknown AF1346 of the Leopold pack.
Lonesome F2694, M2755	0	0	0	0	N/A	N/A	In January, Singles F2694 and M2755 formed the Lonesome pack.
Luna AF1487, M2567	0	0	0	0	N/A	N/A	
Manada del Arroyo F1828, M1582*	0	1*	0	0	N/A	N/A	In March, M1582 was found dead in NM. The incident is under investigation.
Mangas AM1296, mp2774, fp2775	2*	0	0	D	N/A	N/A	In March, mp2774 and fp2775 were captured by a private trapper and collared and released by the IFT.
Milligan Gulch f2688, m2687	0	0	0	0	N/A	N/A	
Owl Canyon AM1790	0	0	0	0	N/A	N/A	
Pitchfork Canyon AF1853, AM2566	0	0	0	0	N/A	N/A	

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food Cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
Point of Rocks AM1717, AF2515*	1*	0	0	0	N/A	N/A	In February, AF2515 was captured, collared, and released during the annual helicopter count and capture operations.
Potato Canyon f2593*, m2590	1	0	1*	0	N/A	N/A	In January, f2593 was captured and temporarily held in captivity as a result of being paired with its sibling m2590.
San Mateo AF1399	0	0	0	0	N/A	N/A	
Sawtooth M2704	0	0	0	0	N/A	N/A	
Seco Creek AF1728*, M2689*	0	2*	0	0	N/A	N/A	In January, AF1728 and M2689 were found dead in NM. The incident is under investigation. There are no longer any remaining members of the Seco Creek pack.
Shepherders Baseball Park (SBP) AF1553*, AM2703	1*	0	0	0	N/A	N/A	In January, AF1553 was captured, recollared and released during the annual helicopter count and capture operations.
Squirrel Springs AF1788	0	0	0	0	N/A	N/A	
Wagontongue AM1946, mp2773	1	0	0	0	N/A	N/A	In January, mp2773 was captured, recollared and released during the annual helicopter count and capture operations.
Whiskey Creek AM1842, mp2760	0	0	0	0	N/A	N/A	
Whitewater Canyon	0	0	0	0	N/A	N/A	While there are no functioning collars in the Whitewater Canyon pack, the IFT continues to document AM1455 and other members on trail cameras within their territory.
Willow Creek AF1890, m2772*	1*	0	0	0	N/A	N/A	In January, m2772 was captured, recollared and released during the annual helicopter count and capture operations.
Single M1888	0	0	0	0	N/A	N/A	
Single m2636	0	0	0	0	N/A	N/A	

MORTALITIES

Six Mexican wolf mortalities were documented in the current quarter, which brings the total number of documented mortalities in 2023 to 6 (3 in AZ and 3 in NM). The annual mortality total for 2022 (12) was substantially lower than 2021 (25 mortalities) and 2020 (29 mortalities) and was the lowest annual total of documented Mexican wolf mortalities since 2017 (12 mortalities) when the Mexican wolf population was significantly smaller (minimum of 114 wolves).

GENETIC MANAGEMENT

Captive pups cross-fostered (since 2016)	Captive pups cross-fostered in 2022	^{a,b} Cross-fosters documented alive at the end of the quarter	^a Documented mortalities of cross-fosters	^{a,b} Cross-fosters surviving to breeding age	^{a,b} Cross-fosters documented producing pups	^{a,b} Documented litters produced by cross-fosters
83	11	14	9	14	7	13

^aThese are only **MINIMUM** values that have been documented by the IFT. The IFT does not affix radio collars on pups at the time of the cross-foster, as the pups are still too small. Pups are collared opportunistically when cross-fostered wolves are captured later in the year or in subsequent years. Not all cross-fosters that survive are captured and collared.

INCIDENTS

The following are investigations of livestock depredations conducted by Wildlife Services during the quarter that were determined to be caused by wolves. Investigations of dead and injured livestock conducted by Wildlife Services during this time period that were determined to be from causes other than wolves (i.e., vehicle strike, illness, coyote predation, bear predation, or unknown cause) are not listed in this quarterly update.

DEPREDACTIONS

	Confirmed Wolf (Current Quarter)		Yearly Total Confirmed Wolf Killed or Died from Injuries	Probable Wolf (Current Quarter)		Yearly Total Probable Wolf by State
	Killed or Died from Injuries	Injured		Killed or Died from Injuries	Injured	

Arizona	6	0	6	0	0	0
New Mexico	39	4	39	0	0	0
2023 Total			45			0

Unshaded cells contain totals for the given time period, gray cells contain totals for the year.

PUBLIC INCIDENTS

On January 23, 2023, the IFT received a phone call about a wolf near a private residence in Vernon, AZ. The Reporting Party (RP), stated that they heard their dog barking and went to investigate. A single animal was seen running away from the area towards two other animals. The IFT investigated and determined that these canines were likely coyotes.

On January 24, 2023, the IFT took a report of a large uncollared wolf in Chloride, NM. The RP was outside walking her dog, went back inside the home and the wolf walked by the house and out of sight. A NMDGF Game Warden responded on the day of the incident, confirmed wolf tracks in area reported, but no wolf was observed.

On February 1, 2023, the IFT took a report of a wolf observed in Mule Creek, NM, in close proximity to and interacting with cattle. The IFT responded by increasing monitoring in the area.

On February 14, 2023, a member of the IFT discovered a dead elk near residences on private property east of Nutrioso, AZ. Multiple wolves were observed feeding on the elk and seen in the surrounding area. The IFT responded by hazing the wolves out of the area and removing the elk carcass to mitigate further attractants. Members of the IFT spoke to several of the residents nearby and provided direct contact information for IFT personnel so any further sightings could be reported immediately. Since the incident, the IFT has continued to monitor the area for further wolf activity.

Throughout the month of February, the IFT has received several calls regarding sightings of wolves in Nutrioso. In response to the increased wolf activity in the area, the IFT has implemented a regular monitoring schedule, checking the area for wolf radio collar signals throughout the day in effort to haze any wolves located within the community.

On March 7, 2023, the IFT received a call about wolves observed on a security camera in the backyard of a private residence in Greer, AZ. The RP shared the security camera video and the IFT was able to determine that these animals were coyotes.

On March 30, 2023, the IFT took a report of a wolf that approached a group of people with dogs on the Gila National Forest near Alma Mesa. The wolf reportedly interacted with the dogs and approached to within 15 feet of the people. The RP did not report any additional interactions with the wolf.

PROACTIVE MANAGEMENT

State	Hazing efforts (separate attempts to haze wolves)	Hazing events (successful hazing of a wolf)	Diversionary food caches*	Carcasses removed	Proactive Equipment Deployed (RAG boxes, fox lights, fladry)
Arizona	106	45	1	12	1
New Mexico	23	16	1	3	0
2023 Totals	129	61	2	15	1

Unshaded cells contain totals for the given time period, gray cells contain totals for the year.

**Includes supplemental food caches, as these also served as diversionary food caches this year.*

PROGRAM PERSONNEL

In March, Shana Olson returned to the Mexican Wolf Recovery Program as a Field Biologist for NMDGF. Welcome back Shana.

REWARDS OFFERED

The USFWS is offering a reward of up to \$10,000, the AZGFD Operation Game Thief is offering a reward of up to \$1,000, and the NMDGF is offering a reward of up to \$1,000 for information leading to the conviction of the individual(s) responsible for the shooting deaths of Mexican wolves. A variety of non-governmental organizations and private individuals have pledged additional funding for a total reward amount of up to \$37,000, depending on the information provided.

Individuals with information they believe may be helpful are urged to call one of the following agencies: USFWS special agents in Pinetop, Arizona, at (346) 254-0515, in Chandler, Arizona at (480) 967-7900, in or in Albuquerque, New Mexico, at (505) 346-7828; the WMAT at (928) 338-1023 or (928) 338-4385; AZGFD Operation Game Thief at (800) 352-0700; or NMDGF Operation Game Thief at (800) 432-4263. Killing a Mexican wolf is a violation of state law and the Federal Endangered Species Act and can result in criminal penalties of up to \$50,000, and/or not more than one year in jail, and/or a civil penalty of up to \$25,000.