

Mexican Wolf Recovery Program Quarterly Update

Second Quarter, 2021 (April, May, June)

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 (USDA-APHIS 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) 352-0700.

Overall Mexican Wolf Recovery Program Quarterly Updates

On April 28, the District Court of Arizona granted the U.S. Fish and Wildlife Service an extension of the deadline for completion of a revised 10(j) rule for the MWEPA. Under the extension, the Service has until July 1, 2022 to issue the rule in accordance with the court's March 31, 2018 Order. The USFWS continues to work with Cooperating Agencies on the court-ordered remand of the 2015 10(j) rule and development of a supplemental environmental impact statement.

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 census for 2020 generated a minimum abundance of 186 Mexican wolves in the wild (72 in AZ and 114 in NM). This was a 14% increase in the population from the 2019 end of year census. At the end of 2019, a minimum of 163 wolves were documented, which was a 24% increase from 2018. This population has nearly doubled in size over the last five years. Annual surveys are conducted in the winter as this is when the population experiences the least amount of natural fluctuation (i.e. in the spring the population increases dramatically 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 wolves in the 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. 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 raising pups will be listed as "Yes" in the "Raising pups" column. Any fields that require further comment will be annotated with "*" and further comments are listed in the "Comments" column.

ARIZONA:

Wolf Pack	Captures	Mortalities	Removals	Food cache	Raising pups	Cross foster	*Comments
Collared Wolves					(April – Sept)	(April/May)	
Bear Canyon	0	0	0	D	Yes	No	
F1823, m2563							
Castle Rock	0	0	0	S	Yes	Yes*	The IFT cross-fostered 3 pups from captivity into the
AF1686							Castle Rock den in April 2021.
Cerro Trigo	0	0	0	0	No	No	
AM2555, F1919							
Eagle Creek	0	0	0	0	No	No	
M1477							
Elk Horn	0	0	0	S	Yes	Yes*	The IFT cross-fostered 3 pups from captivity into the
AF1294, fp1868, M1838							Elk Horn den in April 2021.
Hoodoo	1*	1*	0	S	Yes	Yes*	The IFT cross-fostered 3 pups from captivity into the
AM1290, AF1333, m1789,							Hoodoo den in April 2021. In May, F1830 was
f1938, fp1890, mp1888							observed with a broken back, captured and taken to
							veterinary care. Due to the severity of the injuries, it
							was determined F1830 would not be able to recover and the USFWS decided the best course of action was
							to euthanize the wolf.
Noble Mountain	0	0	0	0	Yes	No	to euthanize the won.
AM1571, F1918	U	U	U	0	1 68	NO	
AW13/1, 11/16							
Panther Creek	0	0	0	0	Yes	No	AM1382's collar has failed, but the animal continues
AF1683			-				to be documented travelling with the pack.
Prime Canyon	0	0	0	D	Yes	No	Č 1
f1791, f1920, m1921							
Rocky Prairie	0	0	0	0	Yes	No	Genetic analysis indicated fp2564 is wild born
AM1383, AF1489, fp2534,							fp2536.
fp2536							

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
Rose M1704	0	0	6*	0	Yes	No	In May, F1828 and 5 pups were removed from the SCAR by the USFWS per tribal request.
Saffel M1852, M1854, F1939	0	0	0	0	Yes	No	Serie by the est was per thour request.
Sierra Blanca AF1550	0	0	0	0	No	No	
New Pack F1916	0	0	0	0	Yes	No	The pack showed denning behavior in NM in April and toward the end of the quarter has been travelling in AZ.
Single m2520	0	0	0	0	N/A	N/A	m2520 continued to make large dispersal movements in AZ. The IFT attempted to capture m2520 in June and translocate the yearling wolf back within occupied territory, due to concentrated use near residential areas in effort to ensure the safety of the wolf. Capture efforts were unsuccessful. The AZGFD and USFWS continue to monitor m2520 with concern of the frequent locations near houses.

FAIR:

Wolf Pack	Captures	Mortalities	Removals	Food Cache	Raising pups	Cross foster	*Comments
Collared Wolves					(April – Sept)	(April/May)	
Baldy	0	0	0	0	Yes	No	
AM1347							
Poker	0	0	0	0	No	No	
F1841							
Tsay-O-Ah	0	0	0	0	Yes	No	
M1559, AF1283							
Tu dil hil	0	0	0	0	Yes	No	
AM1338, AF1679							

NEW MEXICO:

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food Cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
Aldo M2561, AF1712	1*	0	0	0	No	No	In April, during a NMGF helicopter operation, AF1712 was successfully captured and released on site to remove a foothold trap after having been caught by private trapper.
Agua Frio AF1936, AM1875	0	0	0	0	Yes	No	
Buzzard Peak M1831, F1726	0	0	0	0	Yes	No	
Cimmaron Mesa AF1705	0	1*	0	S	Yes	No	M1950 died in April; cause of death is under investigation. The IFT established a supplemental food cache to assist AF1705 with pup rearing as it is the sole adult member of the pack.
Beaver Point AF1837	0	0	0	0	Yes	No	
Blue Canyon AF1834, M1953*	0	1*	0	S	Yes	No	M1844 was located dead in April; cause of death is under investigation. M1953, from the Monument Saddle pack, left its territory in May and joined the Blue Canyon pack as the new breeding male.
Colibri AM1555, M1856	0	1*	0	0	No	No	AF2565 died in May due to natural causes. The pack did not display denning behavior.
Dark Canyon AM1354, AF1456, M1855	0	1*	0	S	Yes	Yes*	The IFT cross-fostered 3 pups from captivity into the Dark Canyon den in May 2021. m2505 (cross-fostered animal from 2020) died in May; cause of death was unknown. m2520 dispersed from the Dark Canyon pack and is now a Single.
Frieborn AF1443	0	0	0	0	No	No	, ,
Iron Creek AM1240,AF1278,mp2545, mp2549	0	0	0	0	Yes	No	F1721's GPS collar has completely failed, but was documented with the pack this quarter. M1710 has not been documented in the last 3 months and is now considered "fate unknown".
Lava AM1285, AF1405	0	0	3	0	Yes	Yes*	During a cross-foster event in April 2021, the IFT added 3 captive born pups from the Endangered Wolf Center (EWC) facility into the Lava den and removed 3 wild born pups, which were placed into captivity at EWC.
Leon AM1824, AF1578	0	0	0	0	No	Yes*	The IFT conducted a cross-foster of 3 pups from captivity into this pack in May 2021. The den failed

Wolf Pack Collared Wolves	Captures	Mortalities	Removals	Food Cache	Raising pups (April – Sept)	Cross foster (April/May)	*Comments
							within two weeks of the event; the pack is no longer raising pups.
Leopold	0	0	0	0	Unk	No	The last remaining member of the Leopold pack, AF1346, went fate unknown in May due to a failing collar.
Luna AM1158, AF1487, m2567	0	0	0	0	No	No	
Mangas AM1296, AF1439	0	0	0	D	Yes	No	M1859 dispersed and became a single in April.
Monument Saddle	0	0	0	0	N/A	N/A	This pack no longer exists; M1953 left the pack in April, and joined the Blue Canyon pack.
New Pack F2569	0	0	0	D	No	No	F2569 was documented with an uncollared wolf and named Canovas Creek pack. The pack did not display denning behavior.
Owl Canyon AM1790, AF1701	0	0	0	S	Yes	Yes	The IFT cross-fostered 2 pups from captivity into the Owl Canyon den in April.
Pitchfork Canyon F1853, M2566	0	0	0	0	Yes	No	m2559 has not been located in the last 3 months and is now considered "fate unknown".
Point of Rocks AM1717	0	0	0	0	Yes	No	
San Mateo AF1399, f2503	0	0	0	S	Yes	Yes*	The IFT cross-fostered 2 pups from captivity into the San Mateo den in April 2021. f2503 dispersed from the San Mateo pack in April and is now a Single.
Seco Creek* AM1693, AF1728	0	0	0	S	Yes	No	On July 1, 2021, AM1693 and AF1728 were translocated with pups to the Ladder Ranch and were named the Seco Creek Pack.
Sheepherders Baseball Park (SBP) AF1553, M2557*, f2558	0	0	0	0	Yes	No	After dispersed from the SBP pack in February, M2557 returned to the pack during June and has been documented helping with pup rearing.
Squirrel Springs AF1788	0	0	0	0	Yes	No	
Wagontongue M1946 and F1951	0	0	0	0	No	No	
Whiskey Creek M1842, m2556	0	0	0	0	No	No	M1842 joined the Whiskey Creek pack in April.
Whitewater Canyon AF1684	0	0	0	D	Yes	No	
Single f2503	0	0	0	0	N/A	N/A	

Wolf Pack	Captures	Mortalities	Removals	Food Cache	Raising pups	Cross foster	*Comments
Collared Wolves					(April – Sept)	(April/May)	
Single F1692	0	0	0	0	N/A	N/A	
Single M1859	0	0	0	0	N/A	N/A	M1859 dispersed from the Mangas pack in April.
Single M1857	0	0	0	0	N/A	N/A	M1857 did not rejoin the Squirrel Springs pack after
							being returned to the wild from veterinary care and is
							now a Single.
Single M2557	0	0	0	0	N/A	N/A	

GENETIC MANAGEMENT

Captive pups cross- fostered (since 2016)	Captive pups cross- fostered in 2021	a,b Cross-fosters documented alive at the end of the quarter (does not include 2021 cross- fosters)	^a Documented mortalities of cross-fosters	^{a,b} Cross- fosters surviving to breeding age	^{a,b} Cross-fosters documented producing pups
72	22	10	6	7	3

^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.

^bIn 2014, F1126 was released from captivity pregnant with a mate and they split up immediately. F1126 and its pups were brought back into captivity, except for two pups (AF1346 and AM1347) which were fostered into the Dark Canyon Pack and are now successful breeders in their own packs. These two wolves represent a successful cross-fostering event and are contributing valuable genetics to the wild population, but are not included in these totals since this event occurred prior to December 2015 and they do not count toward recovery criteria.

DEPREDATIONS

	Confirmed Wolf (Current Quarter)	Yearly Total	Probable Wolf (C	Yearly Total	
	Killed or died from injuries	Injured	Confirmed Wolf killed or died from injuries	Killed or died from injuries	Injured	Probable Wolf by State
Arizona	4	4	9	0	0	1
New Mexico	21	3	48	1	0	2
2021 Total			57			3

White cells contain totals for the given time period, grey cells contain totals for the year.

PUBLIC INCIDENTS

On April 6, 2021, the IFT received a report of wolves that had been observed chasing elk near a residence in Nutrioso, AZ. The reporting party was concerned about the safety of their dogs and the proximity of the wolves close to their residence. The IFT responded within an hour of the incident, located members of the Hoodoo Pack on the outskirts of the community and hazed the pack away from the residences.

On April 27, a wolf kill was reported in Alpine, AZ. The IFT responded, located a cow elk that appeared to have been killed by wolves and moved the carcass from the area to eliminate further attractant of wolves back to the area. Two additional elk carcasses that had been killed by wolves were located in the community of Alpine on May 1 and May 2. The carcasses were also removed by the IFT.

In response to wolf locations in the community of Alpine, the IFT initiated nightly hazing efforts in Alpine starting at the end of April through the middle of May. During this period wolves from the Noble Mountain Pack were located and hazed in Alpine on May 5. Wolves from the Prime Canyon Pack were located and hazed in Alpine on the nights of May 10 and 11. In addition to the hazing efforts, the IFT initiated a diversionary food cache on the National Forest near the Prime Canyon Pack's den in effort to further reduce wolf conflict in Alpine. Following the nightly hazing efforts and diversionary food caching efforts, wolf locations in Alpine discontinued and remained infrequent for the duration of the quarter.

On May 8, the IFT received a report of a solid white wolf acting aggressively toward dogs and in proximity to humans near a residence in Concho, AZ. The incident was determined to involve domestic dogs and not Mexican wolves.

On May 13, the IFT received a report of wolves in close proximity to llamas on private property on two subsequent days and one wolf observed within 50 yards of a residence on a private inholding on the Apache-Sitgreaves National Forest located south of Eagar, AZ. The IFT conducted a site visit, provided information about how to protect domestic animals and issued a less than lethal permit and rounds to the homeowner to haze wolves away from the residence and llamas. GPS collar locations indicated the wolves that had been observed near the humans and llamas were likely from the Hoodoo Pack.

PROACTIVE MANAGEMENT

State	Hazing efforts (separate	Hazing events (successful	Diversionary	Carcasses	Proactive Equipment Issued
	attempts to haze wolves)	hazing of a wolf)	food caches*	removed	(RAG boxes, fox lights, fladry)
Arizona	48	12	5	3	2
New Mexico	20	4	8	0	0

All cells contain totals for the given time period.

PROGRAM PERSONNEL

There are no personnel updates for this quarter.

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 Mesa, Arizona, at (480) 967-7900, in Alpine, Arizona, at (928) 339-4232, 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

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

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.