

Summary of Proactive Management Activities conducted in the Blue Range Wolf Recovery Area in 2011

The Interagency Field Team (IFT), working with Non-Governmental Organizations (NGO), the U.S. Forest Service (USFS), and livestock producers implemented proactive management activities to assist in eliminating or reducing wolf livestock conflicts in the Blue Range Wolf Recovery Area (BRWRA). The Mexican Wolf Reintroduction Project (Project) and NGOs spent approximately \$89,100 on proactive management activities affecting an estimated 10,930 livestock (6720 in Arizona, 4210 in New Mexico), representing about 23% of the permitted livestock grazing in the BRWRA. The IFT, agency contract employees, and NGO contract employees spent approximately 6290 hours implementing proactive management activities.

The IFT installed and maintained turbo fladry around one large pasture for one livestock producer in Arizona to protect livestock (sheep) on both public land and private property. No livestock depredation incidences occurred within the enclosed area. Additional fladry was installed around smaller areas for night enclosures. One ram was killed by wolves outside of a night enclosure.

The Project and NGOs purchased hay during the calving season for one livestock producer in Arizona, one livestock producer in New Mexico, and supplements for two livestock producers. Two livestock depredation incidents occurred on grazing lands associated with these ranches, one in Arizona and one in New Mexico. The Project assisted another livestock producer in the purchase of water, allowing grazing in an allotment away from an active wolf den in New Mexico. No depredations are known to have occurred on the used allotment during 2011.

Project personnel met with District Rangers, biologists and range staffs, to discuss livestock management during the wolf denning season. The Project coordinated with the Alpine, Clifton, Springerville, Black Range, Quemado, and Reserve Ranger Districts and livestock producers in Arizona and New Mexico to address potential conflicts between livestock and wolves. In several of these cases, livestock were scheduled to graze in or near pastures where wolves were denning. In efforts to reduce interactions between livestock and denning wolves, the Districts and livestock producers changed pasture rotations and moved livestock into alternate pastures for the denning season. A total of three depredations occurred on two of the seven alternate pastures, however, there would likely have been additional depredations if livestock had grazed near the den-sites. In one case, there were no options for moving livestock away from a den site; the den site was near the intersection of three pastures. This particular allotment sustained three depredations in 2011.

The Project and NGOs contracted seven range riders (five in Arizona, two in New Mexico) to assist nine livestock producers (five in Arizona, four in New Mexico) in monitoring wolves in relation to cattle. Range riders monitored approximately 6050 livestock within seven wolf pack home ranges, and provided additional oversight of livestock and light hazing of wolves when they were among the livestock. Two depredations occurred on allotments (one in Arizona, one in New Mexico) while ranger riders were under contract.

The IFT issued radio telemetry equipment to livestock producers in areas where wolf-livestock conflicts were prevalent. Six sets of telemetry equipment were issued in Arizona and four sets were issued in New Mexico. Telemetry equipment loans were often in response to past conflicts between livestock and wolves on specific allotments. The IFT trained livestock producers to use the telemetry equipment to monitor wolves in the vicinity of cattle or residences. The IFT instructed livestock producers on non-injurious hazing techniques. Livestock producers were encouraged to contact the IFT for assistance and were required to report any wolf-livestock conflicts requiring intensive hazing efforts. These measures resulted in livestock producers increasing their vigilance over livestock when wolves were in the vicinity, and livestock producers felt the telemetry equipment helped them to reduce the potential for livestock depredations.

Cracker shells were provided to two livestock producers for use in hazing wolves that entered private land. IFT personnel hazed wolves on a number of occasions when wolves were exhibiting nuisance

behavior in close proximity to private landowners or were in close proximity to livestock on private and public land. In many cases, the wolves moved away, though a few were persistent in returning.

Supplemental food caches were utilized to assist a pack or remnant of a pack in feeding young of the year when extenuating circumstances (such as a death of one of the adults) reduce their own ability to do so. Supplemental food caches also served to reduce potential conflicts between wolves and livestock. Supplemental food caches were utilized for three packs in 2011.

In two instances, an adult wolf was documented to no longer be active in raising pups produced in 2011. In April, the IFT could no longer document the presence of the Luna pack alpha male, leaving the alpha female as the only adult animal in the pack providing for six pups. In August, the alpha female of the Hawks Nest pack was confirmed dead, leaving the alpha male as the only adult wolf in the pack providing for six pups. In both cases, the IFT established supplemental food caches within a reasonable distance of the dens and rendezvous sites to help the remaining adult and sub adult wolves in each pack feed the young of the year and to reduce the likelihood of livestock depredations. In both situations, two or more pups survived until the end of the year.

During the Wallow Fire, the Bluestem and Hawks Nest packs were located denning within the fire perimeter. The Wallow Fire was the largest fire in Arizona history, and was an active fire for nearly six weeks. Because wildfires may temporarily displace native prey species, the IFT collaborated with USFS fire personnel to establish supplementary food caches for these denning packs. Although both packs moved their dens during the fire, the IFT documented the same number or more pups after the fire as they had prior to the fire. In all of the cases above, whether in response to the fire, or the loss of an alpha, supplemental feeding likely contributed to the survival of pups until the end of the year.

Diversionsary food caches were utilized to reduce potential conflicts between wolves and livestock, primarily in areas where depredations have occurred in the past. Diversionsary food caches were established for the Paradise, San Mateo, and Middle Fork packs during the 2011 denning season. Additional caches were established to draw F1105 away from private property and to determine whether she was travelling with an uncollared wolf. Another cache was established for a short period (2 weeks) for the Fox Mountain pack following two confirmed depredations.

The IFT implemented additional proactive management activities in 2011. During the Wallow Fire, IFT personnel accompanied Incident Management Team personnel on reconnaissance flights to monitor the Hawks Nest, Bluestem, and Rim packs within the fire perimeter. Following the containment of the fire, the USFS received funds for activities and supplies to help reduce the fire's impact on wolves and to replace or supplement equipment destroyed by the fire. These funds supplied the IFT with a freezer, carnivore logs, radio collars, telemetry equipment, and remote cameras. In addition, materials were purchased to replace three water catchments for wild ungulates that were destroyed by the fire.

Often, livestock die of many causes within wolf territories. To reduce the possibility that wolves would be attracted to the carcasses where livestock were grazing, the IFT covered several livestock carcasses with lime in Paradise, San Mateo, and Luna pack territories.

Proactive management activities in Arizona and New Mexico during 2011.

Proactive Management Activity	Purpose	Date	Location	Wolf ID	Management Result
Fladry – 3 miles	Reduce the probability of livestock depredation within a small area.	May to June	Sheep Springs, AZ	Paradise, uncollared?	No known livestock depredations
Fladry – variable	Reduce the probability of livestock depredation on sheep at night.	May to September	Sheep Springs, AZ	Paradise, uncollared?	1 Ram killed outside of enclosure
Fladry -	Reduce the probability of livestock depredation within a small area.	March	Indian Creek, NM	Middle Fork	Problem with elk in area, taken down
Hay	Reduce the probability of livestock depredation during calving season.	January through September	Collins Park, NM	Luna	1 depredation in September
Hay and Supplements	Reduce the probability of livestock depredation during calving season.	January to March	Blue River, AZ	Uncollared Wolves	No confirmed livestock depredations
Water and Feed	Allow use of alternate Allotment during drought, to reduce problems	April	Glenwood, NM	Dark Canyon	No known livestock depredations
Range Rider	Reduce the probability of predator depredation on free-ranging livestock.	January through May	Eagle Creek, AZ	Rim	No known Livestock depredations
Range Rider	Reduce the probability of predator depredation on free-ranging livestock.	June through October	Mangas, NM	San Mateo	No known livestock depredations
Range Rider	Reduce the probability of predator depredation on free-ranging livestock.	June through August	Springerville AZ	Paradise	No known livestock depredations
Range Rider	Reduce the probability of predator depredation on free-ranging livestock.	July to October	Greens Peak, AZ	Paradise, Uncollared Wolves	No known livestock depredations
Range Rider	Reduce the probability of predator depredation on free-ranging livestock.	July to October	Greens Peak, AZ	Paradise, Uncollared Wolves	No known livestock depredations
Range Rider	Reduce the probability of predator depredation on free-ranging livestock.	June through August	Beaverhead NM	Morgart, Middle Fork	1 depredation with RR, 2 without RR
Range Rider	Reduce the probability of predator	January through	Strayhorse, AZ	Uncollared wolves	One known livestock

	depredation on free-ranging livestock.	May			depredations
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