

Mexican Wolf Recovery Aided by Conflict Avoidance



Mexican wolf recovery is aided by conflict avoidance between wolves and livestock production. One of the primary tools for conflict avoidance are range riders that haze wolves away from livestock where these apex predators and cattle overlap. Certainly, that is part of the program, but it is more complex. There are a variety of tools that range riders have at their disposal. The obvious is human presence and with about half of the wolves marked, staff can readily find the wolves of interest, and, in most cases, human presence is enough to convince a wolf to leave the country.

If their presence doesn't work, there are different tools that staff deploy in cooperation with the livestock operator. One tool that has been deployed in Mexican wolf recovery is called "turbo fladry." Simply, these are flags on the fence wire so wolves can be deterred by the flapping flags and if the wolf contacts the wire, a shock is delivered. Another range rider

tool is called a "radio-activated guard" box, which is an electronic device that is activated by a radio collar on the wolf when it's in proximity to the box. When activated, a strobe light and loudspeakers are turned on to scare the wolf from the area. In a 2002 peer-reviewed article from Wildlife Services, the authors indicate that this was a viable tool for small pastures, but was less useful in the southwest where larger pastures are common.

As the agencies move to more aggressive methods, another tool that is applied is "bore thunder," which is essentially a cracker shell used to scare wolves from the area to deter depredations. This has proven to be an effective deterrent and is successfully used in moving wolves from areas where depredations have occurred. Moving up the scale of force applied to hazing, we use less-than-lethal rounds that are rubber bullets used to shoot a wolf that has not been effectively hazed

using the less forceful methods. This is a method of last resort for hazing, but in instances where wolves have not responded to the lessor forceful methods, it is effective.

A relatively new set of tools is using guard dogs and burros. The assumption is that the guard animals have protective instincts that can help reduce depredation. Guard dogs have been around for a while and are not widely utilized but seem to have potential in some settings. Burros are a recent wrench in the toolbox and are being tried in Colorado.

These are tools available to both the ranching community and the wildlife agencies, but they are most effective when used in a collaborative fashion. The Arizona Game and Fish Department is using what we call a "rapid response" approach. This is where collaboration is essential. The longer a wolf or wolves are depredating in an area, it becomes more difficult to reduce depredations as they become anchored to an area due to food availability. If Department staff get a call from a permittee, we are able to respond quickly and begin to convince wolves that there are safer choices to dine on than beef.

One of the often-asked questions about range riders is how effective are they? It's certainly a reasonable question as the program is new in the southwest and it is a bit difficult to assess effectiveness. Looking at the data since the range rider program was initiated, some insight can be gained. It should be noted that the total number of confirmed depredations in Arizona from the period of August



through December in 2019 (31) dropped to 19 confirmed depredations during the same period in 2020 when the two range riders were working. August, September, November and December all had lower depredation numbers than the same month in 2019. The metrics for this performance period were:

- 213 days/nights of hazing effort (range riders attempting to locate wolves in proximity to cattle with the intent to haze).
- 19 actual hazing of wolves away from cattle.
- 10 diversionary food caches stocked 89 times.
- 14 livestock carcasses moved away from active grazing areas.
- Provided conflict reduction efforts for 15 different livestock producers.
- Assisted with deployment of a fladry fencing project in Nutrioso.

Summary data for 2021 are:

- Range rider days were a total of 135 days in the field.
- The total number of active hazing completed by range riders was 126.
- 14 livestock carcasses were moved from the field to reduce the attractiveness of the area for wolves.
- 20 producers were provided range riding assistance during the field season.
- 22 separate allotments were worked on.

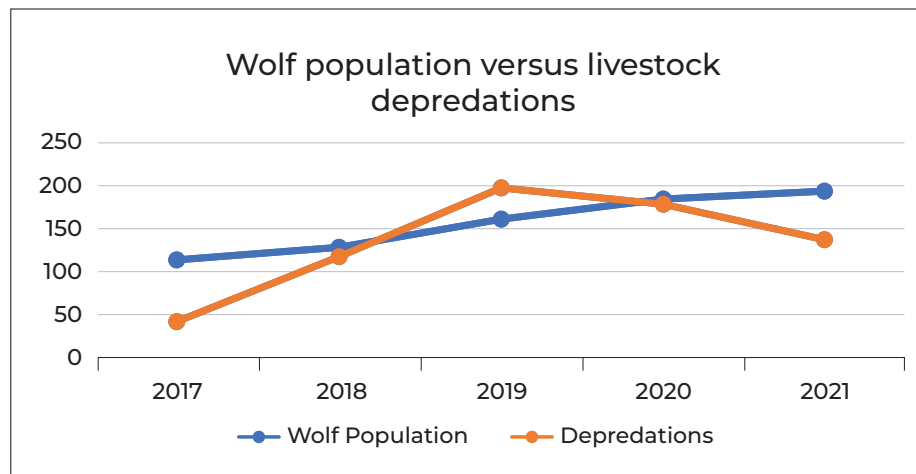


Figure 1. Wolf populations have steadily increased in the last five years while depredations peaked in 2019 and declined in subsequent years after the range rider program was initiated.

It is difficult to quantify the impact of range riding on wolf depredations for there are several factors that could affect this relationship; however, this figure seems to support the importance of range riding in reducing depredations. Looking at 2019, this is the year that had the highest number of depredations, which caused the agencies to evaluate the reasons for such a large increase in depredations. Of interest in this graph is that for the last five years, the wolf population has steadily increased but beginning in 2019, with the initiation of the Arizona Game and Fish (and other agencies') range rider program, the number of depredations in the Mexican Wolf Experimental Population Area has declined each year while the wolf population has grown. If there were no effect from the presence of range riders, it is most likely that depredations would not have declined.

Authorized through Subtitle C of the Omnibus Public Lands Management Act of 2009, the Wolf Livestock Loss Demonstration Project Grant Program provides federal financial assistance to states and tribes to assist livestock producers in undertaking proactive, nonlethal activities to reduce the risk of livestock loss due to predation by wolves. Arizona Game and Fish applies for funding for loss prevention and has been successful in all the agencies' applications. These funds are made available to producers and tribes through the Arizona Livestock Loss Board with the applications found at the board's website (<https://live-azlivestocklossboard.pantheonsite.io>).

In addition to the help from the Arizona Livestock Loss Board, the Eastern Arizona Counties Organization has provided the Arizona Game and Fish Department with \$110,000 in the last four years to support prevention efforts for its constituency in much of the Mexican Wolf Experimental Population Area and without this financial assistance the program would not be as robust as it is now.

Learn more: www.azgfd.gov/wolf



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