Counterpoint: Ranching done strategically can reduce livestock depredation

By Matt Barnes  
Nov 2, 2015

Both wolves and livestock are here to stay in the Northern Rockies.

Editor’s note—Recent articles in Cow-Calf Weekly and BEEF magazine addressing wolf depredation of livestock and possible recourses generated some response from our readers, some of it heated. The debate began with an article written by Temple Grandin reporting on a variety of presentations at a Society for Range Management meeting. One of those presentations discussed non-lethal ways that ranchers can deal with wolf depredations of livestock.

Matt Barnes, author of the paper presented at the SRM meeting that became the genesis of the follow-up articles in BEEF, offers this response. You can read Barnes’ original paper here, which goes into greater depth on the ideas he presents in this counterpoint article.

Both wolves and livestock are here to stay in the Northern Rockies, and many ranches in the region are already coexisting with wolves and other large carnivores. Ranchers interviewed in recent BEEF articles are right that we won’t live with wolves everywhere, but it isn’t reasonable to expect them to stay in wilderness areas.

Ranchers have more ability than they are given credit for to reduce depredations using strategic, preventative and non-lethal methods—while improving their economics and overall land stewardship. The most strategic methods are based on nature’s model, especially strategic grazing management—which can also make other tools more effective—and in some cases the timing and duration of calving.

The lethal vs. non-lethal argument is a false dichotomy. Preventative, strategic management often includes both. We’ve never said that wolves don’t bite, or that no livestock will be killed. We acknowledge that lethal removal of chronic depredators will be needed.
Preventative strategies, including tactics such as non-lethal tools, can work—but only if the rancher wants them to and uses them while considering the landscape and management context. The best “tools” are the ones that think and adapt: people who both create the overall livestock management strategy and apply more specific tools or tactics.

Similarly, livestock guardian animals are inherently adaptive and can be one of the best tools. Carcass removal is also effective because carcasses attract potential predators. Mechanical tools are tactical, rather than strategic: they do work, but on small scales and for short time periods. For example, electrified fladry can work well around a relatively small calving pasture; it isn’t appropriate for large rangeland pastures. Any tool needs to be used at the right place and time, and is only as effective as the people using it.

All of the non-lethal tactics, from range riders to livestock guardian dogs to mechanical tools, only work when the livestock are relatively concentrated. Cattle are often most concentrated at calving season, and this is when we’ve been most successful with mechanical tools such as electrified fladry or any of the devices that make light or noise.

Similar livestock concentration can be created within large rangeland landscapes by strategic grazing management, with a combination of rotational grazing and herding using low-stress livestock handling. Range riders are most effective when they both create this situation by actively managing cattle, and then apply other tactics within this strategic context.

Wild grazing animals form large, dense herds that then move around the landscape to seek fresh forage, avoid fouled areas and escape predators; they exaggerate this density in response to encounters with predators. Isolated individuals and small groups are often the most vulnerable.

Strategic grazing management reflecting those patterns—high stocking density and frequent movement, as in planned rotational grazing and herding with low-stress livestock handling—can take advantage of safety in numbers, reduce the individual need for vigilance and facilitate collective anti-predator behavior, reducing the likelihood that an encounter will result in predation. These same methods can improve rangeland health and livestock production, when strategically planned and adaptively managed.

Nature’s model has many benefits

We applaud the ranch featured in one of the articles for calving in May and June: that is nature’s model and has many benefits. Green-grass calving matches the cows’ annual nutrition and reproduction-lactation cycle to the annual forage production cycle, improving nutrition and bringing cows back into post-partum estrus sooner—contributing to a shorter calving season. That is also nature’s model of predator swamping, maximizing the proportion of young that survive
Beyond the most vulnerable stage.

The fact that losses occurred on a ranch during May-June calving doesn’t mean that timing of calving caused the losses, especially when there is no comparison to any other strategy. Moreover, it doesn’t mean that green-grass calving wouldn’t work elsewhere.

It depends on many factors, including geography, distribution of predation risk, including proximity to den and rendezvous sites, whether cattle and wild prey have their young in the same place and the calving practices of neighboring ranches. A rancher needs to consider all factors, including comparing predation risk to the number of calves lost to bad weather and all the other costs of earlier calving.

Of course, large carnivores are smart, observant and adaptive; what they learn about humans and livestock depends partly on how humans react to them. The recent Cow-Calf Weekly article on wolf depredation seems to imply that this means that human presence is ineffective; in reality, the effect of human presence depends on the potential predator associating humans with negative consequences.

For example, people should haze a potential predator away from homes, ranch headquarters, or livestock, if they have the (relatively uncommon) opportunity. And predators can only be hazed away from relatively concentrated livestock—there needs to be a place nearby, without livestock, to which to haze the predators. That concentration is an advantage of intensive rotational grazing.

I agree with the recent BEEF articles that cattle disposition is important, but it is a matter of optimization. While overly wild (nervous, flighty, and dangerous) animals should be culled, overly calm cattle are less protective and more vulnerable; neither extreme is desirable. Frequent, low-stress handling appears to reduce flightiness without reducing protectiveness.

As argued in the original paper, it appears that ranchers can apply some of the same strategies that work for land health and livestock production to reducing depredation risk. It’s time to be leaders rather than reactionaries, accept that predators are part of the environment in which we raise cattle, and be ever-better stewards of that environment—all of it.

Matt Barnes, a former ranch manager, is a rangeland scientist and conservationist with People and Carnivores, an organization that advances rangeland stewardship and livestock-carnivore coexistence in the American West.