

Living with Predators by Learning and Understanding Their Behavior

by Gail Kimberling
of *the Hells Canyon Journal*

Montana rancher and wild-life biologist Hilary Anderson knows wolves—gray wolves to be specific.

Soon after the once-endangered species was reintroduced to Northwestern Montana in the mid-1990s, Anderson and her husband, Andrew, were faced with protecting cattle on their sprawling ranch that borders Yellowstone National Park from the new predators.

After unsuccessfully relying on fish and game and other agencies for assistance, the Andersons took it upon themselves to learn all they could about wolves, and then devised their own methods for successful coexistence.

Anderson shared the couple's experience during a workshop held January 10 and 11 at the Halfway Lions Hall.

"Strategies for Ranching on a Landscape with Wolves" attracted more than 50 producers and members of the public from as far as Klamath Falls and Idaho. Pine Valley ranchers Shella and Barry DelCurto were instrumental in bringing the workshop to the Panhandle after experiencing their first wolf depredation in the spring of 2018.

Anderson told the group it was critical to first find out all they could about wolves, from their build to their hunting methods.

Wolves, Anderson said, have large feet which allow them to travel across many types of terrain, and they have the endurance and ability to travel for miles to find prey.

Wolves are highly adaptable and quick learners.

"That's why reintroduction worked," Anderson commented. "They learn habitat features to lead to hunting success, and the balance between being too aggressive and too timid.

"They are opportunistic hunters and prefer to hunt on their own terms based on the condition of their prey," Anderson continued. "Wolves do not kill for fun—that is a myth—but they are instinctively programmed to survive. They may not need a particular food source, but if easy pickings are available, such as a sick calf, that's what they will do."

Anderson said the most influential factor in determining wolf hunting success is prey vulnerability.

"They can and will kill anything, but always something weaker and younger that has made it vulnerable," Anderson said. "As wolves circulate around their territory and encounter and test prey under various conditions, they gain information about prey vulnerability. Through trial and error wolves end up with every prey they can capture, and if your livestock is vulnerable out there, that's what they will choose."

How a Wolf Catches Prey

Anderson went on to describe a wolf's hunting sequence. First, she said, is the search.

"Wild ungulates (deer, elk, antelope, etc.) are constantly moving to reduce predation risks. If they are camped out in one area, predators catch on to where they can be found," Anderson explained, adding, "That's why livestock is so vulnerable."

Once wolves find their prey, they watch how the prey reacts to their approach.

Anderson said, "Different prey respond differently. Deer, elk and antelope flee the majority of the time, where other ungulates like bison will stand their ground."

Then comes the attack. "Wolves want their prey to run. It helps identify and exploit weakness in the herd and poses the least risk to the wolves," Anderson said.

The difference in a prey's defense strategies changes the behavior of the wolves, as well as the risk factor.

"The goal for wolves is to kill without being killed, and there is always a risk/benefit analysis on their part," Anderson commented.

She added elk numbers have steadily declined in Yellowstone Park following the reintroduction of wolves but the bison population has been on the rise.

"It's standing your ground versus fleeing. All species can use all strategies, but some are just more successful than others," Anderson said.

Anderson added it often comes down to "speed and split-second decision-making" on the part of prey, and she urged producers to think about ways to improve their herds' ability to make life-saving decisions and increase risk in the minds of the wolves when they encounter livestock.

Dens and Rendezvous Sites

The Andersons carefully studied the movement of wolves on their rangeland to identify dens and rendezvous sites.

"A den is a hole, sometimes a hollowed out log, and a rendezvous site is more of a gathering place," Anderson said. "Mothers will move older pups to a rendezvous site, which then becomes somewhere to camp out and 'own.' These locations will have wolves all coming together and you have to manage your cattle accordingly."

Anderson said some wolves change rendezvous sites on a regular basis while others use the same locations "like clockwork."

Watering areas are also an attractant for wolves as well as prey. The Andersons, who run just under 3,000 head of mixed age classes, were once forced to drift their cattle away from a central watering hole to make them less vulnerable to wolves.

"Once we figured out this was an issue, we came up with plan B and moved the cattle out to the end of our permitted water," Anderson said. "Fortunately, we operate at a scale that is larger than needed, and we had enough room to take cattle out of the area."

Admitting not all ranchers have this luxury, Anderson suggested collaborating with neighbors or requesting more flexibility with allotments.

Pack size and dynamics have a direct correlation to hunting, as well, Anderson said. She explained, "Optimal pack size equates to food availability produced from the prey that is hunted. The larger the pack, the less food obtained per wolf."

Anderson noted, however, they experienced less predation on their ranch as the pack size increased.

She explained when hunting elk, success peaks at four wolves. When hunting bison, success continues to increase with the pack size.

"When food availability is high, the pack has a greater ability to resist [going after] cattle," Anderson said, adding, "I have seen a single wolf capable of killing, but they are designed to work as a pack."

Predation also changes with the seasons, with pack cohesion high in the winter and less in the summer.

"We never see large packs working together in July, but we will see higher rates of depredation in the fall when packs come together as the seasons change," Anderson commented.

Extent of the Problem

Anderson said there is "nothing better at keeping out wolves than other wolves."

She explained the size of a wolf's territory depends on the availability of prey, and wolves will fiercely defend their territory from other wolves.

"Wolves will hunt prey out of the core of their territory the hardest, while avoiding or minimizing the time spent hunting on the edge which possibly overlaps with another pack," Anderson said.

According to Montana Fish and Wildlife, a total of 190 cattle and 409 sheep were confirmed killed by wolves between 1987 and 2004. In that same period 166 wolves were killed in Montana.

Anderson said it's hard to know the exact extent of wolf predation due to the huge "gray area" that exists between the number of cattle a rancher turns out and the number that return.

"One neighbor had 43 that didn't come back, and they only knew what happened to two," Anderson said.

Still, the gray area has shrunk as the Andersons have adopted ranching practices to better coexist with wolves. The Andersons' annual predation rate to wolves and grizzly bears has declined from between two and three percent to about half of one percent; their gray area has also decreased to less than one percent.

"The key in this situation is we have a business model that can absorb that level of loss. Our goal was to make management decisions to reduce the gray area and, yes, it's easier said than done," Anderson said. "Our cattle are our livelihood, and our bottom line was at stake. We needed to take our own responsibility. I'm a fighter, and we decided we could either be the leaders or the victim. The thing that's at stake is the ranch and the way of life."

Further details about ranching with wolves and the wolf issue in Oregon will be featured in an upcoming edition of the HCJ