

STORY BY JAY MALLONEE • PHOTOS BY JOHN HYDE

NO SCIENCE OR BAD SCIENCE? TAKE YOUR PICK



**IF YOU WANT TO KNOW
WHAT IS HAPPENING WITH
WOLF MANAGEMENT,
FOLLOW THE MONEY...NOT
THE SCIENCE.**

In 2011, I published a scientific paper that reviewed the wolf population data collected annually by Montana Fish, Wildlife and Parks (FWP). It showed that no protocols were used to collect their numbers, which invalidated FWP's claim that science was used during the process. The paper also debunked their justifications for killing wolves in the first place. Nevertheless, FWP insists to this day that science is always used in their management process and when making policy decisions. Let's see if that's true.

By killing wolves via public hunts and agency control actions, FWP ignores the available science that demonstrates how predators promote healthy ecosystems. From atop all food chains, predators produce far-reaching effects that ripple downward throughout

ecosystems and influence what diseases will be expressed, what grass species will grow, and the quality of both fresh and salt water. Regardless, wolves are harvested by FWP for money and convenience, like corn. Why? The most obvious answer is because "they can." Although most of the wolves live in national forests, which the public own, society as a whole has not yet chosen to protect "their wolves." So wolf managers do whatever suits them.

In this case, FWP is currently strapped for money and must continually look for additional sources of revenue. Profits from hunting wolves and other wildlife contribute, and they are making plans to sell conservation stamps to help fund wolf management. However, there is another problem.

Over the past several years it has become more difficult for only five FWP biologists to count, or even sample accurately, the entire wolf population in Montana. Therefore, FWP has no idea how many wolves total live in the state. Nevertheless, they are required by the federal government to maintain a minimum population of 100 wolves that includes 10 breeding pairs. The remainder can be killed. But how many? Who's counting?

As of this year, FWP will use "... hunter observations as a cost effective means of gathering biological data to estimate the area occupied by wolves in Montana..." according to their 2013 annual report. In August 2012, FWP conducted a survey of public attitudes towards wolves. In general, they found that Montanans were intolerant of wolves and dissatisfied with FWP for not doing enough to kill them, and allowing the public to do so. Hunting quotas have increased ever since, along with more relaxed hunting regulations. Now, as a basis for management policy, FWP wants to obtain "objective data" from the people who paid for the opportunity to kill wolves.


Data are the infrastructure of any scientific investigation and should be collected using a scientific protocol that controls for and eliminates as much bias as possible. Impressions about wolf abundance from hunters is not science, because FWP has not controlled for bias during data collection.

For example:

- The hunters' expertise of identifying wolves from coyotes under field conditions, especially at a distance, has never been evaluated.
- Hunters are not necessarily trained to collect data scientifically, i.e., always measure print size and is it a front or back paw? Is it a partial print? What device was used to measure the prints: a ruler or their finger?
- If scat is found, what is the diameter? The size of scats overlaps among wolves and coyotes. Do hunters know the difference?

No such qualifying questions or observations are made in the online observation form that hunters and others will fill out. Because they know bias is possible, FWP claims they have a modeling system that will correct for it. But this is after the data has been collected. Models are used by scientists to help interpret raw data but remain simplified reflections of reality, often devoid of the actual complexities involved. Therefore, data collection is paramount, because conclusions based on modeling are only as good as the quality of data being used. In other words, correct for bias *during* data collection rather than *afterwards*.

So, has FWP learned how to apply their knowledge of science over the past several years? Let's just say that ultimately, if you want to know what is happening with wolf manage-

ment, follow the money, or lack of it. Money first, science... well, last anyway—or not at all. 

Jay Mallonee has studied wolves since 1992 and has written extensively about them in his scientific publications, magazines, newspapers and on his website (www.wolfandwildlifestudies.com). This site contains a link to his online petition to end the hunting and trapping of wolves in Montana. The petition is an essay that provides live links to the scientific evidence that shows killing predators degrades ecosystems all over the world. Mallonee also wrote the book *Timber—A Perfect Life*, an account of his 16-year relationship with a profound canine companion.

