## WOLVES AND LIVESTOCK:

and under normal circumstances calving rates generally run 95% or more. In other words, the number of open cows is usually 5% or less of a herd. In areas with wolves, however, open rates approaching 30% have been reported for mature cows, and 42% for replacement yearling heifers. This is nothing short of economic disaster, because most ranchers sole income comes from profits derived from selling calves in the fall.

If you assume 5% open cows as normal, and if wolves raise that rate to 10%, you have lost five calves per hundred cows or approximately \$5,000 per year. At a rate of 15% open cows, a rancher would lose \$10,000 per 100 cows per year, or \$50,000 per year if he ran 500 cows. Open cows not only result from wolf harassment but also from a disease spread by wolves to cattle. Neospora caninum is a protozoan that infects many warm-blooded animals and is a major cause of abortions and neonatal mortality in cattle. The parasite's life cycle involves canids, including wolves, as definitive

hosts, and of the wolves tested in the northern Rockies, the vast majority have been infected with Neospora. As you might expect, none of this was properly discussed before the federal government released wolves over state objections.



Ranchers examine a calf that was attacked by wolves. In just three months there were 15 confirmed cases of wolf attacks on cattle in western Washington.

There are other costs as well. Wolfstressed cattle become more aggressive and are much harder to manage. Herding dogs that many ranchers use to work cattle are no longer an asset, but a liability

as wolf-conditioned cows turn on the dogs in an attempt to fight them off like they do wolves. In addition, wolf-stressed cattle will refuse to use certain pastures or parts of pastures, which can make it impossible to achieve proper range utilization. There are also what economists call transaction and opportunity costs. As various ranchers have noted, it takes a day or more to arrange for the proper authorities to come out and attempt to verify a wolf kill. Then even if a wolf-kill is verified there is paperwork to submit, and it may be months before any compensation is forthcoming. Plus there is the cost of the productive work the rancher should have been doing instead of dealing with wolf-related issues.

Finally, what about stress and psychological damage? Not to the livestock, as that has already been covered, but to the ranchers. Yes, the ranchers! Local government officials in New Mexico, where ranchers have been, and are being subjected to the federal-mandated Mexican wolf recovery, have begun to collect

