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depredation

# Tracking the "green fire"

## — livestock depredation in Manitoba

by Doug Wilcox, MCIC

In his famous "Thinking Like A Mountain" essay, Aldo Leopold referred to an epiphany he had while watching the fading fierce "green fire" in a dying wolf's eyes. This experience moved him to become the pre-eminent advocate of the conservation ethic.

As a fan of Leopold, and as someone involved in production insurance, I think of livestock depredation by wild carnivores as a kind of "green fire." Depredation is "green" in that predators are no longer considered vermin but as a key and valued part of the ecological community. Depredation is also like "fire" in that people living near wild carnivores can get "burned."

The green fire burns Manitoba livestock producers every year. Fortunately, governments provide compensation. Manitoba's Predator Compensation Program compensates producers for livestock killed or injured by bears, cougars, wolves, foxes and coyotes. Wild carnivores are a managed resource, important to society at large, and much of their habitat is on private land, so compensation for depredation only seems fair.

Compensation was first offered through the MCIC in 1997. The experts of the day then estimated the average livestock losses would be in the order of 70 claims per year.

I don't mean to shock you, but the experts were wrong. Losses due to predators in Manitoba are currently more than 10 times that, and continue to grow as program awareness increases. In 2002 there were over 1,000 claims. Since 1997 the predator compensation program has paid over $1.4 million.

On the Prairies, the normal annual death rates of cattle and sheep due to all causes is in the order of two and 10 per cent, respectively. Predators are often unfairly blamed for a disproportionate portion of these losses. There can be severe and fatal injuries not due to predators. For example irritated or spooked animals can run into by barbwire fences or impale themselves on broken posts. Young animals can be stepped or rolled on by larger animals. Disreputable persons can rustle and butcher livestock in-pasture.

Livestock that have died from causes other than predation are often scavenged and sometimes completely consumed by predators — but the predators were not the cause of death.

MCIC adjustors are trained to recognize and separate true predation from other possibilities such as physical injury, domestic dog attacks, carrion feeding, sickness, malnourishment, lightning strikes, hypothermia, poisoning, poor management, etc. A confirmed kill requires evidence that the animal was alive when attacked.

Predators exhibit characteristic behavior in the way they stalk, kill and feed. For example coyotes frequently kill with bites to the throat, wolves often lunge and bite at flanks and hindquarters, and black bears often attack with a bite on top of the shoulders, neck or back. Bite patterns, tracks, scat and signs of struggle are other clues for investigating adjustors.

MCIC has found that roughly 80 per cent of predator claims are caused by coyotes and another 15 per cent by wolves. Of the remaining claims, four per cent would be due to black bear, one per cent by cougar and only a trace number of claims due to fox.

Regardless of the predator type, there can be depredation of both healthy and predisposed animals.

### Losses vary by area

In Manitoba the distribution of wolf predation is distinct from that of coyotes. Wolves tend to be along the forest-agricultural fringe whereas coyotes tend to be more widely dispersed. Map 1 shows the areas of highest risk for wolf depredation are near most of the major provincial forests — the Sandilands/Whiteshell forest area in the southeast, the Moose Creek forest in the Interlake, and the Duck Mountain, Porcupine, and Cormorant forests of the western region.

Map 2 shows that the areas for highest risk of coyote depredation are around Miniota and Minnedosa. This map also shows that coyote depredation is widely dispersed throughout the province except for the Red River Valley.

Not all predators prey on livestock, but wild carnivores can be opportunistic and will take advantage of any easy food source — particularly young calves. The beef calf is the preferred prey, making up roughly 50 per cent of the claims in Manitoba.

Predators tend to select young, inexperienced or disabled livestock much more often than healthy adult animals. They also tend to be interested in animals that run from them. It is likely that many losses are simply the result of skittish calves getting separated from the herd. They start running and attract the predator's interest. Predators generally only take one animal at a time — only around 10 per cent of claims involve more than one.

Figure 1 illustrates how the majority of predator attacks occur from May to October with the peak months in June and July when livestock tend to be out on grazing leases and private pastures. That is when they are most exposed. Young calves are also often the most vulnerable during this time. Food demand by predators is also the greatest at this time because the adults also have young to feed.

Unlike coyotes, wolf depredation is less common in the fall months of September and October — likely due to calves becoming less vulnerable by then. Depredation by black bear does not occur from November to March when they are in hibernation.

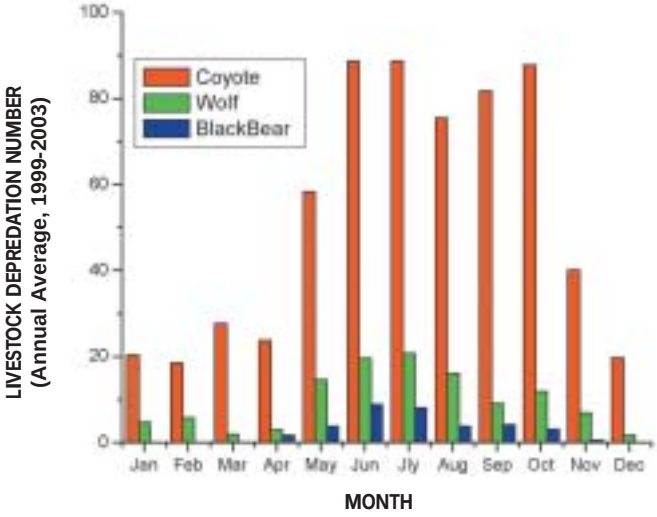
Figure 1 also emphasizes the relative depredation impact of the three main livestock predators in Manitoba. For example this figure shows that in a typical July, 90 predator claims would be due to coyotes, 20 due to wolves and seven due to black bear.

Sustaining a viable population of predators is important because they are an integral part of a functioning ecosystem and are useful indicators of what is occurring in the environment. Predators prey on wildlife most of the time, but given the opportunity will occasionally attack livestock. Manitoba's predators are under the stewardship of all of society, so compensation is awarded for losses.

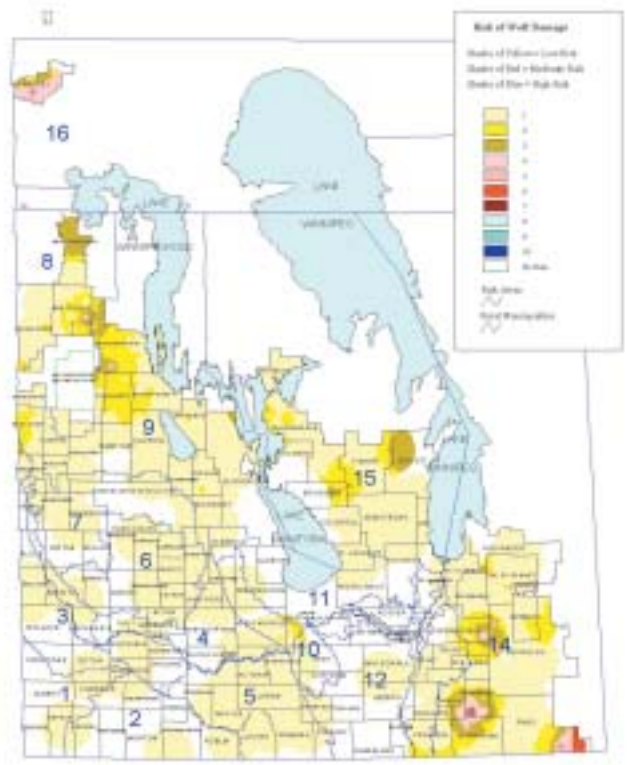
But compensation alone will not reduce the green fire — in fact it may encourage a permanent high flame. Only when compensation is combined with judicious application of predator control techniques, improvements in management practices, and sustainable land use zoning, will the green fire become a pilot light, illuminating the fact that Manitoba producers can both support their environmental heritage and make a viable living.

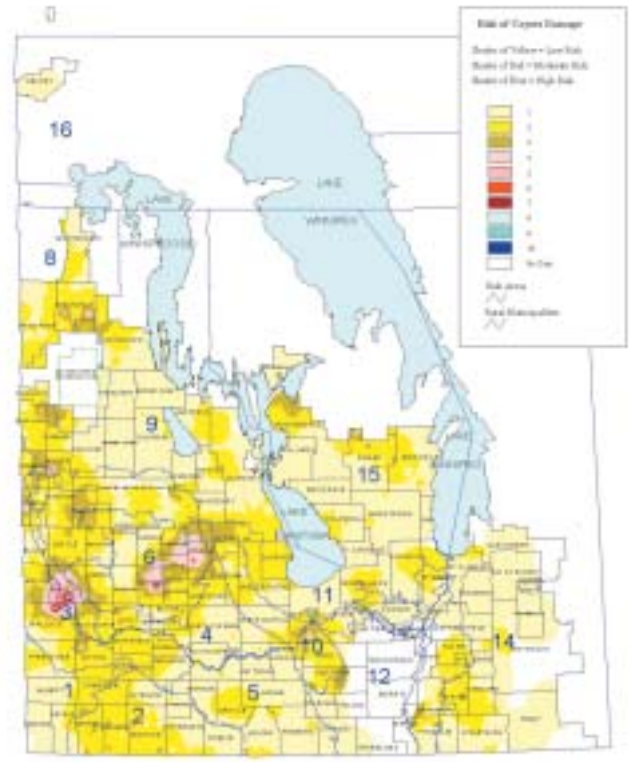
So if you get burned by the green fire don't only contact MCIC. Contact your local Agricultural Representative and Conservation Officer for assistance. They are the firefighters that will work with you to make sure you don't get burned.

Figure 1 **MONTHLY VARIATION IN DEPREDATION BY THE MAIN LIVESTOCK PREDATORS IN MANITOBA**




**Map 1 Risk of Wolf Damage in Manitoba**
**(Based on Compensation Payouts 1997-2001)**




**Map 2 Risk of Coyote Damage in Manitoba**
**(Based on Compensation Payouts 1997-2001)**