

# RAVENS



Cam Hill

Edgar Allen Poe wrote, “Quoth the raven ‘Nevermore’”. So far I haven’t been able to get that kind of a commitment out of the ravens. They are a stubborn lot, them ravens. And intelligent too. And they are costing livestock producers in this province, and around the world for that matter, a lot of money.

Common ravens are members of the Corvidae family. The corvids also includes crows, magpies and jays. Corvids are considered by many to be the most intelligent native wildlife found in British Columbia and among the most intelligent anywhere in the world, which puts them right up there with primates, dolphins and elephants. Ravens are one of the few animals to not only use tools to secure food but have been known to make tools. They have incredible memories, they plan ahead, are problem solvers, have a diverse vocabulary and a complex social structure. I’m pretty sure they don’t worry much about rising interest rates either, or too much rain or too little, or the cost of fuel. Quite possibly, we are not the most intelligent creatures on the planet. Ravens are long lived critters, averaging 10-15 years in the wild with the longest documented being 25 years old. You can learn a lot in 10-15 years, and these aptly coloured black villains have sorted out ways to take advantage of food opportunities and habitat variations created by farmers and ranchers.

Ravens have historically been known as scavenger birds; however, in recent years, there appears to be a bit of a noticeable shift in their behaviour from scavenger to occasional opportunistic predator. During the first three years of operation (2016 – 2018) the Livestock Protection Program averaged seven files per year that involve livestock losses to what we classify simply as bird kills.

No doubt a small percentage may have been attributed to eagle attacks as our verification records don’t further break down the bird species involved. Ravens, however, have consistently been identified as the culprit. I personally have verified over a dozen bird kills over the years and I don’t recall concluding that any were definitively eagle. In 2019, verified bird kills soared to 37 files in just one year. Since then, raven kills have remained between 20 and 30 annually. Awareness to the fact that compensation can now be paid for raven losses may account for more reports coming in; however, producers around the province are consistently reporting more losses and many are of the belief that there are just more birds out there. Increased attacks on livestock by ravens is not unique to BC. Reports out of Alberta, Saskatchewan and Ontario as well as several western states and others from as far away as Sweden and Scotland, have all indicated a substantial increase in raven conflicts with livestock.

Two trends are consistent; their feeding behaviours have broadened and populations are on the increase. One article that came out of southern California referenced a study that suggested their raven population increased by 7,600% over the last 30 years. That’s a big number. Have British Columbia’s raven populations increased? I am doubtful that counting ravens is

high on our government’s priority list and to suggest that is the case would purely be speculative. Anecdotal information, however, does lean in that direction.

A few years back I lost a yearling steer to wolves less than two hundred meters from my house. My wife and I had been away for several days and as we drove down our long driveway we were concerned when our headlights revealed wolf tracks in the snow up and down our road. I had a bad feeling and at first light I found the freshly killed steer piled up against a fence. The yearling had been hamstrung but hadn’t been fed on at all. I suspected the wolves got it just before we arrived home as the sign was fresh. I verified the kill, which of course involved skinning, and then I moved the carcass about half a kilometer away. I set up a trail cam on it as I was anxious to find out how many wolves I was dealing with. A couple days later I checked the camera and counted over 60 ravens in

one photo frame. I also knew that at least six eagles were feeding on the carcass. Ravens weigh on average a little more than three pounds and when feeding on a kill can remove or eat better than a pound a day. Eagles stash less but their daily consumption while on a kill will also exceed one pound.





- ① Bleeding from the eye can be profuse and death is quick. Cam Hill photo
- ② Tongues on calves killed by ravens are generally cut off clean or removed in chunks such as this. LPP file photo
- ③ Skinning around the impacted eye will show the extent of blood loss and bruising around the socket. Skinning the remainder of the carcass helps indicate no other predator involvement. Cam Hill photo
- ④ Raven beaks are sharp edged and very powerful. This one took out a calf's eye and then snipped through a tongue with the efficiency of a set of pruning shears. LPP file photo

The wolves never returned, likely due to suspicion over skinning and moving the carcass, nor did any coyotes approach the remains. In less than ten days the birds had picked the carcass clean.

But why more raven attacks on livestock? Again, we can only speculate. One possible theory may be a relationship between declining wild ungulate populations and this intelligent bird's ability to target an alternate food source. I am of the belief that if ravens are killing domestic calves, which are generally closely guarded by the mother cow, then it would follow that they would also kill the young of wild ungulates. Deer fawns and elk calves are considered "hidlers" for the first couple weeks of their lives. Moose calves tend to be more of a "follower" however they too are stashed for considerable periods of time during the first few days of their lives. The young of wild ungulates are born scentless and so mom knows that the less time they spend hanging out with the kids, until

they become more mobile, the less likely they will leave their scent in the area thus attracting predators. And would not a raven's bird's eye view result in a small percentage of these young being located and killed? Possibly. Fewer wild ungulates would also mean a decline in scavenging opportunities on both natural and human caused mortalities. Again this equates to less available food for ravens which could cause them to seek options elsewhere. The elimination of open landfills and garbage receptacles as well as improved burial practices of dead livestock and road killed wildlife would likely also be factors. Ravens adapt well to agricultural caused changes in habitat. Power poles, hay sheds and other structures make for good nesting sites. Crop fields provide seeds, insects and mice that all contribute to the diet of these omnivorous birds. Cow pastures provide undigested offerings in dung piles as well as insects such as dung beetles that that are at work turning manure into soil nutrients. And of course

there is deadstock carrion and picking from birthing areas. Irrigation systems too offer water in areas that may have otherwise been too arid.

With experience and motivation ravens are skilled predators. In some areas, rodents and small birds are a large part of their diet. A Vanderhoof producer recently watched through binoculars as a mother cow was calving up on a hillside a few hundred meters away. The calf had not yet cleared the birth canal when a raven landed beside it. The calf was born successfully and a few moments later the producer jumped on his quad and drove up to check on it as it hadn't moved much. He found one eye gone and the tongue snipped off. That seems to be a common M.O. amongst ravens. Verifiers will find an empty eye socket with considerable blood on the face, the end of the tongue will almost always be snipped off (likely a little bawl by the calf results in the tongue protruding), next the bird will go for the soft tissue

of the navel area, the rear vents and, on fresh newborns, will also peck the soles of the feet. The majority of raven caused mortalities are on young calves less than a week old. Cattle of all ages however, have occasionally been found with holes burrowed through the hide along the back. It is generally determined that the health of these animals has been previously compromised in some way which has reduced their ability to move or fend off the irritating bird. If a compromising health factor has contributed to the loss of cattle or sheep then compensation payments will generally be denied.

When verifying a raven kill, it is always good to first take a photo of the calf where it lies which should show extensive bleeding from the eye socket. The ophthalmic artery provides blood to the eye and is the first branch off the carotid artery which has the ability to move a lot of blood in short order. Death is quick. On a verification I like to see the eye socket skinned back which will reveal the pooling of the blood in the socket and also will generally show perimeter bruising (helps to indicate that the heart was beating at the time of the attack). It is good then to take a photo of the tongue, the navel, the rear vents and the soles of the feet. Of course ravens will also peck the eyes of calves that were born dead or died from some other cause. These extra photos help sort out the sequence of events. Some verifiers will also cut out a piece of lung and float it in a bucket of water to help determine whether the calf had ever taken a breath.

Is it possible to reduce losses to ravens? Generally it is only one or two birds in a particular area that are the trouble makers who do the actual killing. Most producers will never have losses to ravens but those that do will often have several. As with predators of any species certain individuals seem to perfect a method that works for them and become quite proficient at it. So what else can we do? Minimizing losses to ravens may be one of the most challenging of all predator conflicts to deal with. Following are some suggestions that may provide some level of success in reducing losses to ravens.

### **Deadstock Management**

There is some belief that predators may not recognize livestock as food until they taste it. Proper disposal of the carcass such as burial, compost and removal are essential. Ravens feeding on carcasses can also act as a signal to other predators that a food source is nearby.

### **Best Management Practices on Calving Grounds**

BMPs include minimizing attractants as much as possible. There has always been much discussion as to why some cows eat the afterbirth after they've calved. One theory is that it is part of the bonding process but that doesn't explain the bonding that occurs amongst those pairs where the afterbirth is not consumed. Some feel that it is done to take advantage of the specific nutrients contained in the placenta that the cow craves postpartum. I believe the most probable theory is a cow's natural instinct for predator avoidance. Remove the attractants. It is in a producer's best interest to keep the calving area as free of placenta as possible. Sick, injured and/or calves with scours can also be attractive to ravens and it is best to keep them away from the newborns.

### **Frightening Devices/Scarecrows**

Frightening devices modify bird behaviour and discourage birds from feeding, roosting, or gathering. Novel sounds and visual stimuli may cause avoidance responses in birds and offer temporary protection from losses for a few days or weeks. Frightening devices used to disperse ravens include propane cannons, lasers, scarecrows, and flashing lights. Constant harassment of ravens may encourage them to disperse from a small area. The use of scarecrows goes back over 3000 years. As the name depicts (scarecrow) seems to have a historical roll in keeping the corvids away from crops. I have used scarecrows with some success to keep moose and elk out of stored hay and to keep deer out of gardens. I am confident that their presence in calving areas would also keep ravens on edge.

### **Effigies**

This spring I spoke with a frustrated producer up in BC's Peace region who had recently lost two calves to ravens. Much like wolves, if ravens figure things don't look right they become wary. I suggested cutting up a few pieces of black plastic garbage bags and attaching them to posts in a manner that might represent a dead raven or crow dangling. She did and a recent follow up phone call with her indicated no further losses and definitely less bird activity.

### **Protected Birthing Areas**

Selecting calving areas away from forested areas or prime wildlife habitat areas, particularly if calving later in the spring when nesting and feeding of chicks may be occurring, has also been recommended.

### **Mitigation**

Ravens can only be proactively hunted in Wildlife Management Units where an open season exists. Ravens found and killed while menacing livestock, where or when no season exists, technically must be reported through the RAPP line.

Ravens, like all native wildlife in this province, have a special place in the environment. They are an amazing bird and their presence should help ensure that our on farm best management practices are the best they can be.

*Further information about the Livestock Protection Program can be found on the BC Cattlemen's website at [www.cattlemen.bc.ca/lpp](http://www.cattlemen.bc.ca/lpp). For incidents of cattle or sheep losses, injury or harassment where wolves, coyotes or birds are suspected please call our toll free number 1-844-852-5788. For incidents involving other wildlife such as bear and cougar please contact the COS RAPP line at 1-877-952-7277.*