

Our Feathered Friends



One of the birds I most enjoy watching on the Chippewa National Forest is the Common Raven. Perhaps it's their interesting way of "talking". Ravens have over 30 different calls, a combination of gurgles and croaks and all kinds of noises, and they take on local dialects. Or maybe it's the fact that they make flying look like so darn much fun. One once flew for several miles in front of me along the Winnie Dam Road. That

bird could turn and twist, flap and glide in such an effortless manner. It's hard to believe he was averaging 40 miles an hour. Ravens dive and roll, and can even fly upside down. Their courtship flights are acrobatic.

A very smart bird, ravens are known to play. One favorite game is to fly around dropping and catching things. Ravens have been seen hanging upside down by one or both feet. They are known to peck predators on the tail, and have been observed sliding down inclines on their bellies.

These large, black birds can be distinguished from their smaller crow cousins by their size, ability to glide (they don't always have to flap when they fly), and larger bill. We have ravens year-round on the Chippewa, although ravens are both permanent residents and migratory in northern Minnesota. They are associated with our mixed conifer-deciduous forest and boreal forests of the north.

Young ravens are known for their apparent curiosity. They use their beaks to check out almost all new objects they encounter; gradually learning to distinguish what is edible. Ravens are omnivorous, and opportunistic. They will eat rodents, birds, insects, grains, fruit, garbage, and carrion.

Raven pairs are territorial, and they stay together year around. Ravens often forage in what are termed "crowds", which are especially comprised of juveniles and non-breeders. These young birds apparently summon each other through calling, which allows them to form loose groups which may overwhelm the local territorial pair as feeding opportunities arise.

Ravens store food in caches, and can not only relocate food they have stored, but recall the locations of other birds' cache sites. These crafty birds attempt to evade others when caching prized food, yet in the presence of others, will actually cache inedible items or items of low food value.

Ravens are probably most familiar to us in their role as scavengers. We often see them along roadsides, picking at road-killed deer. They will systematically follow roads and highways, searching for feeding opportunities. Despite their strong beaks, ravens are not capable of opening up a deer carcass on their own. They must rely on carnivores or other scavengers for access. They are known to follow wolves to scavenge on leftovers. On the Chippewa, you often see them feeding near eagles. When you see several ravens feeding in this way, the most dominant raven will occupy the top of the carcass.

During deer season, I get a kick out of watching the ravens, crows, eagles and other scavengers as they discover the tasty morsels represented by the gut piles our hunters leave in the woods. I've long viewed this food source as sort of a bonanza for such birds, and more than once have spent time watching for the birds to come in after my hunt. From my deer stand, I enjoy watching the ravens patrolling, with their quirky gurgle and ability to turn on a dime when they spot something.

One year when I saw a bald eagle come soaring in just moments after a shot, I thought for sure that bird had learned to associate rifle shots with this food source. Another year a couple of Gray Jays were on my kill even before I could finish getting the animal opened up. It amazed me they had so little fear that they would slip in for a little taste as I worked to field dress the deer. Magpies are not real common in our area, but they have a way of showing up when a deer is being butchered. Even the tiny red-breasted nuthatch makes the most of this resource.

So it was with considerable sadness that I learned of the hazard this food source may actually represent to our feathered friends. This story is well covered in the Sept/October 2013 issue of *The Minnesota Conservation Volunteer*. Years of research at the University of Minnesota Raptor Center has led to the discovery that the lead ammunition we use to shoot our deer is responsible for lethal lead poisoning in about one quarter of the sick or injured bald eagles admitted to the Center during the study period. There is, of course, no way to know how many birds have been affected that were not found.

These eagles were particularly associated with the northern half of Minnesota, where deer hunters use primarily rifles to take their deer, as opposed to shotguns and muzzleloaders. A lead fragmentation study conducted by the Minnesota DNR helps to explain what is going on. You can find the full report of this study on the DNR's website. This study found that lead rifle bullets that we use to shoot our deer fragment as they make their way through an animal's body. Some bullets fragment more than others. Lead-core rifle bullets designed to rapidly expand (and deliver a humane and lethal shot) result in the most lead being deposited in the animal's body. Eagles, and very likely other scavengers, are picking up this lead when they feed on what is left after hunters field-dress their deer, and they are developing toxic levels of lead in their blood.

The DNR study reveals that there are a surprising number of lead fragments being deposited in the meat in this fashion, and they are travelling farther from the bullet's wound channel than you might think. The lead particles can be deposited throughout the body cavity, as well as in the meat even 14 – 18 inches away from the wound channel. Rinsing the body cavity can result in spreading the lead even farther, rather than removing it. There is a potential human health

concern as an element to this story because the lead particles are so small that they are not detected by the palate. In other words, you will not see them when you clean your deer, and you will not find them when you eat the meat. Various studies have revealed lead particles in processed venison at rates as high as 20 – 60% of packages tested. Ground meat has a higher tendency to contain lead fragments than do other cuts.

The more information that comes in and the more I read and reflect on this topic, the increasingly uncomfortable I have become. I hunt for a variety of reasons. I love my time in the woods. I love the view from my deer stand. I enjoy watching the birds, and the rise and set of the sun. I enjoy taking my rifle for a walk, and seeing what awaits us there. I like it when I find my deer, and drop it well. I love provisioning for my family. I like to butcher. I like to wrap up what I view as good, healthy meat into neat, white packages. I like the sense of satisfaction that comes from a well-stocked freezer.

We consume a steady diet of venison at my house, and I have been glad to live my life in that way. I don't intend to give up any of this, but I do not want to be weighed down with any level of concern for the implications of long-term exposure to lead contained in meat harvested in this manner. I simply cannot bring myself to knowingly consume lead in my meat, let alone put it on the table for my family to eat. Further, the idea that I may be contributing to the non-target deaths of birds I do so enjoy really takes the fun out things for me, and frankly, violates my conservation ethic.

Fortunately, there is an alternative available in the form of non-lead ammunition. I am taking this opportunity to try something new, and have recently picked up my first box of copper rifle cartridges. I went on-line to do a little research, and pick the bullet design that is most likely to be effective for me. These copper bullets fragment very little, and leave no lead in your meat. It cost me about \$14 more for the copper than it would have for my usual lead bullet choice, which amounts to about 70 cents more per shot. It's going to cost me a little bit more as I help to replace my husband's lead ammunition with copper, as he carries a variety of rifles, and has agreed to try something new, as well. I regard as priceless the peace of mind it will bring me on behalf of myself, my family, and my feathered friends.