This information is taken from the Four Seasons Environmental Centre materials prepared in 2007. Many thanks to Ken Duncan and Kela Graphics for spearheading the project and Glen Hvenegaard, Chad Winger, Susanna Bruneau, and Kim Macklin for the research and writing on the FSEC project.

The FSEC was a project of the Rotary Club of Camrose funded in part with a Government of Canada Rural Economic Development Grant.



Wildlife Management





Red Foxes

In 1952, a province-wide rabies control campaign targeted skunks, porcupine, and canines like wolves, coyotes, and foxes. Though wolves and coyotes are smarter and did not take the bait as readily, foxes were more easily coerced. This campaign decimated the population of red foxes in the Camrose area. Even up to ten years ago there were not a lot of foxes in the Camrose valley.

The red foxes are now common in the Camrose valley and surrounding area. A survey conducted last summer indicated that there were approximately 10 dens in the Camrose greenspace corridor. The coyote is a natural predator of foxes, but (in Camrose) will not enter into the city. Thus, the foxes are safe from predators within the city's corridor. Though there is not an overabundance of these mammals, some of the interactions between humans and foxes have caused some grievance in the community.

Foxes are very good at what they do. They are tolerant, smart, and very versatile. These qualities make them good hunters and scavengers. They eat mostly smaller mammals such as the Richardson Ground Squirrel (and other related species commonly known as gophers). However, when they adapt to the urban environment, this can lead to problems. They will scavenge in garbage, and may even make off with small dogs and cats. Domesticated animals no longer possess the knowledge to fight wild animals.

Fox dens are often located in inopportune places as well. A den near a roadway can be a problem, for both the foxes as well as humans. As foxes cross roadways in search of food, accidents occur. Non-lethal, but often disabling accidents means animals must be

euthanized. However, should a vixen feel that she and her litter of kits are threatened, she will move them to a different place. A male dog or fox (or human) leaving a mark or territory on or near the den site is one of the main initiators of this response. Human intervention is also possible through trapping and relocating them to another area.

Though foxes are wild animals, they are easily habituated to human presence. On the other hand, fear of the foxes is almost an irrational fear. Being quite a bit larger than the foxes, humans could, under most circumstances, easily spook or scare off any seemingly troublesome fox. It is a small dog, and responds in much the same way ¹.

As foxes are scavengers, readily available sources of food encourage their presence. To discourage foxes from using on human food, pick up after picnics and other outdoor eating events, store garbage in appropriate containers, and do not place excess pet food outside ²

Most of the management issues surrounding foxes in Camrose revolve around the intolerance of people toward the wildlife. Some people do not like having wildlife wander around their house, live under their deck, or eat their garbage. Secondly, they don't understand the animal. This breeds fear. Having a greenspace is not just about having a nice pond with ducks. With it comes the wildlife looking for homes and spaces to rear their young ¹.

Mule Deer

Around 10 years ago, there were not too many deer wandering the valley. However, in recent years, the population has increased. The main factor involved in this increase is the number of consecutive mild winters. This enables the deer to live longer and to have more fawns; most of the does here are having twins, instead of the usual single fawn. Lack of limiting factors, such as predators and harsher weather conditions allow the population to increase. Deer from the surrounding area also move in, further increasing the population.

In the deer society, males are only around for the rutting season. Otherwise, they take off on their own, and the does and young band together, in family groups, or larger herds. It is a matriarchal society where the does teach the younger deer.

The deer found in the Camrose valley are mule deer (Odocoileus hemionus). White-tailed deer (O. virginianus) are present outside of the valley and prefer the open. White-tailed deer tend to be

wilier, making them a bit harder to manage. There also seems to be some sort of territory established by the mule deer in town. The nature corridor through Camrose would be a good habitat for the moose and white-tailed deer, but the mule deer appear to be keeping some sort of dominance in the valley ¹. Wild mule deer are naturally more docile, but even more so when more habituated to humans. Does like to habituate with people, and start to not pay humans much heed.

The issues in deer management are many. Two main issues in Camrose are "problem deer" and safety concerns. Increased deer populations mean an increased likelihood of collisions involving deer. No human fatalities have yet occurred in town due to the slower speeds. As well, deer pose less danger in collisions, unlike with larger species, such as moose. Deer involved in vehicle accidents don't often die, but are severely injured, meaning those animals will be euthanized, or they manage to limp off somewhere in the bush and die. To decrease the local population, a managed cull (killing a selected group of animals) of some of the older does was conducted in 2005.



"Problem deer" complaints are caused by a number of issues. First, with a larger population, deer search to find new food sources. These "sources" often end up being people's gardens and flowerbeds. This is especially true in spring, before the wild grasses have started growing. Tulips and other early bloomers look like prime food to the deer. Another cause of "problem deer" is the intentional feeding of deer, especially in the urban environment like backyards. One person may enjoy having deer around does not mean that their neighbours do. Plus, these deer may also cause additional problems, such as garden and property damage.

Reports of "problem deer", more often than not, are the result of intolerance of and lack of knowledge about the ungulates ¹.

To minimize intrusion and damage done by deer, developers and citizens could use plants deer dislike, such as conifers, as well as a variety of perennials and annuals ².

American Crows

A couple years ago, the city began a crow nest removal program, asking citizens to report any observed crow nests. Not only were crows becoming too numerous, but often hazardous, by divebombing people ¹. This is because urban crows are habituated to people and do not fear us, which makes them more aggressive ². The city and Fish & Wildlife officers actively destroy crow nests in town as well as just outside of town. A flock of about 20 birds was culled in the summer, under controlled circumstances, in the river valley ¹. Other methods, such as scaring with pyrotechnics and electronic devices are also possible, but may not be as effective. Citizens can help minimize crow disturbance in an area by limiting the anthropogenic food sources. AS well, citizens can make sure garbage is stored in garbage cans with tight-fitting lids, and do not leave pet food out ².



Beaver

Beavers in the area were completely wiped out during the trapping era. In that period of time a beaver pelt was worth \$75, which was a whole month's wages. However in the 50's and 60's, they were re-introduced. Beavers were protected until about the 80's. During this time, prices (and demand) for beaver pelts fell to roughly \$20, barely worth the time it took to prepare the pelt. Now, there are beaver hunting licenses available, but are not very valuable.

The main source of beavers (in our case, the Battle River) is the young beavers looking for territory. A pair, a male and female, finds some flowing water, builds the dams and a lodge. There is the main dam, but there are a series of other dams downstream put up as secondary dams. Not only do beavers need trees for all these dams, but also for the lodge and food. This requires a lot of trees

Today, beaver are viewed as agricultural pests as their dams flood fields and de-forest river banks and riverfront property. Any trees that are sweet, such as crabapple and some exotic trees are favorites, though they naturally prefer poplars and willow. Efforts are made through use of backhoes and dynamite to get ride of the dams. Some trapping and shooting of beavers also takes place to temporarily remove the perceived problem. But, more will move in.

In the Camrose Creek system, from the Lyseng Reservoir to the Battle River, a number of habitats exist. North of the city, agricultural land tilled to the banks of the creek leave tall rushes and grasses. Further down, the creek passes through aspen forests. In the city, some trees are available. South of city, the creek runs through the aspen forest before entering the Battle River. Areas where aspen forests border the creek, significantly more dams and food caches are found ³. In the aspen forest, there are around 2.6 active dams per kilometer and 1.0 food caches (representing one colony of beavers) per kilometer ³. Lodges were also more abundant in aspen forest habitat, around 1.2 per kilometer ³. In one lodge, there can be up to six beavers: parental pair, yearlings, and new kits.

The county of Camrose and private landowners use various forms of beaver management. The two most common methods are dam removal and harvesting 3. Within the city limits, dam removal is done either manually or through the use of back hoes. Further south along the creek, the County uses dynamite to remove dams more quickly 4. Harvesting of the beavers is done either through controlled shooting or trapping. City or county officials, as well as individual landowners are all able to harvest 4. Live trapping using "suit case" traps is also used by the city. This form of management is limited as there are a limited number of places to relocate the beavers. The beavers' territoriality would prevent the relocated beavers from integrating into other colonies 1,4. Camrose has also placed PVC piping through dams to allow continuous water flow to help avoid flooding of areas and to increase water flow. The technique is only temporarily effective as the pipes are quickly dammed by beavers 1,4. The city has also used the beavers' dislike of conifers as a management method. Planting of coniferous trees along the banks may force the beavers out of the area 4.

Population Density * People /Square Kilometre



