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LIVING

Threats and success stories

Some Kawarthas area birds and animals are in real danger, but others are thriving

As I sit down to write my first column since last spring, I would like to thank the guest columnists who did such a great job filling in for me during my absence. They are John Bottomley, Paul Elliott, Martin and Kathy Parker, Jim Schaefer, Rick Stankiewicz, and Fred Helleiner. The break from the column allowed me to devote most of my time to my new book, Nature's Year in Central Ontario, which is due out in the spring.

Drew Monkman
OUR CHANGING SEASONS

The opportunity to do research for the book provided me with up-to-date information on how central Ontario's flora and fauna are faring in this age of climate change, increased urbanization, and habitat transformation and loss. As you will see, not all of the trends are negative. However, there are still many reasons for concern. I would like to start today by looking at our birds and mammals.

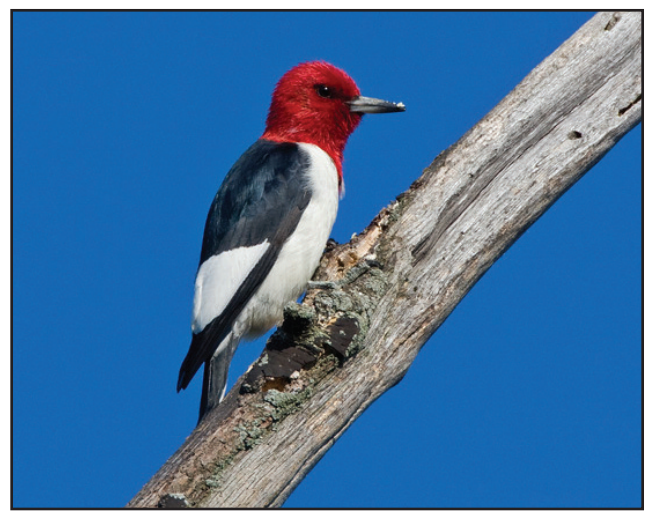
BIRDS

In the Breeding Bird Atlas project from 2001 to 2005, birders from across the province logged more than 150,000 hours of time in the field, assessing how bird distributions and numbers have changed in Ontario since the first Atlas (1981-1985). First, the good news. The data indicate significant increases in raptors (e.g., merlin, bald eagle), resident species (e.g., house finch, northern cardinal), and some introduced species (e.g., trumpeter swan, wild turkey). Big birds, too, seem to be faring well with 11 of Ontario's 12 heaviest birds showing a marked increase in the past 20 years. Among these are the sandhill crane and turkey vulture, both of which are now much more common locally. As for forest-dwelling birds, the picture is more nuanced.

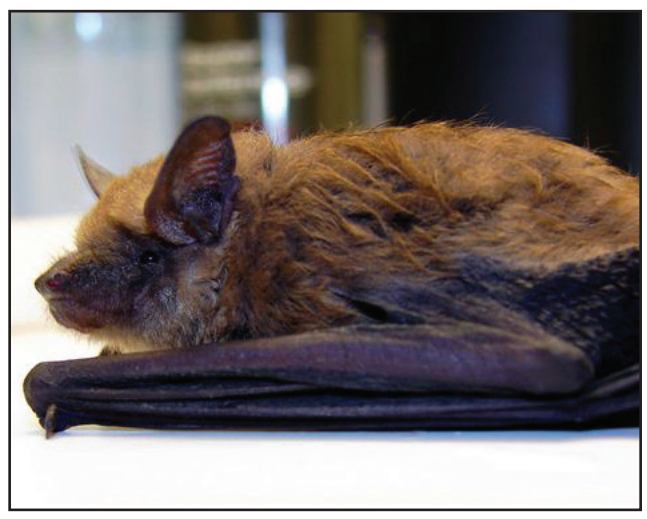
Although more forest birds have increased than decreased in the past 20 years (e.g., blue-headed vireo, pileated woodpecker), there are still many woodland species that are declining. Cerulean warblers and red-headed woodpeckers are experiencing an especially precipitous drop in their numbers. Red-bellied woodpeckers, however, a species formerly restricted to hardwood forests in the extreme southern part of the province, have dramatically expanded their range northward into many parts of central Ontario including Peterborough County.

A major decline, however, is occurring in birds that depend on grassland and open country habitat. A grassland can be an old field that is no longer being farmed or even a hay meadow. A few of the many species that depend on this habitat include killdeers, meadowlarks, and bobolinks. The decline is partly due to the fact that woody vegetation is invading grasslands in much of eastern North America, thereby making the habitat unsuitable for these species. In addition, hayfields where some grassland species nest are often mowed during the breeding season which destroys the nests. Grassland birds are also threatened by changing agricultural practices such as intensification and its high inputs of fertilizer, pesticides and mechanization.

As I have often pointed out in this column, aerial foragers – birds that feed on the wing by catching flying insects - are also experiencing a serious decline. In Ontario, all 10 species belonging to this group declined between 1985 and 2005. No species increased. In fact, nighthawks, chimney swifts, and bank swallows showed a greater decline than all other species of birds in the province. Whip-poor-wills, chimney swifts, olive-sided flycatchers, along with all of the other swallow species, were not far behind. Although the reasons for the decline are still unclear, it is possible that the flying insects on which these birds feed are being negatively affected by everything from habitat loss and climate change to the quality of the air and water.



KARL EGRESSY photo



KARL EGRESSY photo

Species like the river otter (top left) and merlin (right) are making successful comebacks in Ontario, but the red-headed woodpecker (top right) and big brown bat (above) are in decline.

MAMMALS

With the exception of bats, central Ontario's mammals appear to be faring relatively well. The river otter, for example, has been expanding its range in recent years and is increasingly common in areas south of the Canadian Shield. This species can be seen in many areas around Peterborough including the Otonabee River and even in Little Lake on occasion. Another member of the weasel family, the fisher, also seems to experiencing a bit of a population boom. In the early 1900s, fisher pelts were in such demand that the animal almost became extinct. However, according to Don Sutherland, a zoologist with the Natural Heritage Information Centre here in Peterborough, fisher populations have increased naturally in recent decades thanks to a number of factors including more forest habitat and lower snow depths. Like the otter, the fisher has now expanded its range well south of the Canadian Shield.

There is a general perception among many people that black bear numbers, too, have increased significantly. Clearly, a rise in the number of permanent and summer residents in cottage country is resulting in more bear sightings but this on its own does not necessarily suggest more bears. There is, however, good evidence that along the southern part of the animal's range, namely the southern edge of the Canadian Shield that includes much of the Kawarthas, the bear population has been slowly growing over the past 20 to 30 years. As abandoned farmland returns to old field habitat, it provides much better habitat for bears. Raspberries, aspen, and hawthorn all grow in this habitat to provide food and cover.

Coyotes, too, seem to be increasingly common in the Kawarthas. They are often heard calling, even by people living on the outskirts of Peterborough. The genetic makeup of these animals and their close relationship to wolves is interesting. Let's turn to the wolves, first. Through genetic analysis done by Brad White and Paul Wilson of Trent University, it has now been established that the wolves of central Ontario, including Algonquin Park, are not a small race of the grey wolf, as previously believed. Rather, they are a totally separate species. They have now been given their own name, that of eastern wolf (Canis lycaon).

The eastern wolf is smaller than the gray wolf and has a grey-reddish coat with black hairs covering the back and sides of the thorax. Western coyotes are closely related to the eastern wolf; consequently, the two species readily hybridized when western coyotes expanded into southwestern Ontario in the early part of the 20th century. The presence of wolf genes explains why eastern coyotes are bigger and darker than their western cousins. In fact, all wolf and coyote-like animals in central Ontario contain, to varying degrees, both coyote and eastern wolf genes. Depending on the habitat, one or the other is dominant. In more open, agricultural areas, the animals contain more coyote genes. In forested, northern areas, wolf genes are more dominant and the animals are slightly larger and heavier. Coyotes and wolves play an important role in the ecosystem. By killing raccoons, for example, coyotes indirectly benefit songbirds and turtles whose eggs are often preyed upon by this species

The local mammal scene is also seeing the arrival of three newcomers. Between 2000 and 2001, 120 elk were released in the Bancroft area. In 2010, the population was estimated to be as many as 766 animals. They can sometimes be seen grazing in fields in the Bancroft area including along Hartsmere Rd. at the north end of Lake Weslemkoon. Cougars, too, seem to be turning up with increased frequency in central Ontario, although the origin of these cats is still unclear. Many of the sightings have come from the counties of Peterborough, Haliburton and Kawartha Lakes. However, only a relative handful have been confirmed by photos, track marks, or DNA taken from scat (droppings) or other body parts. Finally, the Virginia opossum, a marsupial that is native to the southeastern U.S., is becoming increasingly common. Opossums regularly turn up right in Peterborough. Climate change and the resulting milder winters is a probable explanation for the specie's northern expansion.

The tragic news when it comes to mammals has to do with bats. White nose syndrome (WNS) has already killed over a million of the animals, especially in the northeastern U.S. where bat populations have been affected the longest. Bats with WNS are being observed to wake up far too often during hibernation and to stay awake too long. Being overly active depletes their stored fat reserves prematurely and, since no insects are available in winter, they end up starving to death. It now appears clear that the fungus itself kills the bats.

In research published in the journal Nature just last month, healthy little brown bats that were exposed to pure cultures of the fungus developed WNS. The researchers also confirmed that WNS can be transmitted from infected bats to healthy bats through direct contact. In 2010, WNS was detected at a number of hibernating sites across central Ontario, including a cave in the Bancroft area.

I received an email this summer from a long-time cottager on Salmon Lake who told me that this was the first summer in 50 years that there were no bats swooping over the lake at sunset. The closest known bat hibernaculum to Salmon Lake is less than 10 km away and is known to be "positive" for WNS. Another account from a biologist who has cottaged on Georgian Bay her entire life reported a total absence of bats this summer, when normally they would be abundant. A biologist friend who has been cottaging in southeastern Georgian Bay her whole life reported to me that she didn't see a single bat this summer, when normally little and big browns, at least, are omnipresent. Next week, I'll turn my attention to the other animal groups.

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Karl Egressy is a Guelph nature photographer. To see more of his work and to contact him, go to www.kegressy.com.