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## The great grey invasion

Mysterious visitors on silent wings from the trackless expanses of Canada's boreal forest are among us these days. Bringing with them the wildness and romance of their northern homes, great gray owls are drifting southward this winter and turning up all over Peterborough County, southern Ontario and much of the northern United States. Not since the winter of 1996-1997 have we witnessed such impressive numbers of this, the largest of our owls. Because the birds are so tame and sit out in the open, the coming of the great grays is a phenomenon that everyone can enjoy, usually from the comfort of your car. Seeing a great gray is, without a doubt, one of the most rewarding nature experiences of the winter season.

Since mid-December, dozens of these fascinating birds have been seen in Peterborough County, with as many as 83 present on January 10. They are most often observed in open country, often close to a wooded area, and are usually perched on a tree, hydro pole or fence post. Many of the reports have come from Douro-Dummer township. Up until now, the birds have been moving around a great deal, but individuals may soon elect to settle down in one area for an extended period.

With an impressive wingspan of 54 to 60 inches, the great gray is the largest of our owls. However, both the great horned and the snowy actually weigh more. Along with its striking size, the great gray's most notable feature is the large facial disk, with dark gray concentric rings. The white mustache below the beak also stands out prominently as do the piercing yellow eyes. As with all birds of prey, the females are larger than the males. Great grays, which can live for 12 years or more, are also found across northern Eurasia.

Like redpolls and siskins, great gray owls are known as winter "irruptives", and the years in which they are particularly common are called "flight years". Most irruptive species breed in northern Canada and winter only intermittently south of the boreal forest. The great gray is definitely the most impressive and visible irruptive species to make periodic flights into our area. Large invasions occurred in the winters of 1978-79, 1983-84, 1995-96 and 1996-97 and were well-documented by Doug Sadler, a well-known local naturalist and writer. In the winter of 1995-96, Sadler received reports of no less than 330 different great grays in central Ontario.

Why is it that so many birds over such a large region suddenly decide to vacate their northern homes and head southward? Not surprisingly, like just about everything else in nature, the answer relates to food. The great gray's main prey species is the meadow vole, commonly known as the field mouse. In fact, this owl eats little else. When voles are abundant, usually in years when seed production is high, the owls will lay more eggs and fledge more young successfully. However, when vole numbers crash, the owls most head elsewhere for food. It is a myth that owls are forced south because of unusually cold weather or deep snow cover. These birds are fully adapted to winter conditions and, if prey populations are adequate, they prefer to stay put on their northern territories.

According to Dr. James Duncan, a biologist with the Manitoba Wildlife Branch and author of the book "Owls of the World" (Firefly Press, 2003), meadow voles in the boreal forest were very scarce this past spring and summer. In fact, he found that there was virtually no great gray owl breeding activity in the areas in monitored in Manitoba this year. However, the owls had fledged lots of young in 2002 and 2003 when voles were plentiful. This pattern of feast or

famine occurs on a regular basis and is the explanation behind the southward flights.

Great grays are masterful hunters. When you watch them, you can't help but be impressed by how focussed they are on the task of finding food. It's immediately apparent that they have one thing on their mind and it's not the human observer. Great grays hunt primarily by sound and are most active at night. However, when they are especially hungry, they will also hunt during the day. Thanks to incredibly sensitive ears, great grays can actually hear a vole's faint squeaks coming from under a foot and a half of snow 100 feet away. They then swoop down over the area where they heard the noise, hover briefly and then plummet headfirst toward the hapless target. At the last second, the bird thrusts its long legs forward and strikes the snow with its powerful feet. It then sifts through the snow with its toes until it finds its prey. Great grays can even break through an ice crust half an inch thick.

Look for great grays in open areas with lots of weeds, grasses and places to perch. The seeds are food for meadow voles. During the day, the owls are most active between dawn and 10 a.m. and then again after 2 p.m. When it's overcast or snowy, they may be active all day long. Even though the great gray is amazingly tame, try to stay a reasonable distance back in order to allow the bird space to rest and hunt. You can still get very good looks without getting too close and forcing them away. Remember that they may already be stressed from hunger and from being away from their usual habitat. Janice Enright, of the Muskoka Centre for Wild Birds, writes that great grays require three or four 40 gram rodents daily and if a person is closer than 100 feet, this may well interfere with the owl's hunting, causing it to miss valuable meals.

It is extremely important to slow down whenever you see an owl along the side of the road. These birds are unfamiliar with automobiles and are only intent on listening and watching for prey. Flying with their head down, their hunting path often takes them directly across roadways and directly into the path of an oncoming car. Many birds have already turned up at raptor rehabilitation clinics in the northern states. Doug Sadler reports that in 1995-96, at least 15% of the owls in central Ontario became known traffic casualties.

Whether you're a birder or not, keep your eyes open this winter for these regal wanderers from the northern wilderness. Who knows when they will be back again?

## What to watch for this week:

You can take heart in the fact that the days have already begun to lengthen quite noticeably. Since the winter solstice on December 21, we have already gained more than 30 minutes of daylight. Although the sun rises only two minutes earlier than a month ago, it now sets about a half hour later.

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