

# The Outside Story

## Snowy Owls Irrupting

By Meghan McCarthy McPhaul



Here's a quiz for Harry Potter fans: What kind of owl played Hedwig in the movies? If you guessed a snowy owl, you're correct. With their bright yellow eyes, bulky-looking bodies, and white feathers that cover everything from their beaks to their large feet, these owls strike an impressive pose. And this winter, we may have a greater chance of glimpsing one of these amazing raptors from the far north.

Although they breed high in the Arctic, many snowy owls (*Bubo scandiacus*) fly south for the winter – at least as far south as northern New England and New York (and, yes, occasionally a snowy finds its way to Great Britain). In some years, a greater number of snowy owls migrate from the north and travel farther south than usual in what's known as an irruption, and this winter is shaping up to be one of snowy owl irruption.

"There clearly are more birds coming this year than we've seen in a few years," said Kevin McGowan of the Cornell Lab of Ornithology, although he noted a general increase in the numbers of snowy owls that have been flying south over the past decade. "It seems they are coming further south on a more regular basis. I've seen a snowy owl 10 years in a row in upstate New York."

Snowy owls are the northern most breeding raptor in the world and are well adapted to the cold and harsh conditions of the tundra. While most snowies remain in the far north during the winter, hunting seabirds along the pack ice, the ones that venture south cause quite a stir. Irruptive winters tend to occur following summers of booming lemming populations in the tundra. One owl can eat upwards of 1,600 of the small rodents in a year, and owls adjust their clutch size based on the amount of food available to feed hungry owlets.

"In low years, they'll only lay maybe three eggs, and in really boom years they'll lay up to eight eggs," McGowan said. "Then you have eight baby owls, and then when those baby owls grow up, you have lots of competition."

That means more owls heading south in search of winter food. Adult females tend to stay closest to the breeding grounds, with males traveling a bit farther south, and young owls migrating the farthest. And for an owl that was hatched and reared in the tundra, the southern realm is a strange – and often dangerous – place.

"They have absolutely no idea what people are. They've never seen a car," McGowan said. "They're completely ignorant of what dangers there are."

This naivety results in many owls being hit by cars. Because they prefer wide, open spaces, many snowy owls end up at airports, where they can both be harmed and cause harm. Some airports, including in Boston and Montreal, have programs to catch snowy owls and release them to a safer place. Snowy owls also often show up on coastal dunes, along open lake shores, and in large agricultural fields.

“They don’t like the forest,” McGowan said. “They like to be out in the open country where they can see all around them. And they like to sit up high. You’ll often see them on the tops of buildings and silos.”

The snowy owl’s winter menu extends beyond rodents to include sea ducks and gulls. The owls are able to expand their hunting, McGowan said, in part because of their large feet and their wings, which are longer and narrower than those of most other owls. That wing shape allows snowy owls to fly fast enough to chase down their prey. The huge feet and large talons allow the owls to grasp mammals and birds that are far larger than lemmings.

Those feet, and the rest of the owl’s head and body, are encompassed by thick layers of insulating feathers, which make snowies the heaviest owl species in North America, at around 4 pounds. For comparison, great horned owls weigh in around 3 pounds, great gray owls (the tallest on the continent) are about 2 pounds, and barred owls typically weigh less than 2 pounds.

All those insulating feathers are part of what makes snowy owls so well-suited for life in the Arctic, but they can also cause the owls to overheat in warmer temperatures. McGowan notes that when the thermometer creeps above freezing, the owls will often sit on piles of snow to stay cool.

Females tend to have dark brown barring amid the snowy white. Young males also have heavy barring and generally become whiter as they age. Some adult males are almost entirely white. For those of you paying attention, that means Hedwig, who is a female character, was actually portrayed by a male owl.

*Meghan McCarthy McPhaul is the assistant editor for Northern Woodlands. The illustration for this column is by Adelaide Murphy Tyrol. The Outside Story is assigned and edited by Northern Woodlands magazine and sponsored by the Wellborn Ecology Fund of the New Hampshire Charitable Foundation: [www.nhcf.org](http://www.nhcf.org).*

**Northern  
Woodlands**

PO Box 270, Lyme, New Hampshire 03768  
[mail@northernwoodlands.org](mailto:mail@northernwoodlands.org) / 603-795-0660  
[www.northernwoodlands.org](http://www.northernwoodlands.org)

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