# Comparing the Great Horned Owl to the Snowy Owl By Michele Dixon **Environmental Education Summer 2006**



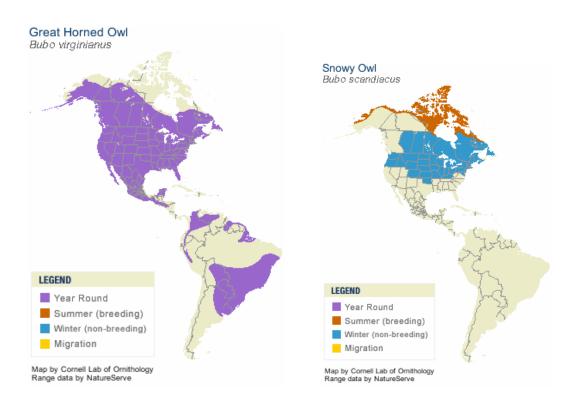


Comparative Chart:
The Great Horned Owl and the Snowy Owl are of the largest of owl species. The Snowy Owl rivals the Great Horned Owl in ferocity, and skill in hunting its prey.

Vital Statistics	Great Horned	Snowy White
Description	Large ear tufts. Bill dark in color:	No ear tuft. Bill dark in color;
	eyes yellow. Boxy shape. White	eyes yellow. Body white with
	patch on throat. Reddish face.	sparse light brown markings.
		Females larger and have darker
		markings than male.
Length/ tail length	45-63 cm / 17-25cm	50-71 cm / 21-27 cm
Weight	3-5lbs or 900-1800g	3-6 lbs or 1320-2690g
Wing Span	30-39 cm	39-45 cm
Range	Throughout Canada, Alaska, all	Primarily in circumpolar region,
	lower 48 US, and South America.	northern Canada and Alaska.
		Some winters in upper great
		lakes, northern plain states and
		northwest.
Habitat	Forest, desert, swamps, meadows,	Tundra, dunes, marshes, fields,
	plains.	sometimes airports.
Habits	Mostly nocturnal. 1-4 eggs;	Diurnal, hunts mostly during the
	incubation 28-35 days. 1 brood	day. Nests on the ground. 5-7
	per year. First flight about 50	eggs, incubation 27-38 days;
	days.	males feed females during
		incubation. First flight about 30-
		50 days.
Life Span	12 years wild; 35captivity.	9.5 years wild; 35 captivity
Voice	Series of loud, low hoots. Second	Mostly silent. Main call is short
	and third notes short and staccato.	series of long. Deep-pitched
		"hoooo, hoooo,"

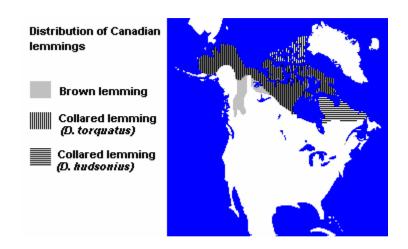
## **Comparing Range and Resilience:**

The Great Horned Owl is a resilient bird. There are about ten races of Great Horned Owls, occupying every distinct habitat within it's' range. The Horned Owl is a bird of trees, so its nests are found off the ground. It has adapted too many places and climates. Therefore is more of a resilient bird than the Snowy Owl. The Snowy Owl is an inhabitant of the tundra; it spends much of its life on the ground. The snowy owl is completely at home in the tundra. It suffers from lack of knowledge or instinct to survive well in different type of habitat. So the Snowy Owl finds some difficulty in acquiring sufficient food to keep it in good health when it visits south out of its natural range. As a result of the change it has a less rich diet and suffers from increase diseases, they become weak and debilitated. There is also an increase in the number of ectoparasites plaguing the owls when their resistance drops from being out of their natural habitat.



### **Generalist Verses Specialist:**

Food sources vary for the Great horned owl and Snowy White owl. Great Horned owls like most owls have high rates of metabolism that burns energy rapidly, forcing the owl to hunt and eat frequently in order to survive. The Great Horned eats an average of 15% of their weight in food intake daily. Therefore the Great Horned owl is not that picky about what it eats. It is one of the few animals that eat skunks. It could be then classified as a generalist. In which it will eats many different types of food so it can continue to thrive. Snowy Owls eating habits are different based upon the fact that it is more of a specialist and prefer to eat only lemmings. It has learned to adapt to these conditions. During the height of winter, Snowy owls may fast for up to thirty days. This is not likely by choice, but because few prey animals are available. In order to survive in such conditions, snowy owls have much higher levels of fat deposits then other owls and can respond to low food conditions by reducing their activity to a minimum, creating an almost torpid state that conserves energy.



To learn more about Lemmings: <a href="http://www.hww.ca/hww2.asp?cid=8&id=91">http://www.hww.ca/hww2.asp?cid=8&id=91</a>

#### **Adaptations:**

The Great Horned Owl and the Snowy Owl many similar adaptive qualities. Both owls have large eyes for keen vision, sharp beaks for tearing meat, large wings for gliding, and sharp talons for grabbing prey, camouflage colors for hiding, soft feathers for silent flight and dense feathers all the way to their toes to provide insulation against the cold. Owls have excellent vision, but can't move their eye sockets. However their flexible necks turn their heads 270 degrees. These owls also have excellent hearing with smooth symmetrical ears that facilitate pinpointing the site of prey. The special adaptation in the Great Horned Owl is it has no sense of smell that allows it to eat a variety of animals, including its favorite meal the skunk. The Great Horned Owls ability to eat many different animals has been the key to its survival in different habitats. The Snowy Owl special adaptation is how it uses fat left over from the summer to survive when the food is scarce. Instead of flying to keep warm, it stays as still as possible. This keeps energy to stay warm instead of using energy for flight.



#### Resources:

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