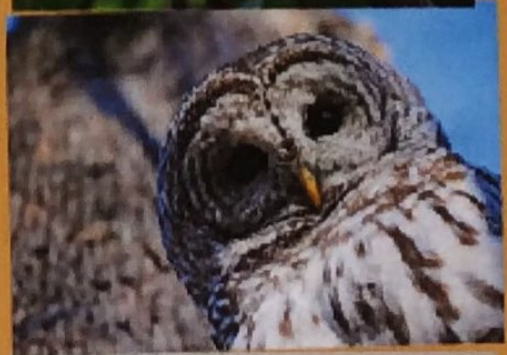
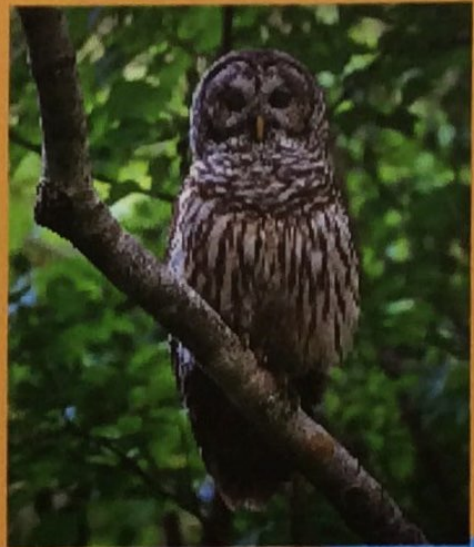
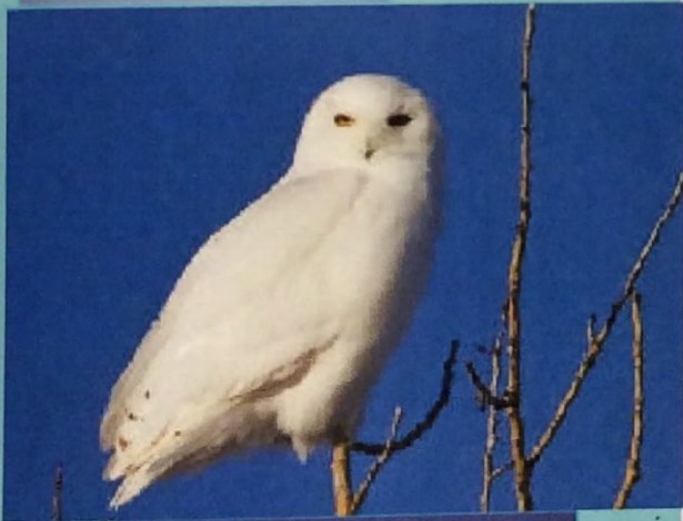


# WHO WOULD SURVIVE?

Snowy Owl vs.

Barred Owl



By Mrs. Tareen's Class

# Researched, written, and designed by:

Evolution/History

Habitat

Life cycle

Size/Weight

Diet/Food

Hunting

Communication

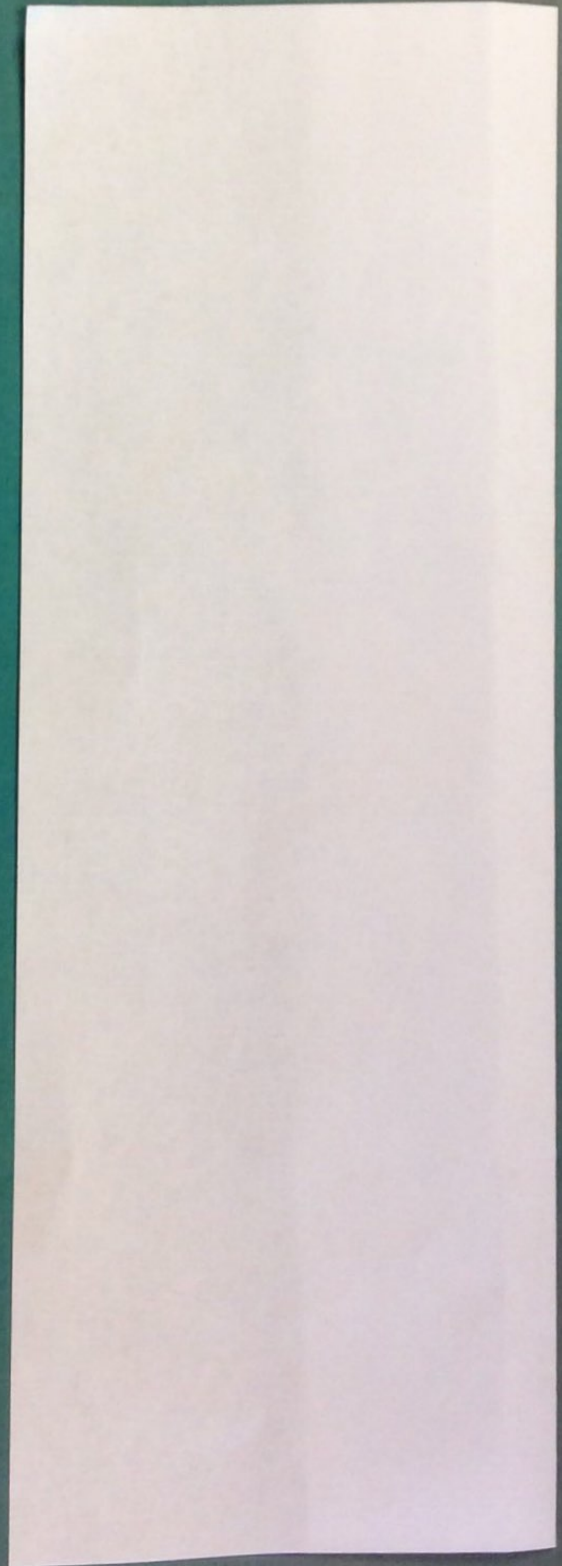
Predators

Defenses

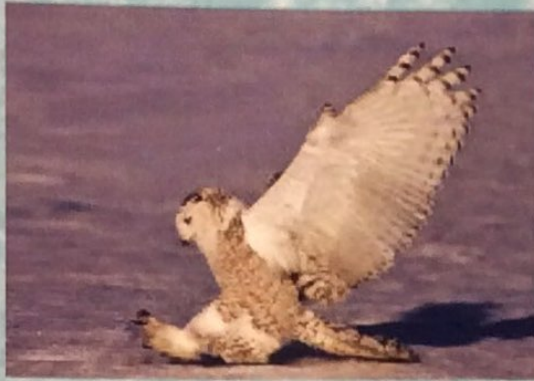
Adaptations

Biological Carrying Capacity

Cultural Carrying Capacity



# Snowy Owl Evolution



The snowy owl is very, very old and still remains on the Earth. They found owl fossils from millions of years ago in the Arctic, but not snowy owl fossils. This does not mean that the snowy owl was not there. It just means they haven't found them yet.

Owls grew shorter over time because of their need to fly.



Experts on owls think that they came from various species of birds. Some scientists said they were like an ostrich.

# Barred Owl History

The Greeks thought the owl was lucky because they were nocturnal and had a magical inner light that helped them to see in the dark. The Greeks thought when an owl flew over an army that was going to attack, it would give them luck.

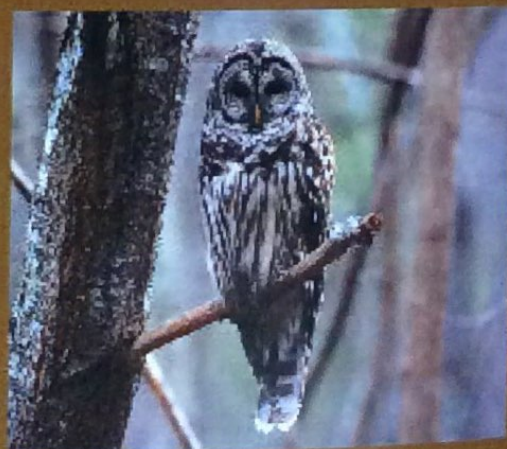
Most cultures think the owl is unlucky or evil because it is nocturnal.

Romans believed owls could keep evil away. They nailed a dead owl over their door to do this.



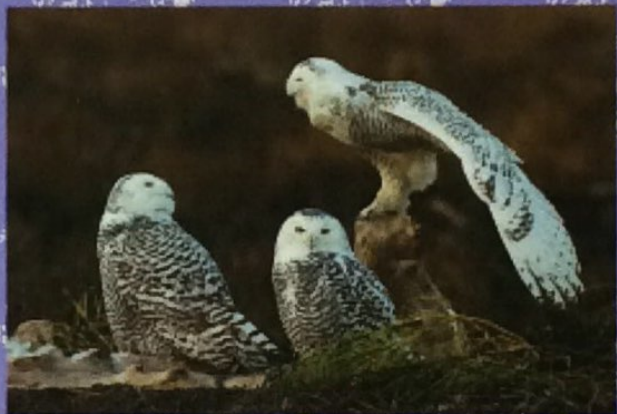
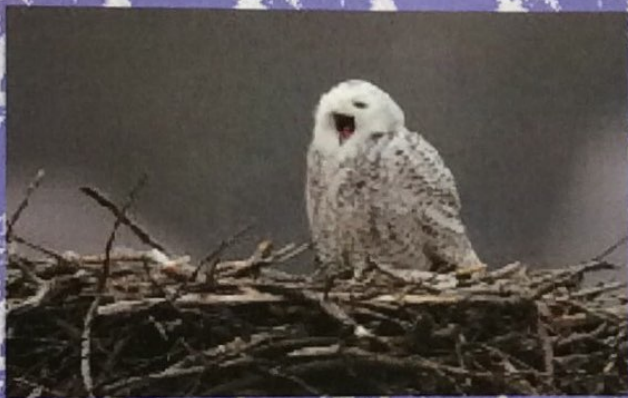
## Fun Fact

**ROMAN ARMIES  
MARCHED NORTH AND  
BROUGHT WHAT THE  
ROMANS BELIEVED IN  
TO EUROPE.**

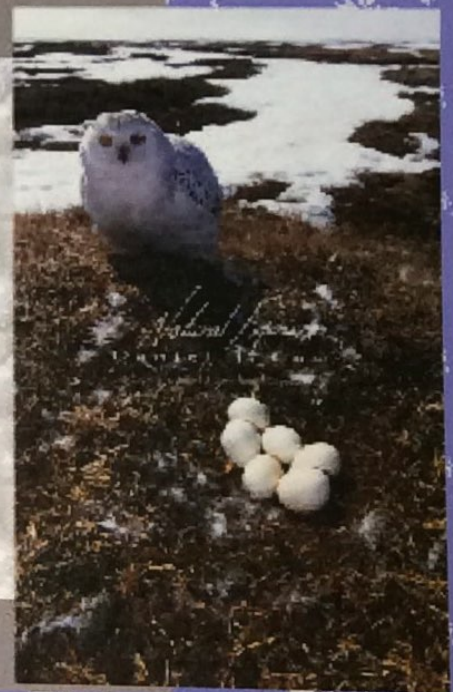


# Snowy Owl Habitat

Snowy owls live in the arctic tundra. They are far away from the people. Snowy owls are good birds, and they don't go in the forest. Snowy owls are primarily tundra birds.



Sometimes they live in grassland. During the winter, snowy owls often migrate south. They breed in the arctic. The female makes a small hole in the ground to put her eggs.



# Barred Owl

**Barred owls live in the woodland. They are far away, and they don't live close to people. Sometimes they migrate and live with their family. Barred owls live in the forest. They go by themselves when they hunt. They are near the water and near animals. Barred owls can be found from the east coast to the Rocky Mountains and from Canada to the Gulf Coast.**



# Snowy Owls: Life Cycle and Babies

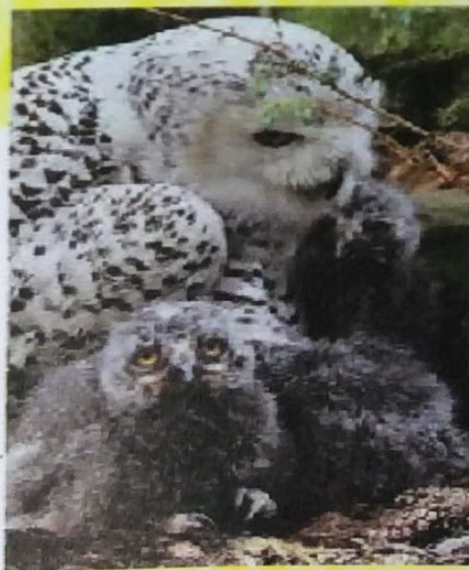
## Did you know?

The female lays 3 to 11 white eggs. They can lay up to 16 eggs if they have a lot of food. After 32 days, one egg hatches everyday.



Snowy owls live at least 9 years and 5 months. The oldest wild snowy owl lived for 28 years.

Snowy owls are covered with white feathers when born. The male hunts and gets food for the babies. The female will stay hungry to make sure her babies get food.



# Barred Owl Babies and Life Cycle

Did  
you  
know?

Eggs are long,  
about 1.7-2.2  
inches long  
and 1.5-1.8  
inches wide.



## Fun Fact

Only the female  
barred owl can sit  
in the nest.

Barred owls can lay 1 to 5  
eggs. Usually they lay 2-3.  
The eggs are laid from  
December until April. They lay  
eggs every 2-4 days.

The oldest owl on record  
was 24 years old!





# Snowy Owl

## Size and Weight



The snowy owl weighs 4.5 pounds. The snowy owl's wingspan is 48-60 inches. The snowy owls are 27 inches tall. The boy owls are smaller than the girls.

# **Barred Owl Size and Weight**



**Barred owls weigh 1 to 2 1/2 pounds.  
Their wingspan is 39 to 44 inches long.  
Females are larger than the males. While  
the female is on the nest, she can lose  
30 percent of her weight.**



# Snowy Owl Diet/Food

Snowy owls eat mice, sea birds, fish, and rabbits.



Did you know that snowy owls eat snow to get enough water?

Snowy owls eat lemmings whole. Lemmings are their main diet. They are carnivores!



An adult snowy owl can eat five lemmings every day!

# Food/Diet



**Barred owls eat rabbits and little snakes.**

**They eat the head first and then eat the whole animal. If the prey is too big they break it into smaller pieces to eat it.**

**Barred owls throw up barf called a pellet.**



# Snowy Owls Hunting!

Snowy owls are sneaky hunters. They quietly wait for their prey on a small hill or snow mound. When their prey comes along, they swoop down and grab it. Their prey has little time to run away.



## FUN FACT!

A snowy owl can see small animals from a quarter mile away! Also snowy owls can hear a small animal running under ten inches of snow!

## FACT!

Snowy owls eat small prey whole. They swallow their prey head first. They use their beaks and talons to tear larger prey into smaller pieces.

## The best fact ever!

Snowy owls find food during the night and the day! That means that they are diurnal!

## So Cool!

A snowy owl is a skilled flyer. It can even catch a bird while it is flying!

# Barred Owl Hunting

Because the barred owl is mostly nocturnal, it hunts at night and twilight also and very rarely during the day.



**Snowy owls have a keen sense of smell and sight but if they are hunting and they are really focused on their prey they might get eaten or hit**

The barred owl's talons make it easy to grab its prey.

## Wow Fact!!

The barred owl is one of the very few owls that's mostly nocturnal.



# Snowy Owl Communication



## Fun Fact

Snowy owls use sight, touch and sound to communicate and understand their environment.



The snowy owl also uses physical displays to communicate. For example, males use courtship displays to attract a female.

Snowy owls are quiet, but in the breeding period they are loud.

## Did you know?

Snowy owls also make sounds like "rick rick". This sound is used by an adult that is defending the nest.



# **Communication of the Barred Owl**

**Barred owls have an interesting sound. They say something like "Who cooks for you? Who cooks for you? Who cooks for you all?" They also can make a single hoot or when courting their sound is like "crazy laughter"!**



**Courtship**

**Baby barred owls make begging sounds. When they are a little older, they make a squeaking sound that sounds like a hiss!**



**You can hear a barred owl more than you can see one!**



# Snowy Owls Predators!



Some of snowy owl's predators are foxes, jaegers (yay-ger), dogs, wolves, and other large birds.

**Some people hunt snowy owls just for sport!**



A snowy owl flying away from its predators.

Some people like to hunt snowy owls. They usually hunt them for their feathers.



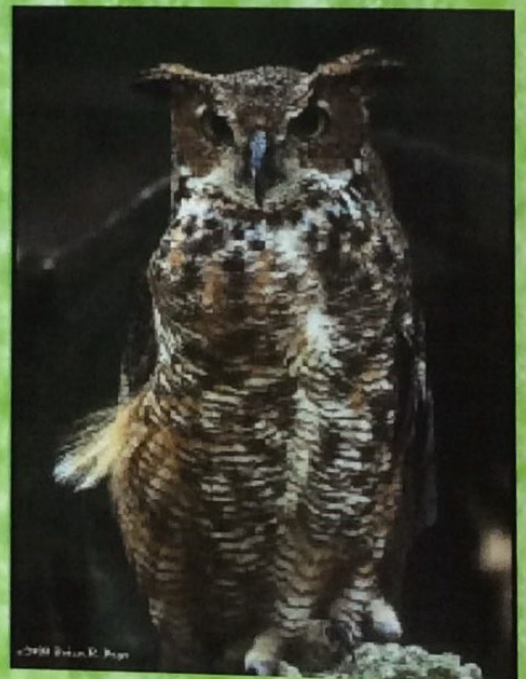
Snowy owl's wings

# Predators

Humans are pretty big predators to barred owls. Sometimes humans are threatening them without knowing by chopping down trees which affects their habitat.



The great horned owl has super fast wings...So the barred owl has to be quick and quiet so its escape is quick.



Did you know??  
Some people think that barred owls don't have a predator but they do....It's the great horned owl.

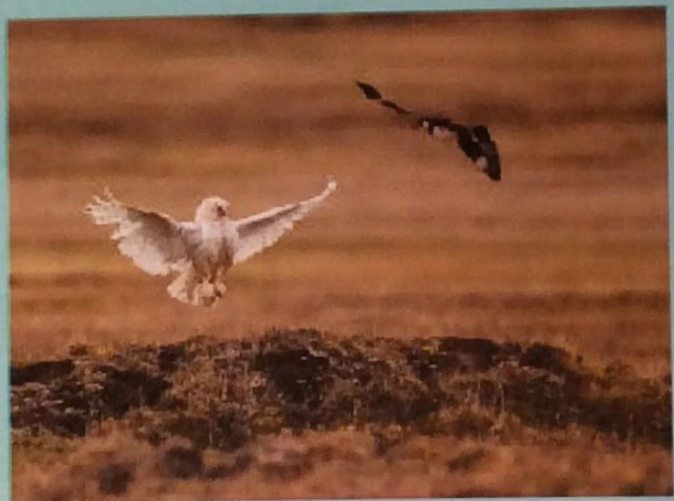
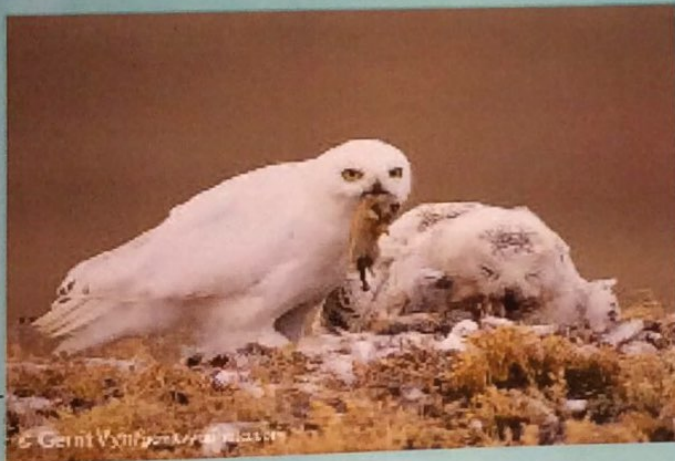
To get away from their predators they have special wings with thick feathers to fly away fast and quiet.

# Snowy Owl Defenses

Snowy owls live alone and are territorial.

They make sounds and use body movements to defend their territory.

Males defend a territory during the breeding season.



When there is a lot of food, territories are small because the snowy owl pair doesn't need space to hunt.

When there isn't a lot of food the male defends a larger area. In winter, females defend hunting areas.

# Barred Owl Defenses

Barred owls are very territorial and aggressive to intruders on their territory, especially during nesting season (particularly the females). These owls will chase away intruders while hooting loudly, sometimes striking with their talons.



## Did you know?

Barred owls will fight each other during conflicts over territorial boundaries!



**AGGRESSIVE:** to be violent or to fight.

**INTRUDER:** someone who comes on to someone else's land.

# Special Adaptations of Snowy Owl

## EYES

SNOWY OWLS CANNOT MOVE THEIR EYES.



They are farsighted so they use their sense of smell to find things close.

Snowy owls use their beaks to kill prey.

Fun Fact  
Snowy owls  
have yellow  
eyes.



Snowy owls have a flexible neck which means they turn their head 270 degrees.

## Talons:

They use their talons to catch prey and to defend themselves.



# Special Adaptations of the Barred Owl

## Ears

Ears are on different points on their heads. They have very good hearing. Barred Owls can hear without moving their heads. There are feathers on their heads to help them hear better.

## Smell

Before scientists thought birds had poor sense of smell, but now they think that they have some sense of smell. So Barred Owls might have some sense of smell.

## Talons and Beaks

Barred Owls have sharp talons to catch prey. They use their beaks to break their prey



## Eyes

They have very good eyesight. They can see well at night while they are hunting. Their eyes don't move so they have to move their heads.

Did you know that owls fly silently? Did you know that birds don't have teeth?



# Biological Carrying Capacity



***Snowy owls are dependent on food that is available to them.***

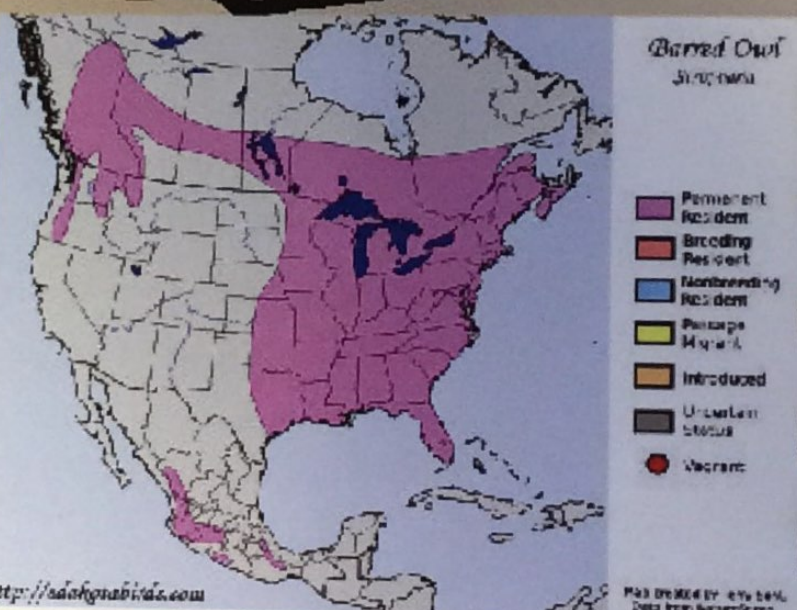
***They migrate to get food at any time of the year. Their population changes from place to place.***

## ***Fun Fact***

***Snowy owls stay in northern parts of Alaska and Canada and Eurasia, except when the lemmings are more to the southern parts of Canada and northern parts of U.S.***

# Biological Carrying Capacity

The home range of the barred owl changes according to location. Usually it's within one square mile and has all their food.



91% of the barred owls have spent some time in the U.S.

## Fun fact

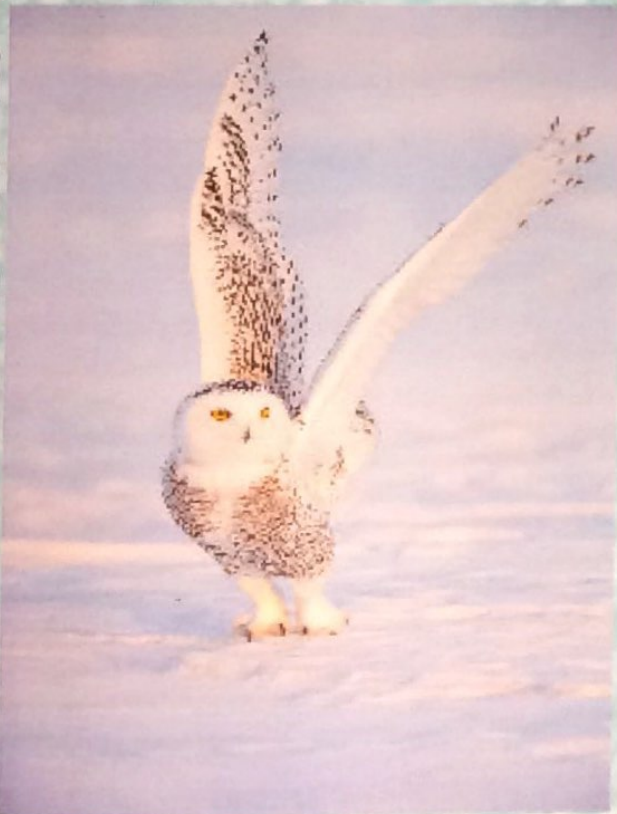
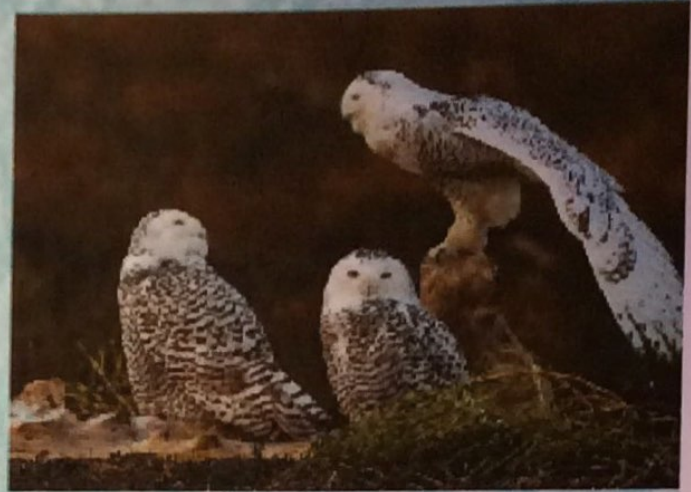
Barred owl's global breeding population is 3 million.

Barred owls usually live alone except when they are mating. Then their home range overlaps.



# Cultural Carrying Capacity of Snowy Owls

Snowy owls usually do not live close to humans, so humans don't have problems with snowy owls.

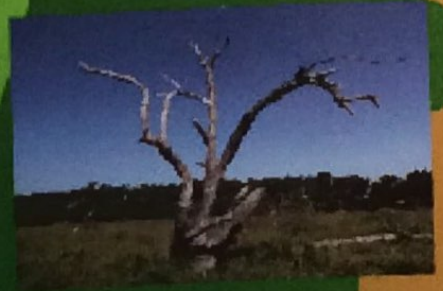


Snowy owls are endangered. Snowy owls are endangered because they get hit by cars, utility lines and airplanes. But snowy owls are protected by the U.S.

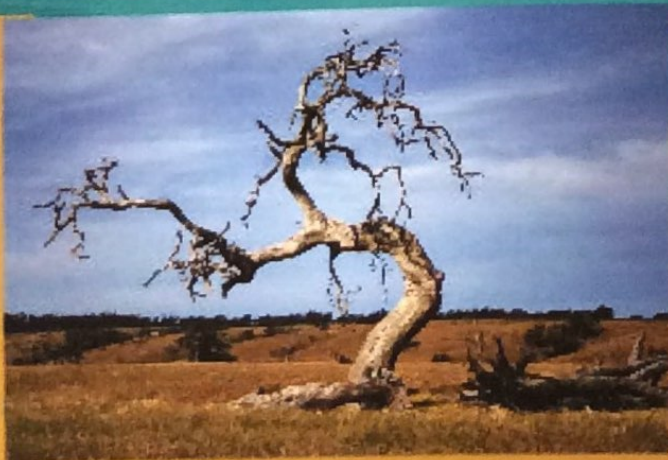
# Cultural Carrying Capacity of the Barred Owl

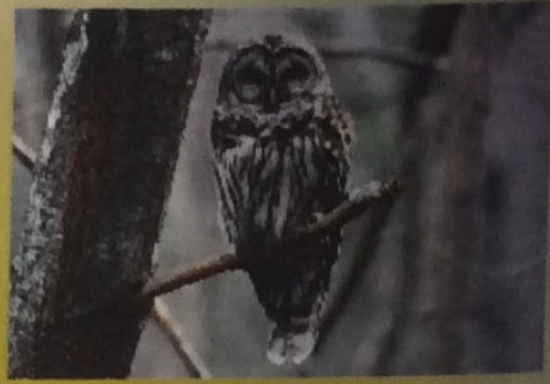
As with many other species, changes to a barred owl's habitat can harm or scare the barred owl. If someone cuts down trees and builds a house in the woods, it could harm a barred owl's habitat or a barred owl.

Barred owls die because they chase a frog into the road and get hit by a car.



You can help barred owls by helping to keep the forests clean and making sure that nobody feeds them anything. It could make the barred owl sick. Barred owls live in dead trees. If people don't like dead trees and they cut down them down barred owls wouldn't have a place to live. You also shouldn't hunt barred owls or cut down trees to make a road or houses.





What would happen if a Snowy Owl were in a Barred Owl's ecosystem and a Barred Owl was in a Snowy Owl's ecosystem? Who do you think has the better adaptations to survive?

We think the snowy owl can survive in the temperate forest because the snowy owl is a smaller target for predators. If it adapts to hunt at night the prey can't see the snowy owl that well. They need to adapt to hunt in trees. For this, they need better eyesight and hearing. They would have to shed feathers to stay cool.

We think that the snowy owl can survive in the temperate forest because it will have less predators. There will also be more different types of food to eat. They will have adapt to living in trees and see better in the dark. Their feathers would change to black and gray. They would have to have less feathers to survive the heat.

The barred owl would have to adapt to the arctic tundra by eating the same type of food like lemmings and Arctic hare instead of mice and rabbit. The barred owl would have to get used to hunting in the day. It needs to be fast to catch the lemming. Their feathers would have to get thicker but they would not have to change the color too much because other birds have darker colors. Their beak should become smaller.

We think the barred owl is more generalized so it could survive in the snowy owl's habitat, the arctic tundra, because it could hide in the grass and could still eat the same kind of food like rabbits and lemmings. They could defend themselves and adapt to nesting low to the ground and on snow mounds.

We think the snowy owl can survive in the temperate forest because it only has to change the features and get used to the trees. And it's a little bit smaller than the barred owl. It has more food there, only the lemming is not there. The snowy owl is really high up in the tree, and it will be safe and defend itself better. The babies will be safer up in the trees.

We think the snowy owl can survive in the temperate forest. We think this because the snowy owl would just have to lose some of its feathers to be warm in the summer. It will also have to eat mice and everything that the barred owl would eat. Their hearing and eyesight would have to adapt to forest life, more sounds and hunting at night.

We think snowy owl can survive in the temperate forest because there are trees to hide in to catch prey. There is a lot of food and few predators, too. We think the snowy owl can survive in the temperate forest because it has trees and bushes to live in and it will be safer.

ssis

We think that the barred owl has more adaptations to survive in the arctic tundra because it only has to grow some more feathers, and it doesn't have to change its color because some birds in the arctic tundra are brown and white. They can change their diet easily to lemmings and Arctic hare. They already have good hearing and eyesight from the forest. They just need to get used to hunting during the day.

We think that the snowy owl would have a better chance of surviving in the temperate forest, than the barred owl would be able to survive in the Arctic because it could shed its feathers and it would not take to much work. We also think a snowy owl could survive in the temperate forest better because it would be able to defend against predators because it will be higher up in the trees. As a hunter it already has good hearing and eyesight so it just has to learn to hunt at night. It already would be good during the day. It would shed some feathers so it can be quieter.

We think the barred owl can survive in the arctic tundra because it likes to eat mice, and the tundra has lemmings. The barred owl will have to have a smaller beak and grow more feathers. The color of the feathers will have to change to grey. The barred owl will not go too far north and stay right where the tundra begins.