

# Owl Honor Requirements and answers:

## 1. List six main differences between owls and other raptors.

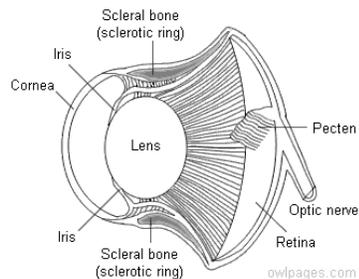
- a. Most owls are nocturnal, which means they are more active at night, whereas other raptors (birds of prey) are diurnal, which means they are more active during daylight hours.

Owls have special feathers which make them almost completely silent when they fly. The leading edge of the flight feathers have a comb-like structure that reduces the sounds made by the wings cutting through the air. Also, the contour feathers that cover the owl are “fuzzy” to help muffle sound made while flying.



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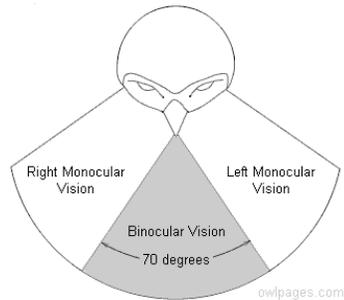
- b. Owls are generally bulkier and less streamlined than other raptors, which makes them better at short, powerful flights rather than long-distance flights or soaring. This also allows them to carry much larger prey in relation to their size compared to other raptors. Illustrate showing the Northern Saw-whet Owl
- c. Owls are more heavily dependent on sound to communicate and to find prey than other raptors.
- d. Owls have larger eyes than other raptors. Raptors eyes are round whereas owls have a tube-shaped eye caused by the presence of a sclerotic ring. Together, this allows for better nighttime vision compared to other raptors.



<https://www.owlpages.com/owls/articles.php?a=5>

- e. Owl's eyes have forward-facing eyes, which gives them better binocular vision (better 3D vision). Forward facing eyes make owls look more like a human face compared to all another birds, which is probably why young children identify with owls more than other birds. It is also probably why the phrase “wise old owl”

comes from - appearing to be more human-looking and therefore wiser than other birds.



<https://www.owlpages.com/owls/articles.php?a=5>

## 2. Classification:

a. Name the order to which owls belong

Strigiformes

b. Name the two families of owls and be able to identify two examples of each

i. Strigidae (typical owls)

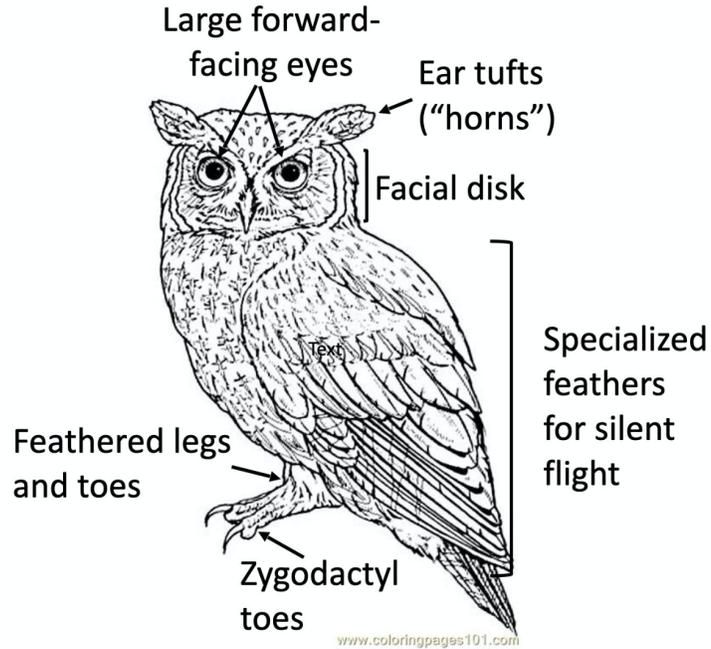
Examples: Great Horned Owl, Snowy Owl

ii. Tytonidae (barn owls)

Examples: Barn Owl, Sooty Owl

3. From a diagram, identify and label the following parts of an owl that make them unique from other birds of prey: specialized feathers for silent flight, large forward-facing eyes, ear tufts (“horns”), facial disk, feathered legs and toes, zygodactyl toes.

Owls’ toes are zygodactyl which means that they can move one toe around so that when perched there are two toes in the front and two in the back, but in flight there are three in the front and one in the back.



4. Watch the short movie about owls. \_\_\_\_\_  
 I am working on how this will work without power at our station. Stay tuned for news.

5. Tell what makes each of these owls unique from other types of owls.  
 Be able to identify each one from a photo.

a. Blakiston's Fish Owl

The largest owl



Macauley Library

**b. Elf Owl**

The smallest owl



Macauley Library

**c. Burrowing Owl**

The only owl that nests in burrows underground. Also, one of the few owls that isn't solitary and spends time in groups.



Gordon Atkins

**d. Great Gray Owl**

The only owl that can hunt using only sound. It can hear a rodent moving under the snow and catch it without ever seeing it. It is also the largest owl by body length but not by weight.



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**e. Barn Owl**

The most common and widespread owl worldwide



Andrew Theus

f. **Moheli Scops-Owl**

The rarest owl.



Macaulay Library

g. **Northern Pygmy Owl and Northern Hawk Owl**

Two of the very few types of owls that are completely diurnal (active in the day).



Macaulay Library



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6. Know the different types of places where owls make their nests and give an example of one species that uses each nest type.

a. **Other birds' old nests**

Examples: Great Horned Owl, **Barred Owl**, Great Gray Owl, etc. Many larger owls start laying eggs earlier than other birds so they can take over other birds' nests from the previous year.

b. **Tree cavities and nest boxes**

Examples: **Eastern Screech-Owl**, Boreal Owl, Northern Pygmy-Owl, etc. Many smaller owls use woodpecker holes or other types of tree cavities as nests. They will also use man-made nest boxes whether they are meant specifically for owls or not.

c. **Buildings and caves**

Examples: **Barn Owl**, Great Horned Owl, etc. Some owls (most famously Barn Owls) prefer buildings to nest in. However, before buildings were prevalent, they used to, and sometimes still do, nest in caves.

d. **Cliffs and banks**

Examples: Barn Owl, **Great Horned Owl**, Eurasian Eagle Owl, etc. Some owls nest in crevices in cliff faces as well as in hollowed out areas in dirt banks.

e. **On the ground**

Examples: **Snowy Owl**, Short-eared Owl, etc. Owls that live in tundra environments where there are no trees, are forced to nest on the ground.

**f. In underground burrows**

Example: Burrowing Owl. Burrowing owls mostly use other creature's burrows such as Prairie Dogs and Gopher Tortoises. They will occasionally also dig their own burrows.

**7. Know the calls of at least five different owls, preferably ones in your area.**

To find out which owls live in your area, simply google "owl species in [insert state or country]." You should be able to find a list fairly easily. Another option is to look at the range maps in a bird book. For owls in the United States and Canada, you can find the different owl calls on this website: <https://www.allaboutbirds.org/guide/>. If you live outside North America, you can search on Youtube or Google for "[insert owl species name] calls" and should be able to find recordings of their calls. Note: many owls have more than one different-sounding call. You only need to know one call from each species.

**8. Learn about the proper safety precautions to take when going owling at night as well as how not to overly disturb the owls and other nighttime creatures.**

**a. Wear proper clothing**

Keep in mind that temperatures often drop significantly at night in many places and dress accordingly. Closed toed shoes are also a good idea as it is easy to stub your toe in the dark.

**b. Become familiar with the area you will be owling in before you go at night**

First of all, make sure you are welcome. It's probably a good idea to talk to locals if you are near houses so as not to look suspicious while walking around at night. Another thing to check with locals about is crime in the area. Avoiding high-crime areas is important for keeping safe while owling. Finally, it is good to know the potentially dangerous nighttime creatures including venomous snakes, predatory mammals, and most of all MOSQUITOES!

**c. Bring proper lighting**

Having a good flashlight, headlamp, spotlight, etc. is essential for owling. It is important to remember, however, that owls' eyes are very sensitive and the intense light of a flashlight can temporarily blind them (the same goes for flash photography). If you are lucky enough to see an owl, be careful not to expose it to intense light for a long period of time. The safest light to use while viewing an owl is a flashlight with a red filter since owls cannot see red light and it doesn't hurt their eyes.

**d. Using playback**

Playback, the use of recorded owl calls to draw owls in, can be very useful for finding owls. It should, however, be used sparingly as too much playback can

stress owls unduly. There are also areas where playback is illegal. Make sure you check with local rules and regulations before using playback.

**9. Go on an owling expedition.**

When I get there, I will scope out a possible spot for an owl trip for everyone on Friday after the evening program. Other wise this will be an independent activity.

**10. Dissect an owl pellet and write down a list of what you find.**

Pathfinders will work in groups of three. They will get a pellet each and petri plate to work on and dissection tools. A chart is supplies to help them ID what they may find. We can be general ie skulls, bone, hair or possibly more specific ie type of skull etc.

**11. Read Isaiah 13:20-22, Psalms 102:1-8, and Isaiah 34:11-14 and explain what owls represent in the Bible.**

We will have a bin of Bibles for them to use. I think working in groups of 3 will help with their interpretations

**12. Color a picture of an owl**

I will have coloring pages of outlines of the different species of owls that we have on display. They can choose one to color (pencil crayons supplied)