

Good example of owls eyes essay

[Environment](#), [Animals](#)



The eye under study was the owl's eyes. Owls have forward facing eyes located on the front of the face. Owls have rather large eyes in comparison to their body weights. Depending on the species, an owl's eyes range between one and five percent of the animal's body weight. The owl's eyes enable it to have a binocular vision hence seeing objects in three dimensions and can hence judge distances just as humans. The view of an owl is 110 degrees with over 70 degrees allocated to the animal's binocular vision the rest is for either the right or the left monocular vision.

The owl's eyes are large for improving efficiency especially in low light conditions and are well developed that they do not sit in eyeballs rather on elongated tubes. The eyes are held in place in the animal's skull by bony structures called sclerotic rings hence making it hard for the animal to roll and move its eyes. Since almost all owls are nocturnal, their eyes are adapted to efficiently collecting and processing even the minimal amount of light available. The owl's eye has a large cornea, pupil and its retina is abundant of light sensitive receptors. Most of the light receptor on the retina of an owl's eyes is the rods responsible for functioning in low light but do not react well to color (Martin, Graham R, 2012).

Owls have limited numbers of cones responsible for seeing in high amounts of light and in perceiving color. The pigmentation of an owl's eyes come from the iris responsible for determining the size of the animal's pupil hence the amount of light getting in. the protection of the owl's eyes is offered by three strong eyelids including both the upper and lower eyelids. The owl's third eyelid is called the nictitating membrane that stretches diagonally across the

eye from the inside to outside. It is responsible for cleaning and protecting the animal's eyes (Murphy, C. J., and H. C. Howland, 2006).

Work Cited

Martin, Graham R. " An owl's eye: Schematic optics and visual performance in *Strix aluco* L." *Journal of comparative physiology* 145. 3 (2012): 341-349.

Murphy, C. J., and H. C. Howland. " Owl eyes: accommodation, corneal curvature and refractive state." *Journal of comparative physiology* 151. 3 (1983): 277-284.