



Nature at School Pre-lesson Owl Prowl

Learning outcomes:

Join DNR educator Katie McGlashen from Eddy Discovery Center, to explore the world of owls. These birds of prey are fascinating animals with remarkable adaptations that help them survive in a variety of habitats. Owl species occupy an important ecological niche wherever they occur. This 30-minute presentation will meet the following learning outcomes:

- Understand the unique adaptations of sight, hearing and other physical features common to owls.
- Learn about the range and habitat needs of the three most common owl species in Michigan and their role within the ecosystem.
- Discuss ways in which we can support habitat for owls in our communities and public lands.

Background information:

Like all predators, owls play an important role in nature in maintaining the health and viability of prey populations. Because many owls hunt at night, they occupy a unique ecological niche and have special adaptations that allow them to be successful. Their position at the top of the food chain makes them sensitive to changes that occur within it, and an abundant and healthy owl population is an indicator of a balanced ecosystem.

Specialized features that owls have in common include sensitive vision and hearing, silent flight, long talons, and sharp beaks. They are able to rotate their heads up to 270 degrees, see well in low-light conditions, and may eat a wide variety of prey.

Resources:

- [All About Owls for Kids video](#)
- [Great horned owls podcast](#)
- [Owl Senses Video](#)
- [Nat Geo Kids Owls](#)

Suggested pre-activity:

Owls are part of complex ecosystems consisting of many components. Choose a habitat (forest, field, urban area, etc.) and have your students construct a food web diagram to include owls.

Directions for your DNR Nature at School virtual program:

1. You will receive a reminder email from SignUp Genius three days prior to your scheduled *DNR Nature at School* program. Please read and follow the directions, so we all can have a successful program.
2. At least one day prior to your lesson, send your instructor the link to your Zoom/Google Meet/Skype/Teams for your lesson time. Starting 10 minutes early with just your instructor is encouraged.

Day of:

3. Make sure students have their sound muted and their cameras on to participate (with thumbs up, number on fingers).
4. If you use the chat feature, we encourage the students to ask their questions there, and the teacher can ask them at the end of the program.
5. See further directions in your SignUp Genius confirmation.

Nature at School NGSS Correlation Owl Prowl



Live from southeast Michigan: Learn how an owl's adaptations play a role in its fitness and survival.

Guiding question/phenomenon:

What adaptations allow owls to become top predators in their habitat and why?

Science and Engineering Practice

Developing and Using Models

Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, storyboard) that represent concrete events or design solutions.

Use a model to represent relationships in the natural world. (K-ESS3-1).

- In the pre activity students will predict an owl's food web/energy transfer.

Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.

- Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions.
- Students will observe owl adaptations, habitat needs, niche, and natural selection patterns.

Recommended grade band(s): Pre-k through upper elementary

All Nature At School virtual programs have been created to introduce students at any grade level to life and/or earth science core ideas, when used with pre- and post-activity suggestions.

Disciplinary Core Idea

LS1.C: Variations of Traits

All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.

LS3.B: Variations of Traits

Different organisms vary in how they look and function because they have different inherited information. The environment also affects the traits that an organism develops.

- Students understand bird beak, coloration, hearing and sight adaptations that allow owls to survive in their particular habitat.

ESS3.A: Natural Resources

Living things need water, air and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)

Cross-Cutting Concepts

Systems and Systems Models

A system can be described in terms of its components and their interactions.

- Students understand an owl's role within their ecosystem.

Nature at School Post-lesson Owl Prowl

Activity wrap-up:

By learning about the physical features and behavioral traits of owls, we can better understand the concepts of adaptation, biological fitness, ecological niche and natural selection that lead to an animal's success in its environment. We can also explore human impacts on the environment and their effects on the ecosystems we share.

Resources:

- [All About Birds](#)
- [Owl research and conservation](#)
- [Owls around the world](#)

Connect to home:

Go on a night hike with your family and listen for owls that may live in your area.

If you have space and suitable habitat, construct a [nest box for owls](#).

Post-activity:

- Try dissecting an owl pellet! Sort the bones to try to identify the prey item found. Sanitized pellets may be purchased from biological supply companies. [Bone sorting chart](#).



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