



Bald Eagles In the Classroom

Duke Farms Lesson Plan

Elementary School
Grades K-5

Standards

Next Generation Science Standards

3-LS4-4: Make a claim about the merit of a solution to a problem caused when the environment changes and affects the types of plants and animals that live there.

4-LS1-1: Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

5-LS2-1: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.



Bald Eagles In the Classroom

Guiding Questions

- How do bald eagles survive in the wild, and what can we do to protect them?

Learning Goals

Objectives

Students will be able to

- Describe what eagles need to survive.
- Observe and record eagle behaviors using the Duke Farms Eagle Cam.
- Discuss human impact on bald eagle populations.

Materials

- Lesson plan
- *The Eagles Are Back!* by Jean Craighead George
- Eagle Cam Observation Handout (pg. 8)
- [Duke Farms Eagle Cam](#)



Duke Farms

For this and other lesson plans, go to:
dukefarms.org/education-resources/

Background Information

Bald Eagles in the U.S.

The bald eagle (*Haliaeetus leucocephalus*) is a bird of prey native to North America and serves as the national symbol of the United States. Once endangered due to habitat destruction and pesticide use, conservation efforts have helped their populations recover.

Bald Eagles in New Jersey

New Jersey has played a critical role in eagle conservation. The state had only one nesting pair of bald eagles in 1973. Thanks to conservation efforts, the population has increased significantly, with over 200 active nesting pairs today. In 2025, the bald eagle was removed from New Jersey's Endangered Species List.

Bald Eagles at Duke Farms

Duke Farms, located in New Jersey, is home to a nesting pair of bald eagles. Through the Duke Farms Eagle Cam, students can observe eagles in real time as they build nests, lay eggs, and raise their young. A pair of bald eagles have been nesting at Duke Farms since 2004 and have stayed as a result of the habitat restoration work. Some of this work includes removing dams from the Raritan River to increase fish populations, planting native trees and, reforesting habitats.





Teaching This Activity

Engage in the Classroom

Introduction to Bald Eagles

- Read *The Eagles Are Back!* to introduce the history of bald eagle conservation.
- Discuss why eagles are important and how they were saved from extinction.

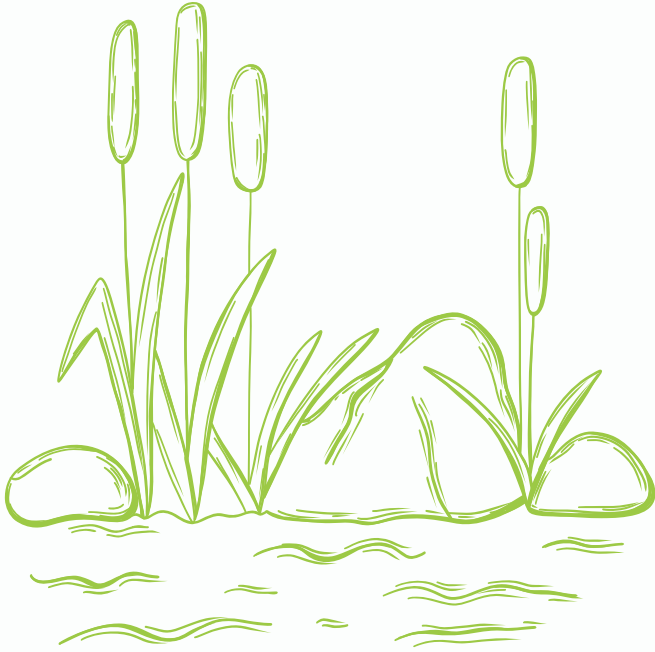


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Observing Eagles in Real Time

- Introduce the Duke Farms Eagle Cam and explain how scientists use cameras to study eagles.
- Use Eagle Cam Observation Sheets to track behaviors such as feeding, nest-building, and parental care.



Modeling Eagle Habitats

- Guide students to observe the Duke Farms Eagle Cam. Ask them to take notes on the factors that help bald eagles survive, such as food sources, shelter, and environmental conditions.
- Then, have students create a model of an eagle's ecosystem, starting with the sun as the energy source. Their models should show how different living (biotic) and non-living (abiotic) elements work together to support the bald eagle population.
- Encourage students to think about potential threats to eagle habitats, such as pollution or habitat destruction. Discuss what could happen if part of the ecosystem changes and how those changes might impact eagles.
- Finally, ask students to propose ideas to protect bald eagles. They can write a short letter to a legislator or a local conservation group explaining why bald eagles need protection and suggesting ways to help.



Elaborate and Extend

Conservation Discussion

- Talk about human impact on eagles (habitat destruction, pollution, conservation laws).
- Brainstorm ways students can help protect eagles and other wildlife.
- Write a class letter to a local wildlife conservation group.

Creative Extension

- Students create a Bald Eagle Fact Book with drawings and information about eagles.
- Journal from the perspective of a parent eagle or eagle chick in the nest.

After This Activity

Measurement

- Student handouts, share outs, and participation in discussions.

Feedback for Duke Farms

- Scan student handouts and/or take a photo of your classroom display wall to share with Duke Farms

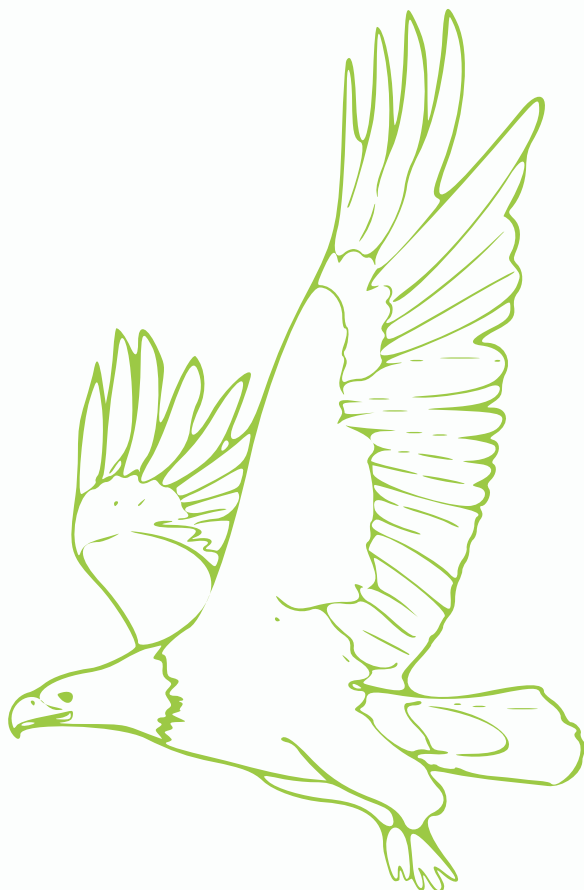
Our Favorite Eagle Tools and Resources

Videos

- [Duke Farms Eagle Cam](#)
- [Eagle Banding](#)

Artifacts

- [Eagle puppet](#)
- [Traceable skull](#)
- [Egg replica](#)
- [Skull replica](#)
- [Talon replica](#)
- [Track mold](#)



Books

"My Little Book of Bald Eagles"

Hope Irvin Marston

0893170682

"Esther the Eaglet: A True Story of Rescue and Rehabilitation (Wildlife Rescue Stories)"

Christie Gove-Berg

1591935423

"The Eagles are Back!"

Jean Craighead George

0803737718

"Inside a Bald Eagle's Nest"

Teena Ruark Gorrow

0764344641

"Is a Bald Eagle Really Bald?"

Martha E. H. Rustad

1467744662

"The Bald Eagle"

Norman Pearl

1404826459

"The Ultimate Coloring Book Collection: #8 Eagles"

Adrian Nantchev

1540847217

"Eagle in the Sky"

Ryan Jacobson

194064708

Eagle Cam Observations

Name

Date

Time

Weather (circle one)

Sunny



Partly cloudy



Windy



Cloudy



Rainy



Snowy



Count the Eagles

adults

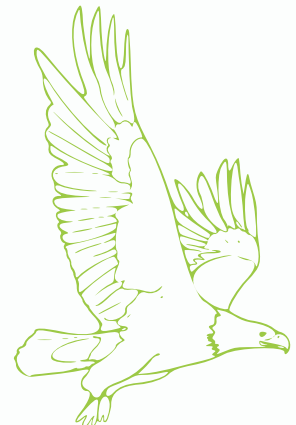
eggs

eaglets

Eagle Activity

- Fixing nest
- Cleaning nest
- Adult feeding eaglet
- Adult brings prey to nest
- Eaglet sleeping
- Egg hatching

_____ What prey?





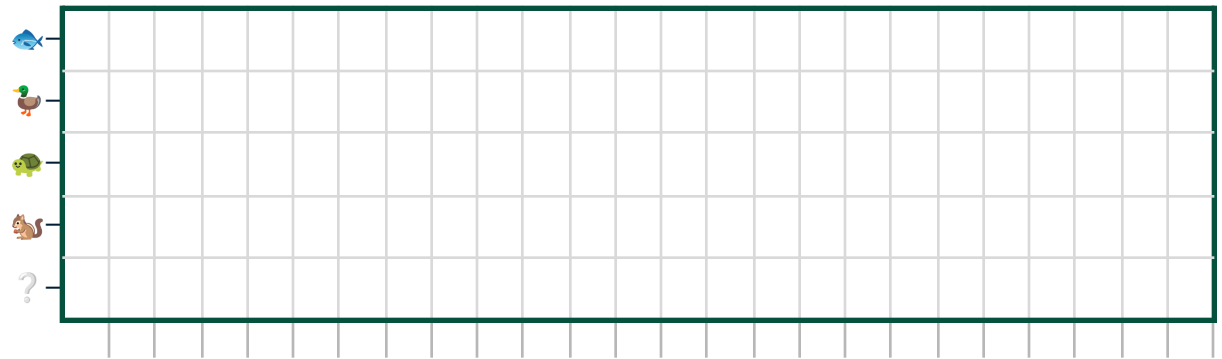
Duke Farms Eagle Nest Prey Item Datasheet B

Observer's Name: _____

Date	Time AM / PM	Weather E.g. temp, precipitation, cloud cover	Prey item Fish, bird, turtle, mammal, or other

Date	Time AM / PM	Weather E.g. temp, precipitation, cloud cover	Prey item Fish, bird, turtle, mammal, or other

Type of prey	Total seen in nest
Fish	
Bird	
Turtle	
Mammal	
Other	



What do you notice about your data?	What do you think is going on?	What do you wonder about your data?