DCR Parks as Classrooms Virtual Edition



Waquoit Bay National Estuarine Research Reserve

Title: Observing Osprey

Overview:

The Osprey is a large migratory bird that feeds mainly on fish. These raptors are amazing hunters earning them the nickname of fish hawk. You will learn about the Osprey's adaptations, life cycle and food web.



Format:

Use the Live Video Cam at Waquoit Bay Reserve: <u>Live Osprey Cam – Waquoit Bay National Estuarine</u> Research Reserve (waquoitbayreserve.org) and

a video which is divided into timestamps for topics: life cycle (1:18-4:53), adaptations (5:01-9:51), and food web (9:55-14:16). Teachers may choose to show the whole video or focus on their own grade standard. https://youtu.be/ydeh22la7Do

Curriculum Connections:

<u>Grade 3</u>: Use simple graphical representations to show that species have unique and diverse life cycles. Describe that all organisms have birth, growth, reproduction, and death in common but there are a variety of ways these happen. (3-LS1-1)

<u>Grade 4:</u> Construct an argument that animals and plants have internal and external structures that support their survival, growth, behavior, and reproduction. (4-LS1-1)

<u>Grade 5:</u> Develop a model of a food web to describe the movement of matter among producers, primary and secondary consumers, decomposers, and the air and soil in the environment: (5-LS2)

Assessments:

Grade 3:

<u>Pre-Assessment Activity:</u> Project the osprey web cam or a photo of an osprey. Ask students how they think it began its life. Ask them if they've ever seen a bird like this and to share any information they know. What questions do they have? Watch the video and see how many of their questions are answered.

<u>Post-Assessment Activity:</u> Have the students write their own imaginary story of an osprey in their town.

Grade 4:

<u>Pre-Assessment Activity:</u> Watch the osprey cam or project a photo of an osprey. Have students write down observations of what they can see as well as questions that they have. Ask students if they can guess anything about the bird based on what they can observe (for instance, what do you think the bird eats?) Show video and have students see if their questions are answered.

<u>Post-Assessment Activity:</u> Writing prompt: Which adaptation of the Osprey do you like most and why? Can you imagine using it in your everyday life? Create your own story based on that adaptation.

Grade 5:

<u>Pre-Assessment Activity:</u> Construct/draw your own food web diagram including the osprey. What does it eat? Who are its predators?

<u>Post-Assessment Activity:</u> Make any changes you need to on your food web diagram_using the information learned from the video. Where are the Ospreys on your diagram? What does it eat? Who are its predators?

Extend the Experience:

- Visit Waquoit Bay National Estuarine Research Reserve while the osprey are there or find an osprey nest near your school or where the students live. Have students observe this species in their natural habitat over time.
- If you can't get to an osprey nest in person, have students observe the osprey cam at Waquoit Bay Reserve (www.waquoitbayreserve.org) and record their observations (day, time, weather, sketch, behaviors observed). This can be done as a group project on a bulletin board, in science journals, spreadsheets. If you do this every year, students can look back at previous years and compare the dates when the osprey return, first egg, hatching, fledging, and other milestones.
- A nice resource if you don't have a lot of time for observation of the live cam is to have students view specific behaviors at this link. <u>Osprey Nest Cam Highlights | Friends of Mashpee National Wildlife Refuge</u>
- Your class could become citizen scientists and join the Osprey watch program. <u>Osprey Watch Osprey Nest Monitoring Program (osprey-watch.org)</u>
- Read aloud or have students read the book "Belle's Journey" based on the travels of a real osprey who was radio collared. <u>Belle's Journey (ospreytrax.com)</u>
- Students can track the travels of radio-collared osprey at <u>Rob_Bierregaard</u> (ospreytrax.com)

Educator Resources:

- https://www.allaboutbirds.org/guide/Osprey/id
- Estuary Species Profiles (noaa.gov)
- Book: Awesome Ospreys: Fishing Birds of the World (Donna Love)

For more information check: www.waquoitbayreserve.org