

# FreshkillsPark

## Wonderful Wetlands Virtual Program

**Description:** People used to think that wetlands were muddy swamps full of bugs. But wetlands are an important ecosystem that protect people, plants, and animals! In this field trip, students will learn about wetlands by exploring 360 acres of wetlands at Freshkills Park. They will conduct a home-friendly science experiment showing that wetlands absorb water and prevent flooding. Students will also meet two birds that live in wetlands, the Osprey and the Great Egret. They will observe these animals and explain how the animal's adaptations help them survive in their habitat.

### Aligned with Next Generation Science Standards

K-LS1-1	2-LS4-1	5-ESS3-1
1-LS1-1	3-LS4-3	MS-LS2-3
2-LS2-2	4-LS1-1	MS-LS1-4

**Essential Question:** How do wetland ecosystems benefit humans and animals?

### Field Trip Vocabulary

*Wetland:* An ecosystem where soil is partially or completely covered by water

*Landfill:* A place where trash goes after it is thrown away

*Absorb:* Soak up liquid

*Flood:* An overflow of water

*Filter:* Remove impurities or dirt from a liquid

*Adaptation:* A behavior or structure used by an animal or plant to survive in its habitat

*Talon:* A bird of prey's claws

### Prepare for the Program

*Science Experiment:* This field trip will involve a science experiment. You may also watch the experiment onscreen instead of participating. If you plan on participating, please set up materials before the trip.

- **Materials:**
  - Two rectangular containers
  - 2 index card-sized pieces of scrap paper
  - Scissors
  - Sponges
  - Pitcher of water
- **Setup:**
  - Cut the scrap paper into 2 rectangles the same width as the smaller side of the rectangular container. Fold the rectangles in half to form a tent. Place one tent in each container.
  - Moisten the sponges by dipping them in the water then squeezing them out. Use the sponges to form a "sponge wall" in front of one of the houses.



*Tech Set-up:* To set up a virtual program, choose whether you'd like to log on individually using tablets, or log on as a class using a smartboard. If using a smartboard, make sure you have a

connected device with a functional camera and microphone so I can hear and see the students. If using tablets, make sure that students are muted to prevent echoing.

**Pre-trip activities:**

- Preview Freshkills Park with [this 3-minute video](#) or another resource from the [Freshkills Park Resource Bank](#). Students may prepare questions to ask during the presentation.

**Post-trip activities:**

- **Share Feedback:** Fill out the [Virtual Program Survey](#).
- **Explore Adaptations:** The two birds we learned about are the [Osprey](#) and the [Great Egret](#). Continue to compare/contrast animal adaptations by learning about [Forster's Tern](#), another wetland bird living at Freshkills that uses different adaptations to catch fish.
- **Learn More:** Read about [wetland ecosystems at Freshkills Park](#), or explore NYC's waterways with [this StoryMap Collection](#) from NYC H2O.
- **Take Action:** Plan a [volunteer day](#) at Freshkills Park, or take action to protect wetlands by exploring the [Wetlands Management Framework](#) created by Natural Areas Conservancy and NYC Parks.