



Rangers are willing and able to assist with planning your schedule for the day and providing resources for any selected activities.

See reverse for curriculum guide.

*John Heinz National Wildlife Refuge at Tinicum*

# Teacher-Led Lesson Plans

## Grades K-2

**Color Hunt** - Students match tiles with colors in nature, sort their findings, & create a simple graph.

**Nature Scavenger Hunt** - Using their best detective skills, students explore nature & count as they search for a variety of plants, animals, and living things.

**Over in the Forest** - In this *indoor* lesson, students read a story about forest wildlife and enjoy a sensory experience with animal furs and feathers.

**What Do Birds Do?** - Students search for birds, observe their behavior, and tally their observations.

## Grades 3-5

**Bird Investigation** - Students use inquiry to explore birds, study their adaptations, and brainstorm their own investigation questions. They then head outside with binoculars, field guides, and a journal page to search for answers.

**The Great Habitat Hunt** - Students begin by comparing and contrasting human & wildlife habitat needs. Students then head outdoors search for habitat components that wildlife need to survive.

**Insect Investigation** - Students use nets, bug boxes, field guides, and hand lenses to explore the structures & functions of insects.

**Meet A Tree** - Using simple field guides and science tools to study trees, as they collect data on their circumference, height, and species.

**Nature Detectives** - Students investigate the outdoors for signs of wildlife and collect data. Each student then translates their data chart into a bar graph to summarize their results.

## Grades 6-12

**BioBlitz** - Students study the biodiversity of the refuge by hiking and identifying as many organisms as possible to compare and contrast upland and wetland habitats.

**MicroAdventures** - Students use microscopes to investigate microscopic wetland life.

**Water Quality** - Students collect a water sample and use various metrics to determine the overall health of water quality, including observation, pH and Dissolved Oxygen.





**John Heinz NWR**

	K - 2nd				3rd - 5th				6th - 12th				
	Color Hunt	Nature Scavenger Hunt	Over In the Forest	What Do Birds Do?	Bird Investigation	The Great Habitat Hunt	Insect Investigation	Meet A Tree	Nature Detectives	What Lives in a Wetland?	BioBlitz	MicroAdventures	Water Quality
Structure and Function of Organisms			●	●			●					●	
Ecosystems and Diversity	●		●	●		●	●	●	●	●	●		●
Classifying Organisms		●		●		●						●	
Habitat Needs					●	●			●	●		●	●
Living and Non-Living Things		●				●			●	●	●		
Comparing and Contrasting	●			●		●	●	●	●	●	●		
Graphing & Sorting	●							●	●				
Data Collection & Journaling				●			●	●	●		●		●
Using Science Tools					●	●	●				●	●	●