

BIRDS OF PREY — WHO DONE IT?

For the Teacher with answers!

MR. RICHARDSON'S POND

Set-up: Mr. Richardson has recently installed a large decorative fountain and fish pond in his backyard. When he comes home from work he notices that there are Koi, large goldfish, and catfish missing from his pond! He does not have a camera but he does have a small tape recorder in which he can record up to 2 hours of sound per day. Mr. Richardson works during the day so he is not home to see when the fish go missing. No human tracks (footprints) have been found at the pond so Mr. Richardson is convinced that an animal is hunting his fish. He begins to search for clues. His findings are on the next pages. Please use your knowledge of birds of prey and any investigative techniques you may have learned to figure out which animal is taking the fish.

Additional information: Mr. Richardson lives in Hillsborough, NJ on a large property along the Raritan River. The time of year is early spring. The pond measures 5ft deep (fountain is off center), 25ft x 16ft length.

Answer = Juvenile Bald Eagles!



clubpenguin.wikia.com

BIRD CAMS — DIRECTIONS FOR THE NEXT 4 SLIDES

Watch the following wildlife Cams to help you make your decision. Watch each camera for at least 10 minutes a day for a few days. Note what you see. This will help you determine what types of birds may want to eat the Koi fish. Notes should include the following:

- Describe what the birds look like. What do their feet look like? Wings look like? Beak? Talons?
- What types of foods are they eating?
- How many birds are in the nest?
- What do their feathers look like?
- What time of day is it?
- How old are the birds?
- What is the environment like?
- Can you hear any sounds? What are the sounds?

EAGLE CAMS

Student: View the cameras on the left and take notes here. Follow your teacher's instructions as well as the instructions on slide three. Edit the chart as needed.

What do you see? Type here: Answers will vary.

<u>Duke Farms - NJ</u>

Southwest Florida

Northeast Florida

Date/Time	Camera	Description of Nest Activity	Prey Items

OSPREY CAMS

chart as needed.

Student: View the cameras on the left and take notes here. Follow your teacher's instructions as well as the instructions on slide three. Edit the

Osprey Cam - Maryland

Osprey Cam - New Jersey

What do you see? Type here: Answers will vary.

Date/Time	Camera	Description of Nest Activity	Prey Items

RED-TAILED HAWK CAMS

Red-tailed Hawk - New York

Red-tailed Hawk - California

Student: View the cameras on the left and take notes here. Follow your teacher's instructions as well as the instructions on slide three. Edit the chart as needed.

What do you see? Type here: Answers will vary.

Date/Time	Camera	Description of Nest Activity	Prey Items

GREAT-HORNED OWL CAM

Great Horned Owls - Georgia

Great Horned Owls - Montana

Student: View the cameras on the left and take notes here. Follow your teacher's instructions as well as the instructions on slide three. Edit the chart as needed.

What do you see? Type here: Answers will vary.

Date/Time	Camera	Description of Nest Activity	Prey Items

ELIMINATION

Student: Which bird or birds can you eliminate right away?

The Osprey and the Great-horned Owl.

Why is this bird (s) being eliminated?

Osprey have not returned for breeding season in fact, their nest should be empty. The owl will hunt primarily at night. It is unlikely that the owl is the predator.

ITEMS FOUND AT THE SCENE

On the next few slides, you will see pictures taken of the pond and surrounding areas. It's your job to identify the objects. Some are foot prints, some are feathers, and lastly, the recording that Mr. Richardson took with the tape recorder. Write your observations underneath each clue.

PHOTO EVIDENCE - TRACKS

Identify what you see in the picture below:

These are Mourning Dove tracks. They do not hunt fish. They eat grass, seeds, and vegetation. The pond is a good food source but the doves are not after the fish.

Identify what you see in the picture below:

Red-tailed hawk tracks. This could be a viable predator although the do not typically hunt for fish. Red-tailed hawk would be more interested in voles, mice, other small mammals including birds. It would be more likely that the hawk is after the Mourning Dove.



Naturetracking.com



Naturetracking.com

PHOTO EVIDENCE - TRACKS

Identify what you see in the picture below:

American Bald Eagle tracks (both pictures). Ding ding! Eagles choose fish as their prey. This is a likely suspect and at this time, your students should be on the right track. Now they must prove it!

Identify what you see in the picture below:



alfa-img.com



http://www.outdoorproject.com/adventures/washington/beaches/kalaloch-beach-1

PHOTO EVIDENCE - FEATHERS

Identify what you see in the picture below:

Red-tailed Hawk

Identify what you see in the picture below:

Bald Eagle



http://www.themodernapprentice.com



http://www.learner.org/jnorth/

ELIMINATION

Student: Which bird or birds can you eliminate after looking at the pictures of the tracks?

Mourning Doves

Was there anything seen that confused you?

Student opinion with evidence to defend answer.

Why is this bird (s) being eliminated?

Mourning doves do not eat fish. They are herbivores.

SOUND RECORDING

Student: Listen to the recording that Mr. Richardson took during the day while he was out. Use the internet to help you decide what sounds you are hearing.

Describe what you hear:

Answers will vary.

What type of animal make this sound and how can you prove it?

Bald Eagle — sounds of adults, juveniles crying for food. Students should be directed to you-tube to listen to raptors and make their match. They can also use https://www.allaboutbirds.org which is sponsored by the Cornell Ornithology Lab.



CONCLUSION

Student: Now it is time to decide which raptor is stealing Mr. Richardson's fish. Type up your conclusion using your evidence as proof. The more detailed explanation you give, the more credit you will earn.

Answers will vary.