Lights, Camera, Wildlife!

Submitted By:

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Overview

Students imagine they are working on a project to research animal behavior. As part of their research, they analyze National Geographic's Wildcam videos and record their observations.

Grade Levels

4

Curriculum Correlation

NCES 4.L.1

Duration

60

Location

Indoors and Outdoors

Materials

- Internet Access: Required
- Tech Setup: 1 computer per learner, Projector
- Observation recording sheets
- National Geographic Wildlife cam

Lights, Camera, Wildlife!

Squirrels

Educators Information

Some species are relatively easy to locate and observe—they might be larger, more abundant, have unique characteristics, or stay rooted in place. Other species are more elusive—think of species that are small or agile, able to run, fly, or swim away. Or think of species that are active only at night, or live only in the tallest treetops or the darkest caves. Yet, during a BioBlitz, every species, large and small, counts. So, while participants need to know where to look and what to look for, it's also important to know how to make and record scientific observations.

Procedure

1. Show students the presentation "Making and Recording Observations"

Use the Powerpoint presentation to introduce students to the importance of observations—both in daily life and in scientific research. As a class, discuss differences in powers of observation among species; differences between scientific and casual observations; factors that impact human observations; and techniques scientists use to record observations.

2. Divide the class into small groups and have each group designate a leader.

Divide the class into small groups. Explain that each student will complete an individual worksheet and that the group leader will summarize findings on a group worksheet. Have each group choose a leader.

3. Introduce the WildCam program.

Explain to students that National Geographic's WildCam program is a conservation initiative

that uses the Internet to connect people to Earth's last remaining wild places. The program used to stream live video from digital cameras located in the wild. Ask students to imagine they are working on a project to research animal behavior. As part of their research, they will analyze archived videos of animals in the wild and record their observations on a worksheet.

4. Distribute the worksheet and introduce the task.

Distribute the WildCam Observations worksheet. Make sure each student has one and provide one additional worksheet to each group to use when they report back to the class. Read through the directions with students. Assign an archived WildCam video or support students in selecting an archived video from the National Geographic Crittercam and WildCam website, as needed.

5. Have students watch the video and complete the worksheet.

Provide students with enough time to watch the video more than once. Have students complete their individual worksheets and then work together as a small group to summarize findings on the group worksheet.

6. Have students share their work.

To complete the activity, ask groups to report back to the whole class and compare their observations.

7. Have a whole-class discussion.

Use the prompts below to guide a discussion about the strengths and weaknesses of using stationary cameras to study wildlife.

• What are the strengths or weaknesses of using video to study animal behavior in the wild? (Possible responses: Strengths—can observe animal behavior from remote locations that may be challenging for human observers because of climate or location; the camera may be

less intrusive than a human observer; a video recording is permanent and can be shared and reviewed. Weaknesses—the camera is in a fixed location so it does not capture action that is out-of-range.)

- How is the location of the camera a factor in terms of what is recorded? (Possible responses: The camera is in a static position but animals move; the camera can record only what is within range of the lens and microphone.)
- Is there additional data that the camera does not record? (Possible responses: anything outside the range of the camera; smell; temperature.)

Informal Assessment

Have students write a paragraph that summarizes the observations they made.

Extensions

If time allows, have students use the WildCam worksheet to observe and record details from a real field location nearby.

Resources

- WildCam Observation Worksheet https://media.nationalgeographic.org/assets/file/0322-WorksheetWildCamObservations.pdf
- Archived WildCam videos
- PowerPoint