

The Case of the Phantom Feathers



TEACHER'S PAGE

The Case of the Phantom Feathers activity is designed to give students a practical look into the science of wildlife forensics. Pennsylvania Game Warden use these and other techniques to solve crimes related to wildlife across the state each year. Wildlife cannot speak for itself, so Game Wardens and concerned citizens of the Commonwealth try and do it for them. This activity allows your students to sample some of the interesting techniques that real Game Wardens use in the field. Students may complete this activity in the classroom or virtually.



**Pennsylvania
Game Commission**



Objective:

Students will gather and analyze evidence relating to a wildlife crime. Students will define the role that the Pennsylvania Game Commission plays in protecting wildlife in the Commonwealth.

Materials Needed:

- Student Worksheets— When photocopying the worksheets, it is suggested to set the copier on the “photo” setting.
- Student Worksheet Answers
- Feather ID Chart. If possible, use a color printer to reproduce copies.
- PA Game Commission Wildlife Notes can be downloaded from the website at www.pgc.pa.gov.
- Filled plastic milk/water gallon jug
- Bathroom scale
- Ruler or yardstick

Background:

Wildlife forensics is an exciting part of solving crimes related to jobs of the Game Warden. Wildlife cannot speak for itself but when a crime has been committed towards wild animals, the Game Warden, using forensic evidence and crime scene investigation, can sometimes speak for the animal and bring the violator to justice. Your students have been chosen to speak for wildlife in this activity. They will be given clues and information that they will need to research, analyze and make a final decision about a specific wildlife crime.

Activities:

Tell the students that they are all now “Honorary” Game Wardens and will need to use the evidence provided to solve a wildlife crime. Explain that a witness has called them. The witness statement is Page 2 of their worksheet. Students should compare the feathers on their evidence photo sheet to the Feather ID chart to identify the type of bird that was killed. After identifying the feather, students should go to the Pennsylvania Game Commission website at www.pgc.pa.gov. Students should click on Education>Wildlife Note Index>Turkey to view or download the appropriate wildlife note. They will need to identify whether the bird that was killed was a male or female. To assist them in this determination, they can use the embedded ruler to measure the track on their worksheet. Students should measure the height of their gallon jug and then measure the weight of the filled gallon jug using their bathroom scale. Both measurements should be multiplied by 3 before entering those values on their worksheet. Explain that the jug is to simulate the weight and length of the bird that was killed. Students should examine the shape of the scat found on the evidence photo sheet and record it on their worksheet. Students will need to compare the collected data to information found in the Wildlife Note in order to determine the sex of the bird. Students should then move to Page 3 and complete the “Suspect’s Physical Description” by pulling information out of the witness statement. Not all information that is requested is available. This reflects how real investigations work. Students should examine the shoe print plaster cast on the evidence photo sheet to answer questions on their worksheet. After determining which fingerprint belongs to the suspect, students may make their own fingerprint by using an ink pads if available.