

**Harford District
2015 Cub Scout Day Camp
June 27 - July 1
Cubstruction**

Owl Pellets & Food Chain



Station Volunteer's Guide

Thank you for being a station volunteer! The stations are the heart of camp and truly provide our scouts with an opportunity to try out a new skill (or build on one they know) while having a great time. Our volunteers' knowledge and enthusiasm is what makes our camp great!

To make running the station easier, please take some time to read through the station guide. While what is being covered at the station needs to remain as outlined, how it is covered is only one of many methods. If you find a better way to accomplish the requirements or if the method we have outlined doesn't seem to be working...please feel free to change it! This is only a guide...do what works best for you and the scouts coming to your station.

One other thing to keep in mind - some stations will be visited by all ranks. That means you may have 6 year olds through 11 year olds and may have to simplify or intensify the methods to meet the skills and knowledge of all the scouts.

Thanks again - we are glad to have you as part of Harford Day Camp!

Station Procedures

- The first station begins at 10:15 on Monday and 9:15 other days...so you have some time! We've tried to only schedule 2 dens at a time (max. 24 boys) but, there may be times when you have 3. Consult your station schedule so you will know who to expect and when.
- Greet dens as they arrive. Many will have a den cheer, ask to hear it!
- Once all the dens arrive or the start time has come, begin going through the procedures for the station. It is very important that you start and end on time! Each time slot lasts 45 minutes. If a den arrives 10 minutes late, they CANNOT stay 10 minutes past the end of the station...that would make you and then late for the next station. If a den doesn't get finished, suggest they come back during a break or take the remaining activity with them to work on at the den.
- Execute the station with energy and enthusiasm! Let the scouts do as much for themselves as possible. It doesn't need to be perfect, they just need to Do Their Best!
- Don't forget the beads. Each scout earns a bead at every station for participating. Beads can be given to the den leader for distribution.
- Once the den is finished, begin resetting for the next group.
- Close the station at the end of the day by packing/organizing the supplies and cleaning and disposing of all trash. Let the Program Director responsible for the station (either Tiger/Wolf/Bear or Webelos) know if supplies are running short!

Station Overview

Scouts will examine owl pellets and discuss the diet of an owl. They will also discuss food chains relative to the owl.

Set-up:

1. Cover tables.
2. Prior to each group, put out paper plates & egg cartons (the scout may bring the egg cartons with them) for each scout. Put out gloves at each plate.
3. Put forceps, magnifiers, & Bone charts in the middle of each table.

Break-Down

Place everything in the Station Box. The box should stay in the Crouse building overnight.

Station Objectives:

Scouts will dissect owl pellets to look for bones of the animals they have ingested. Scouts will learn about food chains, especially using the terms producers, consumers and decomposers. Scouts will discuss how humans have changed the balance of nature and how each person can help protect the balance of nature.

Activity 1:

1. Explain what the food chain is and have the boys play the Food Chain Game. (Find the baggies of the card game in your box - sample of game and instructions attached)
This should take no more than 10 minutes.
2. While the boys are working on this activity have them answer 2 questions:
 - a. How have humans changed the balance of nature?
Lots of answers to this: cutting down forests, pollution, highways, building houses where woods & open spaces used to be.
 - b. How can you help protect the balance of nature?
Leave No Trace (cut down on pollution), don't disturb nature (ie. Bird nests), don't cut down too many trees, don't play where you shouldn't, follow the rules when hiking, etc.

Activity 2:

1. Hand out pellets, place on paper plate.
2. Carefully, scout pulls apart owl pellets with their hands. Separate bones and other fragments with tweezers. Place separated items in egg cartons. As the Scout examines their owl pellet What do they notice?
3. Using bone identification chart, scouts try to identify bones.
4. If time allows, let boys pool their bones and assemble a whole skeleton of a rodent.
5. Boys may take bones home in egg cartons, if there are enough cartons, otherwise use plastic baggies or foil.

Background that may be helpful....

Owl pellets are masses of bone, teeth, hair, feathers and exoskeletons of various animals preyed upon by raptors, or birds of prey. Pellets are produced and regurgitated not only by owls, but by hawks, eagles and other raptors that swallow their prey whole or in small pieces. Owls feed early in the evening and regurgitate a single pellet approximately 20 hours after eating. Unlike snakes, the protein enzymes and strong acids which occur in the digestive tract of raptors do not digest the entire meal. The relatively weak stomach muscles of the bird form the undigested fur, bones, feather etc. into wet slimy pellets. In this process even the most fragile bones are usually preserved unbroken.

Owls, hawks, and eagles are types of raptors, animals which have hooked beaks and sharp claws, and are therefore adapted for seizing prey animals. Hawks and eagles differ from owls in that they eat their prey animals by tearing them into small pieces, picking out the flesh and avoiding most of the fur and bones. They also have strong stomachs which can digest most of the bone material which they might eat. The relatively small amount of indigestible bone and fur that remain will be compacted by their stomach muscles into a pellet similar to the owl's.

Food Chains

A food chain shows how each living thing gets its food. Some animals eat plants and some animals eat other animals. For example, a simple food chain links the trees & shrubs, the giraffes (that eat trees & shrubs), and the lions (that eat the giraffes). Each link in this chain is food for the next link. A food chain always starts with plant life and ends with an animal.

1. Plants are called producers because they are able to use light energy from the Sun to produce food (sugar) from carbon dioxide and water.
2. Animals cannot make their own food so they must eat plants and/or other animals. They are called consumers. There are three groups of consumers.
 - a. Animals that eat ONLY PLANTS are called herbivores (or primary consumers).
 - b. Animals that eat OTHER ANIMALS are called carnivores.
 - carnivores that eat herbivores are called secondary consumers
 - carnivores that eat other carnivores are called tertiary consumers
e.g., killer whales in an ocean food web ... phytoplankton → small fishes → seals → killer whales
3. Animals and people who eat BOTH animals and plants are called omnivores.
4. Then there are decomposers (bacteria and fungi) which feed on decaying matter. These decomposers speed up the decaying process that releases mineral salts back into the food chain for absorption by plants as nutrients.

The table gives one example of a food chain and the trophic levels represented in it.

Grass →	Grasshopper →	Toad →	Snake →	Hawk →	Bacteria of decay
In general,					
<u>Autotrophs</u> (Producers) →	Herbivores (Primary Consumers) →	Carnivores (Secondary, tertiary, etc. consumers)		Decomposers →	

Example Pictures to be used for Food Chain:
Order: Owl, snake, rat, lizard, cricket, grass

