What’s a Seabird?

**Sand Point Culture Camp 2014, written by Erick Paulsrud**

**TOPIC:** Seabirds and their characteristics

**THEME:** Certain features distinguish a seabird from a passerine/terrestrial bird, and seabird species differ from one another due to even more specific adaptations.

**GOAL/OBJECTIVE:** To educate and raise awareness of seabird ecology and teach students the difference between seabirds and land birds, and also between different seabird species. Seabirds are very specialized creatures with specific adaptations that allow them to survive in a saline, aquatic habitat, which are both fascinating and awe-inspiring. The teacher uses the aids of visual demonstrations and puppets to gain and hold the student audience’s attention as well as accommodate multiple learning styles.

**MATERIALS:**

* 6 volunteers, 5 of which are teachers (4 puppeteers and 1 wardrobe assistant) and one student who participates in the puppet show.
* Puppet stage
* 4 puppets, including Puffin, Cormorant, Auklet, and Eagle
* 4 puppet scripts
* “Seabirds and Their Amazing Adaptations” kit
* 3 medium-large bowls of equal size and appearance
* 3 small bowls
* Kitchen tongs
* Tweezers
* Large-holed strainer or serving spoon with drain holes
* Water
* Dried uncooked rice
* Goldfish
* Colored tissue paper

**PROCEDURES:**

Before the class begins, the teachers place the goldfish crackers and uncooked rice in two of the large bowls and set them on one side of the room behind the students’ chairs. The other large bowl is filled about ¾ full of water and the tissue paper is ripped into small strips and added to the water (**NOTE** this bowl must be stirred up immediately before the corresponding activity to ensure the strips are spread evenly throughout the water to simulate suspended plankton, otherwise they will simply form a mat on the surface and be less effective of an illustration.) These three large bowls are set in a line about 2 feet from the wall and about 8 feet apart (or as space allows), with the small bowls set up empty on the other side of the room. One of the utensils, either the tongs, tweezers or strainer, is set beside each of the small bowls.

Teacher who is designated as wardrobe assistant stands in front of puppet stage and distracts audience attention from the stage as the other four teachers/puppeteers ready themselves, the puppets and the scripts behind stage. Wardrobe assistant has “Seabirds and Their Amazing Adaptations” kit ready in its tote beside them. Wardrobe assistant introduces themselves and prepares audience for the show (“Hi everyone, my name is\_\_... we are going to learn about seabirds, and in a few minutes we have a few special people who are going to tell us all about it… we need everyone to be very quiet while are talking, they might be a little shy…”). Puppets appear when ready according to the script on stage and follow script with assigned parts until completion. Wardrobe assistant interjects when necessary, but overall stands back until student volunteer is called up by the puppets partway into the show. Once student is on stage, wardrobe assistant helps introduce them to the puppets, and as the puppets name off the different seabird characteristics the wardrobe assistant puts the correct costume piece on the student. This continues until all the costume pieces are on the student and the puppets are done speaking.

At this point the activities shift away from the puppets and on to the next activity, set up behind the students’ chairs. Puppeteers come out from behind stage after cleaning up puppets. All five teachers begin to organize students into three teams for the relay race activity. Each team lines up behind a small bowl on one side of the room, facing a larger bowl with one type of “food” in it, either the goldfish crackers, the uncooked rice, or the tissue paper strips suspended in water. The teachers explain that the students are about to model the feeding habits of several species of seabirds – the team with the tongs are cormorants, the teams with the tweezers are auklets, and the team with the strainer/serving spoon stands for Shovelers and other waterfowl that use this technique. The object of the game is to race the other teams and see how fast the different foods can be collected and returned to the “colony,” or the other teammates, and added to the small bowl that is their nest. Each team member goes with their team’s tool, retrieves as much food as they reasonably can in one trip, and then brings the food to the “nest.” The next person cannot go until the food is added to the nest and the first player hands off the tool to the next runner. The teams can cycle through all their players for three or four cycles or until all the food sources are gone, however time allows. Winning team is the first to retrieve all the necessary food first.

After the game, the teachers devote a few minutes to follow-up on the meaning of the game just played, explaining that these demonstrated the methods used by different seabirds to collect food both for themselves and their young. The cormorants and puffins feed primarily on small fish, and so have large-opening bills with grooved inside edges that help to catch and grip the fish. Auklets have small, tweezer-like bills that they use to pick plankton individually out of the water, which also accommodates their small body build and lightweight frame. Auklets are able to see and pick out plankton due to their fisheye vision that magnifies close-up objects. Many waterfowl use the straining method, an efficient way of collecting all the plankton and microorganisms in a volume of water and/or sediment that are often too small to see individually with their eyesight. Waterfowl need lots of food especially during migration and other times of significant energy output, thus the more food they can collect at once the better, hence the efficiency of a strainer bill. Leave time to answer any questions the students have about feeding methods or any other points of seabird ecology, then clean up the supplies as the students move on to the next activity.

**REFERENCES:**

Denlinger, L.M. 2006. Alaska Seabird Information Series. Unpubl. Rept., U.S. Fish and Wildl. Serv., Migr. Bird Manage., Nongame Program, Anchorage, AK.

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