Sounds for Survival

OBJECTIVES

Students explore the survival advantages of producing sounds.



MATERIALS

- □ blindfolds
- noisemakers one for each student, two of each kind (*examples: whistles*, *clickers, kazoos, small containers of seeds, two pencils to tap together*)

Producing sound is an important behavior for many animals. Many marine mammals use sound to locate their offspring.

ACTION

- Discuss animal vocalization as a behavior. Ask students to infer some survival advantages of creating sound. (If necessary, prompt students by asking them how individual animals might locate each other in a dark ocean or on a crowded beach.)
- 2. Divide students into two equal groups and place them on separate sides of the room or field. Distribute one of each type of noisemaker to one group, and then distribute matching noisemakers to the other group.
- 3. Blindfold students.
- 4. Students move across the room or playing field making noise. Each student tries to locate his or her "partner" by listening for the matching sound.
- 5. When all students have paired up, have them remove their blindfolds and discuss the experience. How did students find their partners?

- 6. Repeat the simulation with the following twist: Select one or two students to be blindfolded "predators." As the pairs are trying to locate each other, the predators attempt to find (by sound) and "catch" prey. If a predator locates and tags a student, the student is "out" and must remain silent.
- 7. Ask students what they can infer about animal vocalizations. Make a list of questions that get raised during discussion. Ask students to brainstorm ways to design experiments that might further our knowledge of the role of animal vocalizations.
- 8. Students use reference materials such as books, periodicals, and the Internet to investigate the role of vocalizations in mother/pup recognition and mate recognition for various animals. (*Research has increased our understanding of the role of vocalizations in bats, fur seals, and penguins, for example.*)