



LEARNING LABS SEA OTTER SURVIVAL

Students take on the roles of Shedd Aquarium staff members to design a sea otter habitat. In this problem-based learning lab, students use hands-on investigation to understand otter diet, behavior and habitat. Using their results, they'll recommend an exhibit design to their classmates.

GRADE LEVEL: 6-8 | **CAPACITY:** 30 students | **DURATION:** 90 minutes

KEY CONCEPTS

Ecology, population genetics, biological needs, behaviors, habitats

SKILLS

Scientific investigation and method, collaboration and communication, data collection and analysis, presentation, inquiry

IL STATE LEARNING STANDARDS

- 11.A.3a, 11.A.3c, 11.A.3f, 11.A.3g, 11.B.3a, 11.B.3b, 11.B.3c, 11.B.3d, 11.B.3e, 11.B.3f
- 12.B.3a
- 13.B.3c

WHAT TO EXPECT FROM THE LEARNING EXPERIENCE

- Students work in groups using data-collection tools
- Students generate their own questions and pursue investigations to answer them
- Teacher and chaperones may participate
- Students use technology such as SMART Boards and multimedia resources
- Students present their findings to each other



For more information contact
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FURTHER EXPLORATION

Shedd Educational Adventures Animal Behavior

<http://sea.sheddaquarium.org/sea/>

Sea Otter Teacher Resources

http://www.montereybayaquarium.org/efc/efc_otter/otter_teacher_resources.aspx

Sea Otter interactives and games

http://www.montereybayaquarium.org/efc/efc_otter/otter_resources.aspx

PBS.org

Imagine a Kelp Forest

<http://www.pbs.org/kqed/oceanadventures/educators/>

Encyclopedia of Life

<http://www.eol.org/>



CONNECTIONS TO THE EXHIBITS

Shedd's exhibits meet the specific needs of animals from a diverse range of habitats. The following exhibits will help you to focus your field trip.

Abbott Oceanarium

On the Regenstein Otter Trail, you will find sea otters, which live in the cold waters of the Pacific Northwest. Have students observe the exhibit and discuss the elements of the sea otters' natural habitat that they see here. What adaptations do sea otters have that are suited to this environment? How does the exhibit space reflect the natural behaviors of a sea otter?

Local Waters Gallery

A different kind of otter lives here, a river otter. While viewing this exhibit, have students focus on the animal's behavior and the features of the exhibit space. Is there a connection between behavior and the habitat? How does the exhibit space reflect the natural behaviors of a river otter? What elements of the river otter exhibit are different from those of the sea otter exhibit?

Amazon Rising

The caiman lizard lives in the Floating Meadow exhibit. While students are viewing this exhibit, have them discuss the basic needs of an animal. How are these basic needs met in the exhibit for this lizard? Can you figure out this information just from observing the exhibit space? Have students discuss what other factors might influence an animal's behavior beyond its basic needs.

CONNECTIONS TO THE CLASSROOM

- Before your field trip, have students design an exhibit for an animal. They can draw the exhibit and write a short description about the exhibit's features and why they were included. Afterward, follow up on this activity by having students revisit their exhibit. How might they change it based on what they learned on their field trip?
- Back in the classroom, extend your field trip by doing an investigation into animal behavior. Using an ethogram, students can study an animal they won't see in a zoo, a human. Have students develop a question about behavior that they can answer through observation. For instance: Does behavior change after lunch? Is a person more active in the morning or in the afternoon?
- Have students design a public aquarium. Groups can decide on what kinds of exhibits, animals, etc. to include.