



## Educator's Guide to the Visitor Center

ALL PROGRAMS ARE FREE

*Alaska Islands & Ocean Visitor Center  
is a partnership between  
Kachemak Bay Research Reserve  
and  
Alaska Maritime National Wildlife Refuge,  
dedicated to understanding and conserving the marine environment*

### Planning your trip:

To schedule an educational program at Islands & Ocean with Kachemak Bay Research Reserve and/or Alaska Maritime National Wildlife Refuge, **YOU MUST CONTACT EACH ORGANIZATION SEPARATELY**. Please click on the Education Brochure for information on programs offered and how to book them. **If you plan on bringing your group to the Islands & Ocean Visitor Center without booking a guided field trip, please contact the Visitor Center Manager to make sure space is available during the busy field trip season:**

Marianne Aplin, Visitor Center Manager  
907-226-4619; [info@islandsandoocean.org](mailto:info@islandsandoocean.org)

### Islands & Ocean facilities are set up to support you with your learner group:

- \* bus parking area
- \* student mudroom
- \* recycling containers
- \* interactive exhibit halls
- \* student restrooms
- \* outdoor amphitheater
- \* bookstore / gift shop
- \* trails to wetlands and beach





**AGREEMENT FOR SCHOOL/GROUP VISIT  
(Alaska Maritime National Wildlife Refuge and Kachemak Bay Research Reserve)**

**As of 4/11/06**

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**Outdoors**

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- All chaperones and school buses should park in the main lot, at the front entrance. There are designated spaces for school buses/RVs
- Outdoor amphitheatre (large rock area to the right, just after the bridge from the parking lot)
  - Meet your naturalist here, before entering the building
  - Enjoy lunch here. Leave your garbage tied up in one of the large garbage bags provided
  - Rocks are for looking at, not for climbing on

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**Indoors**

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- People are working in offices throughout the building. Use soft voices. Maintain control of your group inside the building. Thank you!
- Elevator is for physically-disabled only. All exhibits and class/group activities will take place downstairs, on the exhibit and book store floor
- No running, no climbing anywhere-not on the rocks inside or out, not on the One Big Ocean railing, not on the benches, not on the sea lion model.
- No food or drink in the lab classroom or seminar room during EE programs. No food or drink in the exhibit hall at any time. There are no indoor eating facilities.
- Mud room and restrooms for students are located past the lab classroom.
- Please have a chaperone or teacher accompany student groups into the rest rooms and make sure they are left neatly for the next student groups:-)
- Limit student numbers, with a chaperone, to 6 students in the bookstore at any time.
- Allow time to tour the Refuge and Reserve exhibits, outside of your scheduled program time. Suggestion 30 minutes- All tours are self-guided. Please let the Visitor Center Manager, Marianne Aplin , know when and how many will be in your group.

**THANK YOU!!!**



## Seek and Find

Write your answers to these questions in the margins. When you are done, present this page to the helpful person at the front desk and win a prize, for answering any twenty questions on both sides.

### Alaska Maritime National Wildlife Refuge Exhibits

1. What did the early biologists use the dories for?
2. How did early biologists find islands in the fog?
3. What did the Aleut people use to build their kayaks frames? covering? lashing?)
4. What is the Aleut rain jacket made from?
5. Why is the boy climbing the cliff ?
7. In the Seabird Theater, draw and name one of the birds you see. (Red-legged kittiwake, tufted puffin, horned puffin, crested auklet, red-faced cormorant, thick-billed murre.
8. How did the foxes get on the islands?
9. Look at the boulders. Where are the fox and rats?
10. Name two pieces of trash left behind on the Aleutians after World War II.
11. How did the rats get on the islands?
12. What is the problem with having rats on the islands?
13. How does the shape of murre eggs help in survival of the next generation?
14. What is the color of the beak of the least auklet?
15. What kinds of birds nest in burrows?
16. What is the Tiglax?
17. What does the Tiglax do?
18. What is the farthest island that the Alaska Marine Highway Ferry reaches?
19. Which is not part of the biomass: seabirds, fish, water, plankton, whales?
20. Name three kinds of fish in the halibut's stomach. Which one is considered junk-food?

## Kachemak Bay Research Reserve Exhibits

1. What is an environment where fresh water and salt water meet called?
2. Name the mountain range south of Homer.
3. Name the creek that the State Park Emerald Lake trail crosses (on the south side of Kachemak Bay).
4. What body of water would you sail west into from Kachemak Bay?
5. Name the 2 points of land that define the western border of the Kachemak Bay Research Reserve.
6. What is the large salt marsh at the head of Kachemak Bay called?
7. How many species of salmon spawn in Kachemak Bay?
8. What is the average salinity of sea water?
9. Name a seashore creature that is featured in the Research Reserve's Marine Invertebrate Inventory project.
10. How is the Kachemak Bay Research Reserve unique, compared to other National Estuarine Research Reserves in the U.S.?
11. Where do nutrients, such as phosphates and nitrates, found in Kachemak Bay's sea water come from?
12. Name 3 physical processes that affect how young marine invertebrates travel, settle, and survive in the waters of Kachemak Bay.
13. Name the closest National Estuarine Research Reserve (NERR) to the Kachemak Bay NERR.
14. Name 4 vital signs of the ocean that Research Reserve scientists are monitoring.

ALASKA ISLANDS & OCEAN SEEK AND FIND  
as of 10/14/05

REFUGE ANSWER KEY

1. What did the early biologists use the dories for? [To carry food and equipment](#)
2. How did early biologists find islands in the fog? [Smell of the birds on the cliff](#)
3. What did the Aleut people use to build their kayaks frames? [Driftwood, whale bones](#) -  
[covering? Marine mammal skins-lashing? sinew](#)
4. What is the Aleut rain jacket made from? [Seal intestine and grass](#)
5. Why is the boy climbing the cliff ? [To collect bird eggs](#)
6. In the Seabird Theater, draw and name one of the birds you see. (Red-legged kittiwake, tufted puffin, horned puffin, crested auklet, red-faced cormorant, thick-billed murre.
7. How did the foxes get on the islands? [people](#)
8. Look at the boulders. Where are the fox and rats? [On top](#)
9. Name two pieces of trash left behind on the Aleutians after World War II. [Bombs, helmet, fire extinguisher, equipment, etc.](#)
10. How did the rats get on the islands? [ships](#)
11. What is the problem with having rats on the islands? [Eat the seabirds, eggs, and chicks](#)
12. How does the shape of murre eggs help in survival of the next generation? [Keeps the egg from rolling](#)
13. What is the color of the beak of the least auklet? [orange](#)
14. What kinds of birds nest in burrows? [Storm petrels, tufted puffins](#)
15. What is the Tiglax? [Refuge ship](#)
16. What does the Tiglax do? [Transports scientists to the islands](#)
17. What is the farthest town that the Alaska Marine Highway Ferry reaches? [Unalaska](#)
18. Which is not part of the biomass: seabirds, fish, [water](#), plankton, whales?
19. Name three kinds of fish in the halibut's stomach. Which one is considered junk-food? [Pollock-junk food, capelin, sandlance](#)
20. Where is the sea star made of shells? [Lobby floor](#)

## RESERVE ANSWER KEY

### ALASKA ISLANDS AND OCEAN SEEK AND FIND

#### *(Research Reserve Exhibit Questions)*

1. What is an environment where fresh water and salt water meet called? [An estuary](#)
2. Name the mountain range south of Homer. [Kenai Mountains](#)
3. Name the creek that the State Park Emerald Lake trail crosses (on the south side of Kachemak Bay). [Humpy Creek](#)
4. What body of water would you sail west into from Kachemak Bay? [Cook Inlet](#)
5. Name the 2 points of land that define the western border of the Kachemak Bay Research Reserve. [Anchor Point and Point Pogibshi](#)
6. What is the large salt marsh at the head of Kachemak Bay called? [Fox River Flats](#)
7. How many species of salmon spawn in Kachemak Bay? [5](#)
8. What is the average salinity of sea water? [34 parts per thousand \(ppt\)](#)
9. Name a seashore creature that is featured in the Research Reserve's Marine Invertebrate Inventory project. [Hairy Triton](#)
10. How is the Kachemak Bay Research Reserve unique, compared to other National Estuarine Research Reserves in the U.S.? [Huge tides, includes 5 different estuarine habitats, is more marine in the winter](#)
11. Where do nutrients, such as phosphates and nitrates, found in Kachemak Bay's sea water come from? [Decaying plants and animals, ocean bottom, surrounding watershed, dust, rain, snow](#)
12. Name 3 physical processes that affect how young marine invertebrates travel, settle, and survive in the waters of Kachemak Bay. [Currents, upwelling, tides](#)
13. Name the closest National Estuarine Research Reserve (NERR) to the Kachemak Bay NERR. [Padilla Bay NERR in Washington](#)
14. Name 4 vital signs of the ocean that Research Reserve scientists are monitoring. [Temperature, oxygen, salinity, tides, nutrients, available light, pH \(acidity\), turbidity \(clarity\)](#)