Habitat of Northern Pacific Marine Fish

Instructions for the Habitat of Northern Pacific Marine Fish exercise

1) Each student's edition pdf contains 4 pages. Page 1 is the instruction sheet. Page 2 contains the color in map and list of questions for the students. Page 3 contains a background sheet with all the relevant information needed to do the exercise. Page 4 contains fish stickers for up to 4 students. The Teacher's edition contains the answers on page 5 as well as the colored in map with sticker placement.

2) To make effective copies, we recommend that pages 2 to 3 of the student's edition is printed as B&W copies and then photocopy those pages as many times as needed.

3) Sticker page printing instructions: For the stickers on page 4, we recommend that this page be printed in color at the highest resolution by itself using Avery Laser Labels, style #5160, 1" X 2 5/8", which is what we used for our sticker template.

IMPORTANT! Do not choose any scaling other than 100%, or choose any "fit to page" or any other "page sizing" options when printing these pages. This is particularly critical for the fish sticker page, as it won't precisly fit on the Avery labels if scaling is selected!

Each sticker sheet has enough for 4 students. Each student should have 7 different fish: Tuna, Salmon, Pollock, Red Rockfish, Humuhumunukunukuapua'a, Mola Mola, and Garibaldi.

4) Page 5 of the teacher's edition should be printed in color.

5) If you have any questions, please do not hesitate to contact us at
http://swfsc.noaa.gov/ERD.aspx

Visit our website !!
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Habitat of Northern Pacific Marine Fish

Temperature of the ocean
1 = purple (45°F & colder)
2 = dark blue (45°F to 50°F)
3 = light blue (50°F to 55°F)
4 = green (55°F to 60°F)
5 = yellow (60°F to 65°F)
6 = orange (65°F to 70°F)
7 = red (70°F to 75°F)
8 = brown (75°F & warmer)
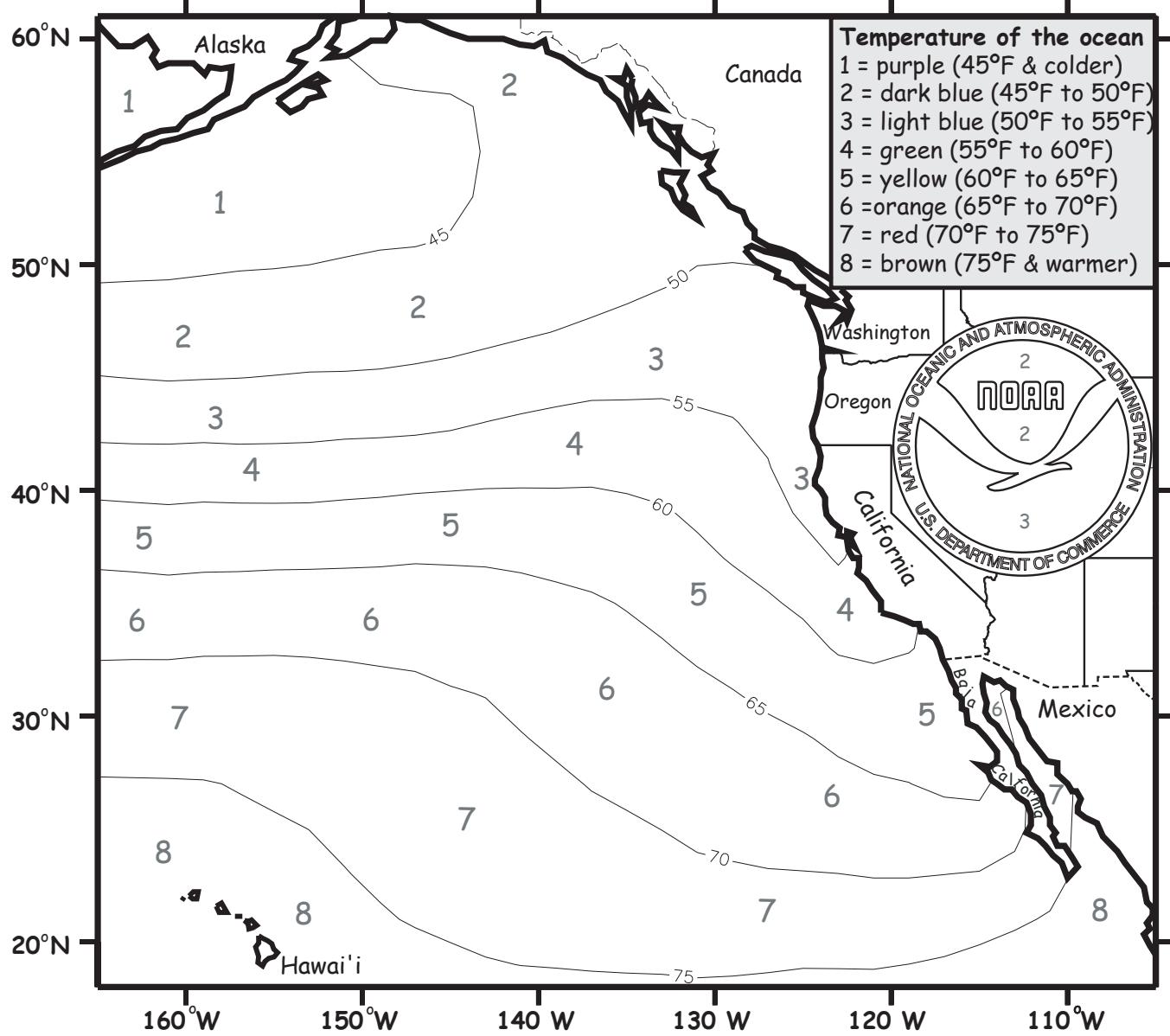
A) Color in the ocean temperature map (using the color key in the upper right corner).

B) Where is the northern Pacific Ocean coldest? _____

C) Where is the northern Pacific Ocean warmest? _____

D) Place the fish stickers where they belong on the map after coloring in the map.
   (Use the information on page 3 to know where to place the fish).

E) What fish likes the warmest water? _____

F) What fish likes the coldest water? _____
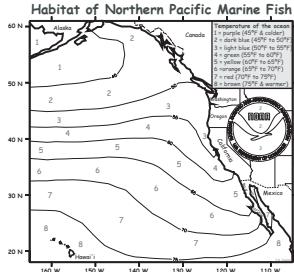
Habitat of Northern Pacific Marine Fish

The northern Pacific Ocean has a rich variety of various ecosystems including open ocean, coral reef, kelp forests, sandy shores, and rocky shores. In this exercise we have a sampling of some of the hundreds of species of fish that we find in the Pacific Ocean in these habitats.

Facts and hints about the fish:

Humuhumunukunukuāpua`a- These fish are found in warm shallow reef areas around Hawai'i. They feed on algae, crabs, sponges and other invertebrates. They are also called pig nose fish. They can get to be 10 inches long and have a bright interesting color pattern with a curving long black stripe. They are the Hawai'i state fish.

Garibaldi- These fish prefer warmer waters off Southern California in rocky shores habitat. These bright orange fish can grow to be 14 inches long. They usually feed on attached invertebrates such as sponges. They are the California state salt-water fish.

Tuna - Most species of tuna are usually found in warmer open ocean areas between California and Mexico and Hawai'i. These fish range in size from 1 ft to 8ft! They feed on smaller fish. They are also warm-blooded unlike most fish. These fish are wide ranging large predators, as lions are in Africa. This fish may end up as the fish in your tuna fish sandwich.

Ocean Sunfish (also called "Mola Mola") - These fish are typically found in warmer open ocean habitat in the eastern Pacific Ocean and they roam offshore California down to the tropics. They mostly feed on jellyfish. They can grow to be 10 feet in diameter, and weigh more than 1000 lbs. They look like a big grey head with fins.

Rockfish- They are more than 60 different kinds of rockfish along the North American west coast! They range (depending on type) from the tropical coasts to offshore Alaska. They are usually 6-12 inches long, although a few species reach 3 feet! A lot of these species can be found off the California coasts.

Salmon - These fish are anadromous, which means they hatch in coastal streams and migrate to the open ocean to grow. They are very common off the coasts of central California north to Alaska. They return to coastal streams as adults to spawn. Pacific Salmon die after spawning. They can grow over two feet in length. They feed mostly on smaller fish and crustaceans.

Pollock - These fish are very common in very cold waters off the coast of Alaska and the Bering Sea. They can grow up to 3 feet in length. They feed mostly on smaller fish. These are often the fish that end up in fish sticks.
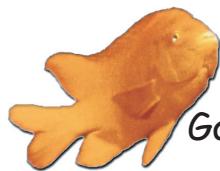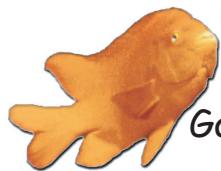
Garibaldi
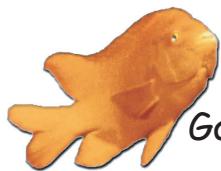
Garibaldi

Garibaldi
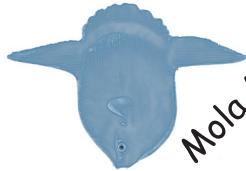
Mola Mola

Mola Mola
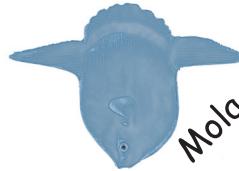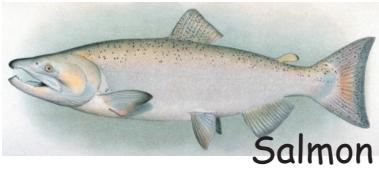
Mola Mola

Salmon
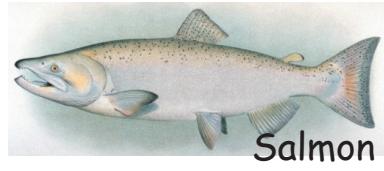
Salmon
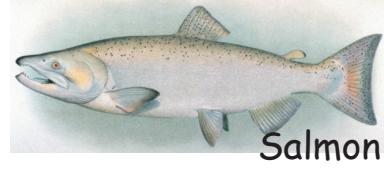
Salmon

Red Rockfish

Red Rockfish
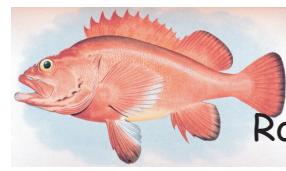
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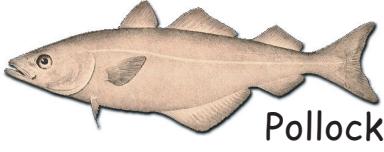
Pollock
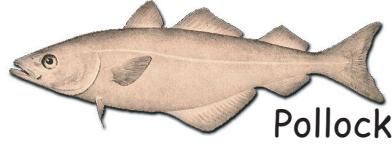
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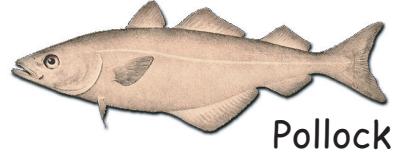
Pollock

Tuna
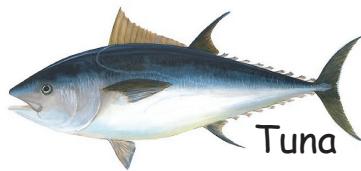
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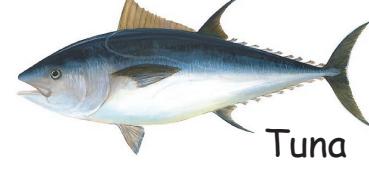
Tuna

Humuhumunukunukuäpua`a

Humuhumunukunukuäpua`a

Humuhumunukunukuäpua`a

Red Rockfish
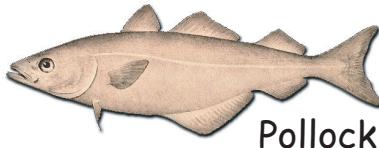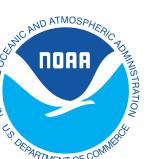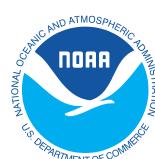
Pollock

Humuhumunukunukuäpua`a

Tuna

Mola Mola
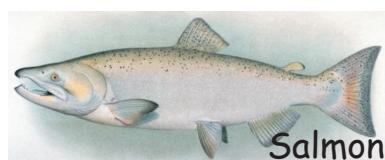
Salmon

Garibaldi

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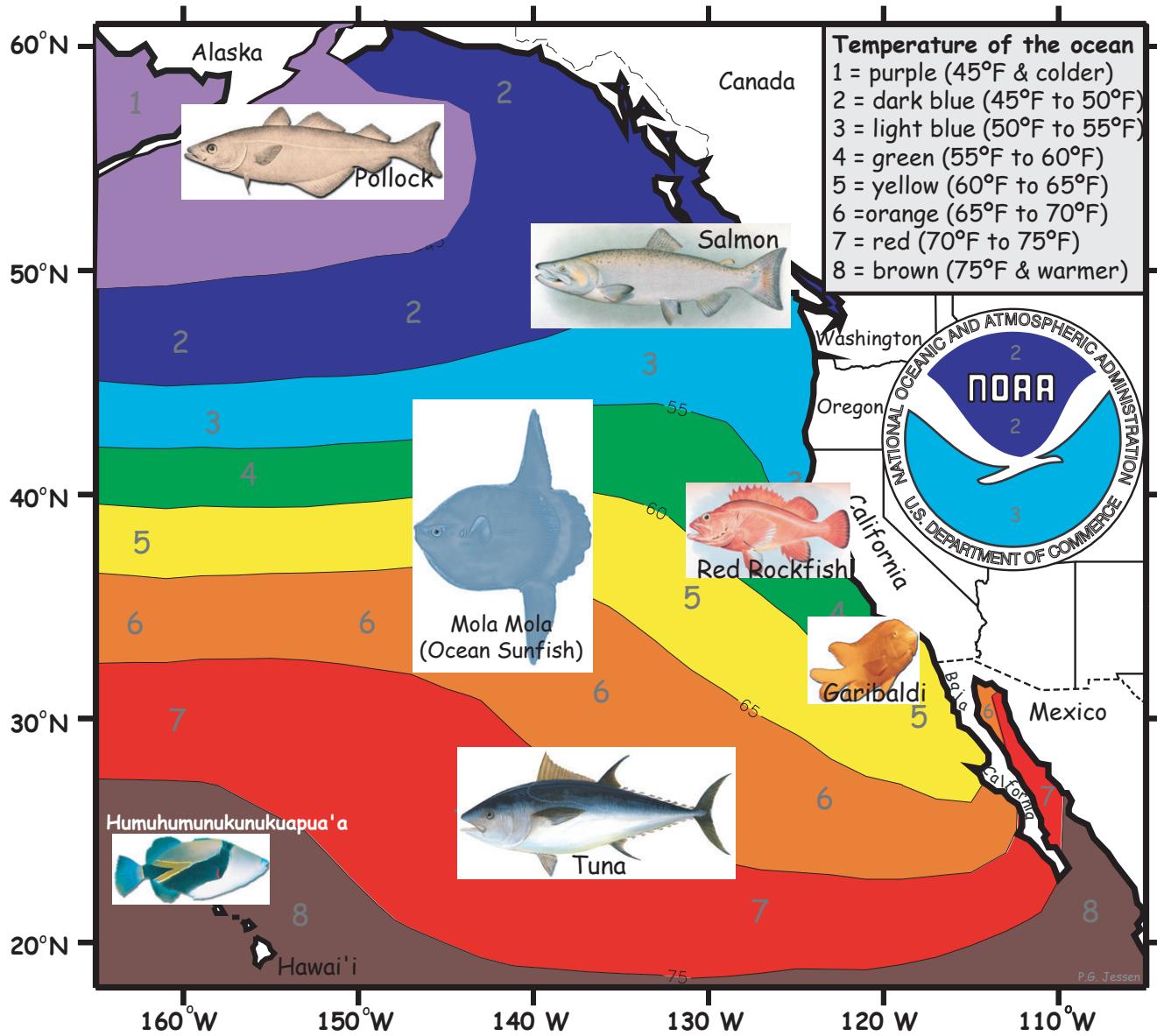
A) Color in the ocean temperature map (using the color key in the upper right corner). **(see map for colors)**

B) Where is the northern Pacific Ocean coldest? **The area represented by the color purple (#1). Its coldest near Alaska, northern Pacific Ocean, and the Bering sea.**

C) Where is the northern Pacific Ocean warmest? **The area represented by the color brown (#8), near Hawai'i, south of Baja California off the coast of Mexico.**

D) Place the fish stickers where they belong on the map after coloring in the map. (Use the information on page 3 to place the fish). **See map for approximate positions as well as the info on page 3, some fish species are wide ranging, and some of their ranges may overlap.**

E) What fish likes the warmest water? **Humuhumunukunukuāpua`a or Tuna or Mola Mola**

F) What fish likes the coldest water? **Pollock or Salmon**

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