RAINY DAY KITS FOR ENVIRONMENTAL EDUCATION

This Lesson Generously Contributed by:

THE PEW CHARITABLE TRUSTS

HOOKED ON CONSERVATION

Overview
'Hooked on Conservation' is a game that demonstrates the effects of longline fishing on the overall health of an ecosystem.

Target Age Group
Kindergarten through 2nd Grade

Subjects
Biology, Environmental Science, Food Chain

Key Concepts
The Gulf of Mexico provides important habitat for rare and beautiful marine species including Atlantic bluefin tuna, white marlin, sailfish and sharks. But even before the Gulf oil disaster, those species and more faced a significant threat from surface longline fishing gear.

Surface longline boats set hundreds of baited hooks on lines that stretch on average of 30 miles. Fishermen in the Gulf use this indiscriminate and wasteful fishing method to target yellowfin tuna and swordfish, but it also catches and kills at least 84 species of other animals including spawning bluefin, endangered sea turtles and hard fighting game fish like white marlin.

Commercial fishermen could use alternative, more selective types of gear and still keep fishing, so there is no need for them to move out of the Gulf of Mexico or continue to kill bluefin tuna, marlin, sailfish and endangered sea turtles.

Materials
Heavy String
Long wooden ruler or bamboo pole
Small Magnets
Glue
Marine Animal Printouts
Crayons or Markers
Scissors

Setup Prior To Class
Cut out the pieces of string for each group of students, keeping in mind that the string should be long enough to simulate the longline fishing gear, at least 4 feet. Measure out even increments, maybe every 3-4 inches, on each long string and make a mark to indicate where the kids should glue the magnets. Then, cut out pieces of string that are only 2 ft long, and attach them to an extended ruler or pole, simulating a fishing rod, showing a more targeted type of fishing method.

Duration
60 minutes for preparing the activity with the kids (such as gluing, coloring, etc)
30 minutes for the activity
15 minutes of discussion after the activity

Physical Activity
Low

The Activity
1. Divide the class into groups with 3-4 children per group.
2. Give each group a set of marine animal cut outs.
3. Have the class color and cut out the animals.
4. Have the class paste one magnet on the back of each of the marine animal cut outs.
5. Have each group paste the magnets onto the ‘longline’ fishing line along the indicated marks.
6. Have each team paste a magnet to one end each ‘fishing rod’.
7. Each group should spread out their marine animals along the floor at random.
8. As a class decide the target animal that the teams will fish for. As a team, they should fish for the target animal with the longline, each taking turns to see what they can catch.

9. After each team member has taken a turn with the longline, put all of the marine animals back in a random order on the floor, and ask them to fish for specific marine animals using the fishing rod.

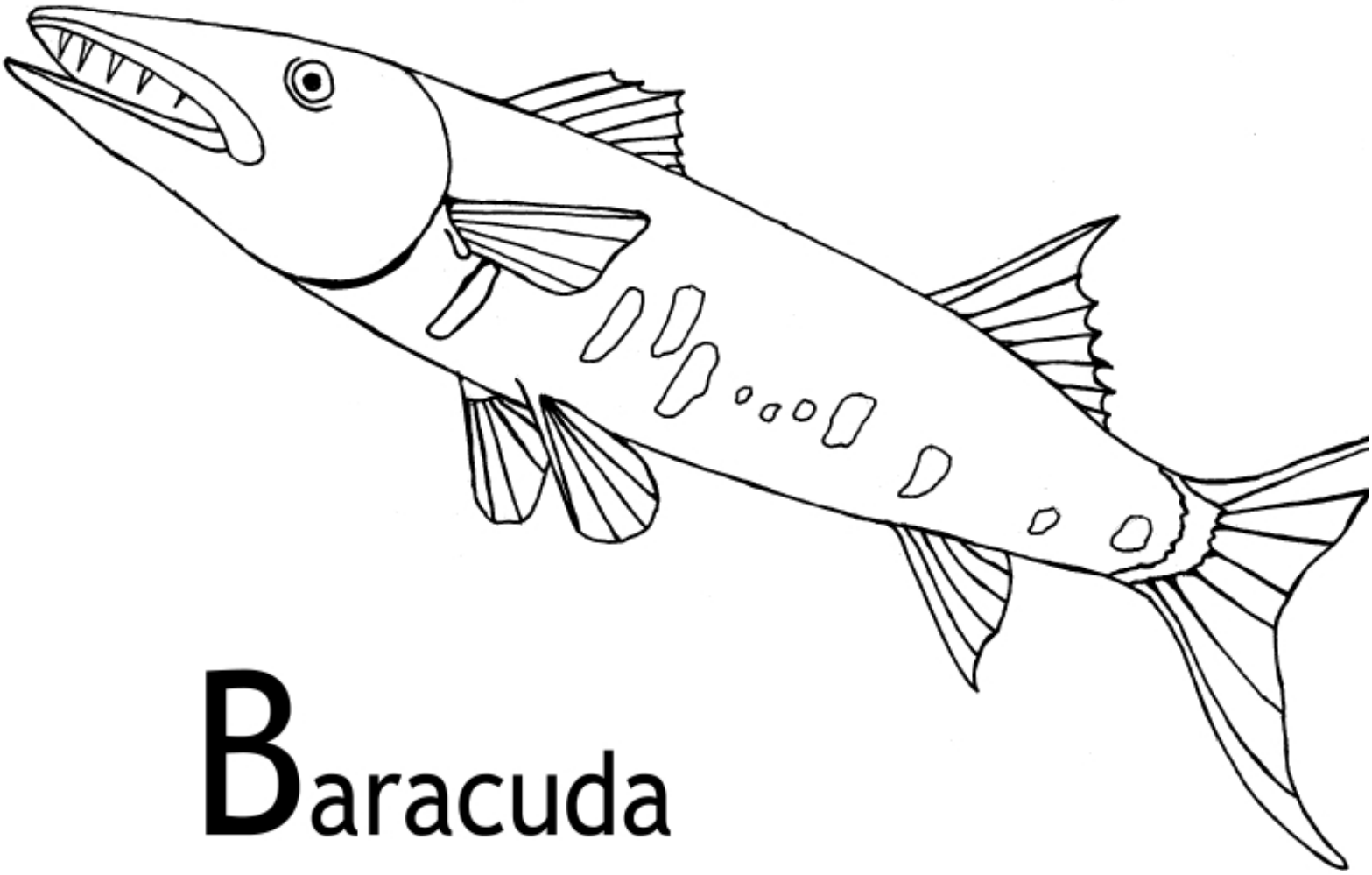
Discussion

Discuss the differences that the students experienced between the two types of fishing gear (including what they intended to catch and what types of additional animals they caught). This game is meant to teach the lessons of bycatch, and to show the students the importance of fishing with appropriate gear types to help keep fishery stocks at healthy levels. Additional questions may include:

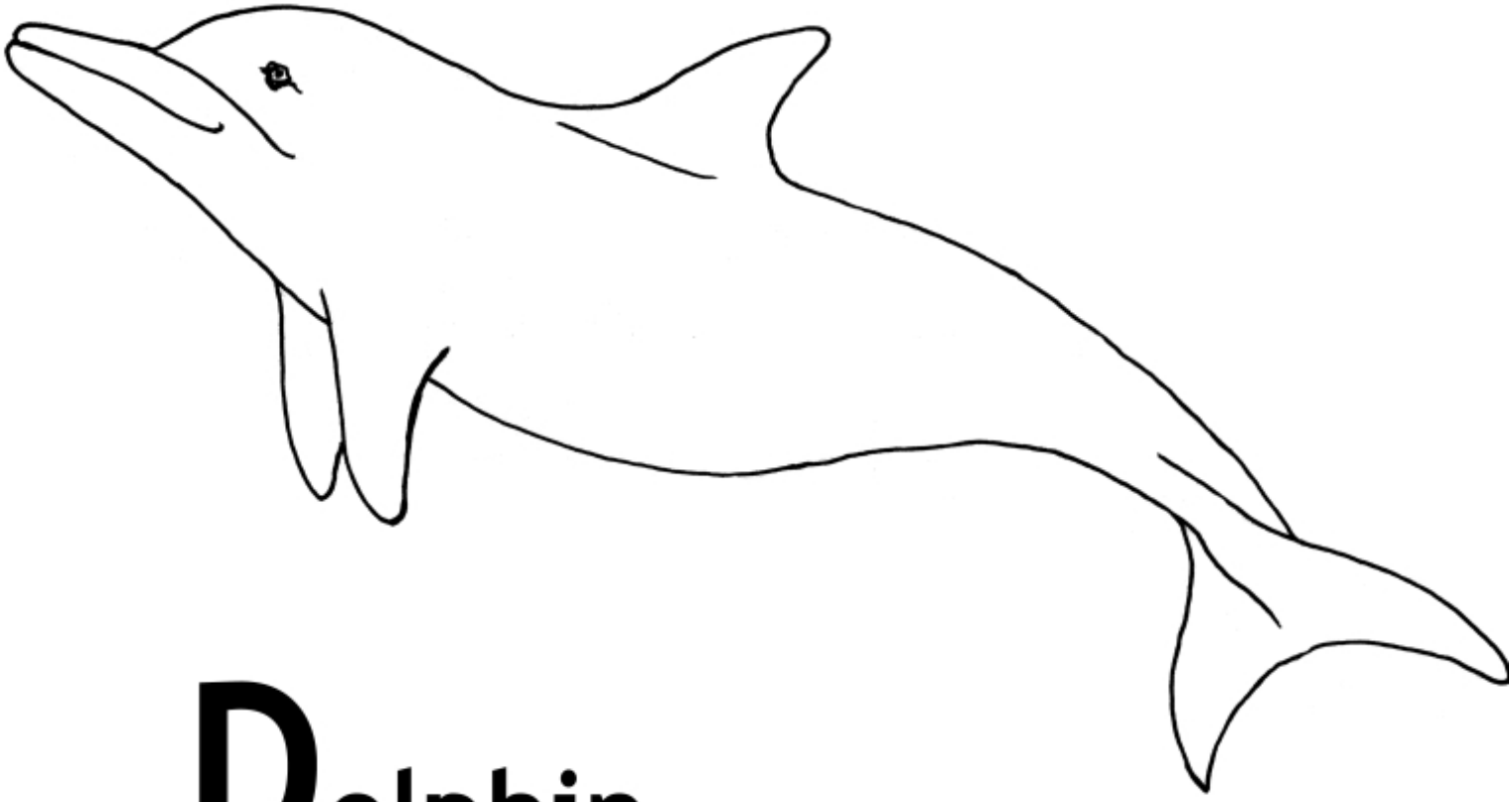
- What does 'Hooked on Conservation' demonstrate about fishing gears?
- Why would a fisherman prefer longline fishing to rod fishing methods?
- Why would a fisherman prefer rod fishing to longline fishing methods?
- What can you do to help support healthier fishing practices?

Additional Reading

http://www.pewtrusts.org/our_work_detail.aspx?id=937
http://www.pewenvironment.org/campaigns/gulf-surface-longline-campaign/id/8589935771
http://www.teach-nology.com/teachers/lesson_plans/science/environment/oceans/
http://www.nmfs.noaa.gov/fishwatch/index.htm
http://www.proteacher.com/110009.shtml
http://www.seasky.org/sea.html
http://www.teach-nology.com/teachers/lesson_plans/science/environment/oceans/

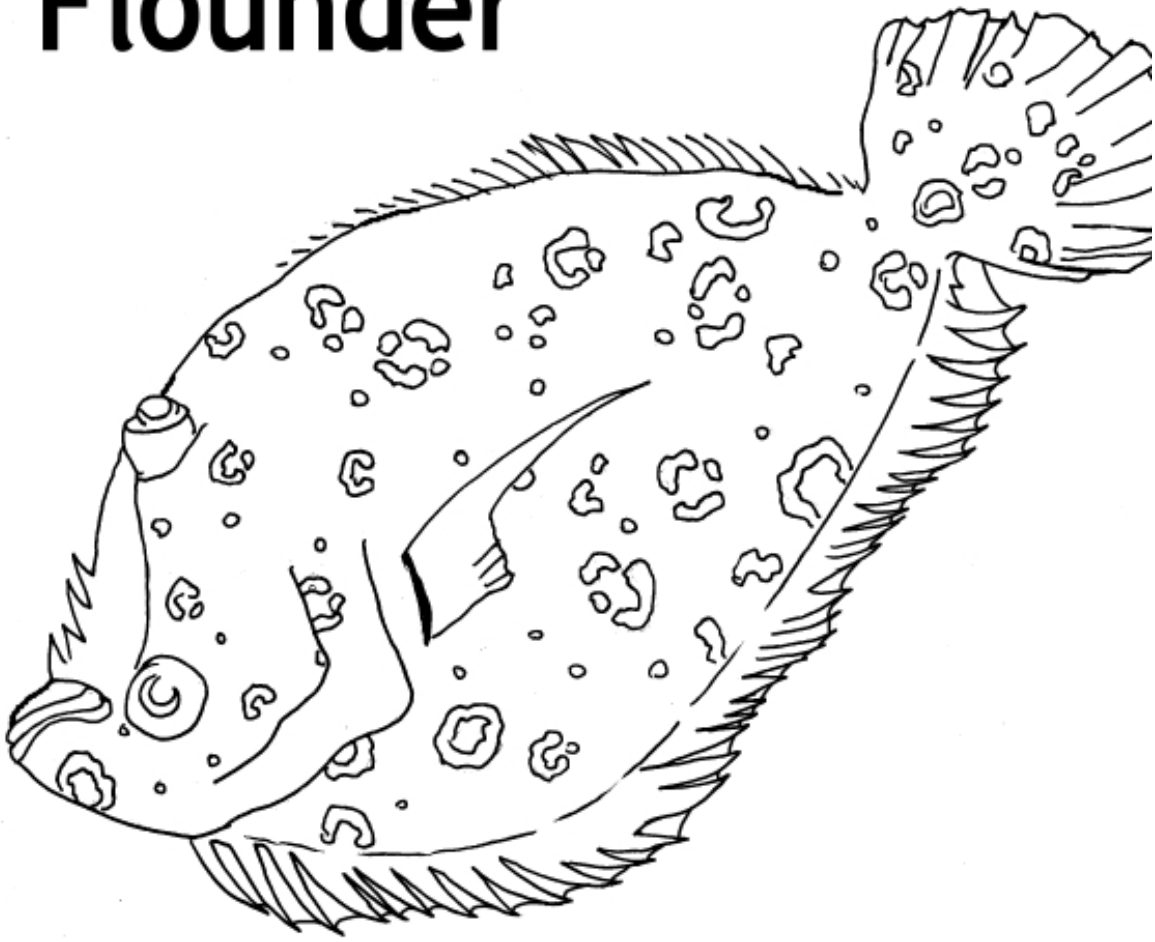


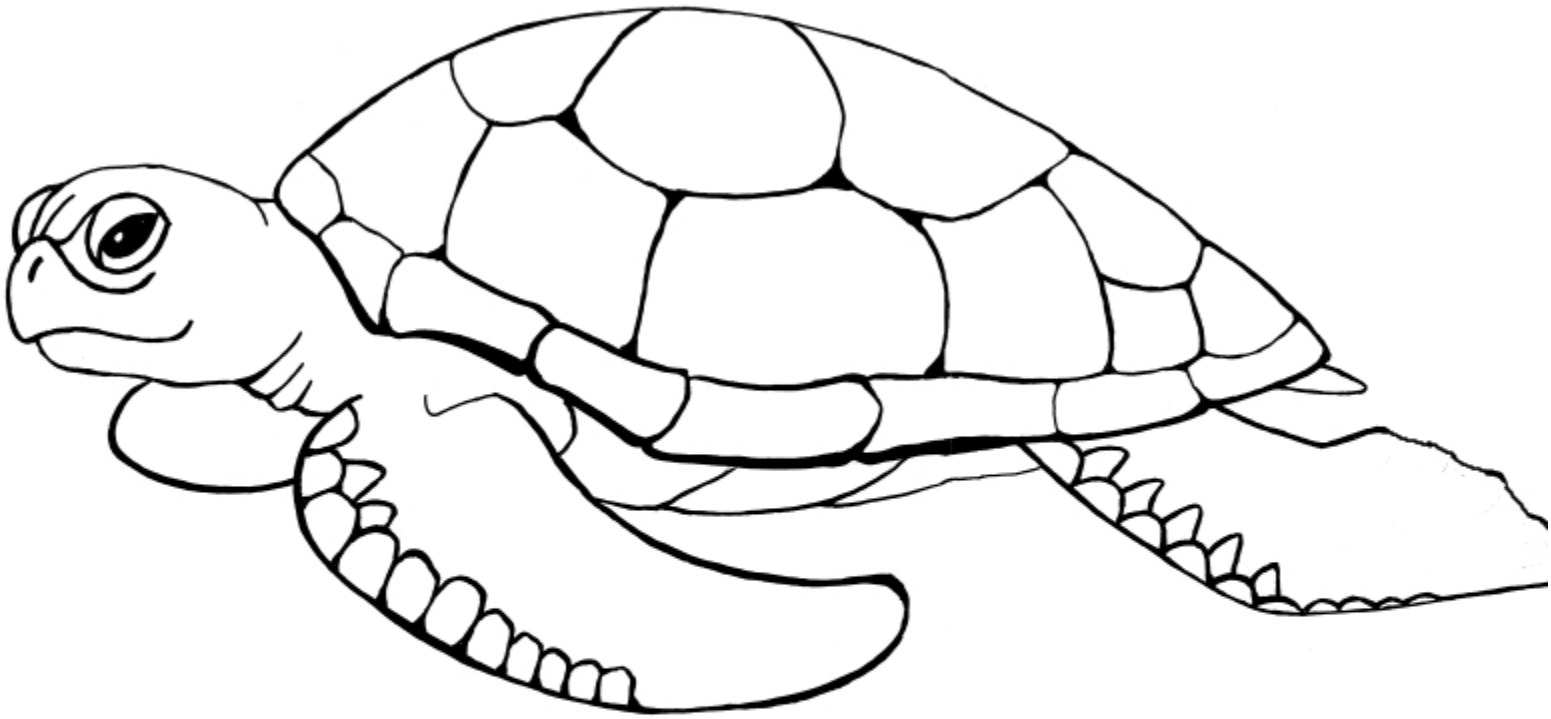
Baracuda



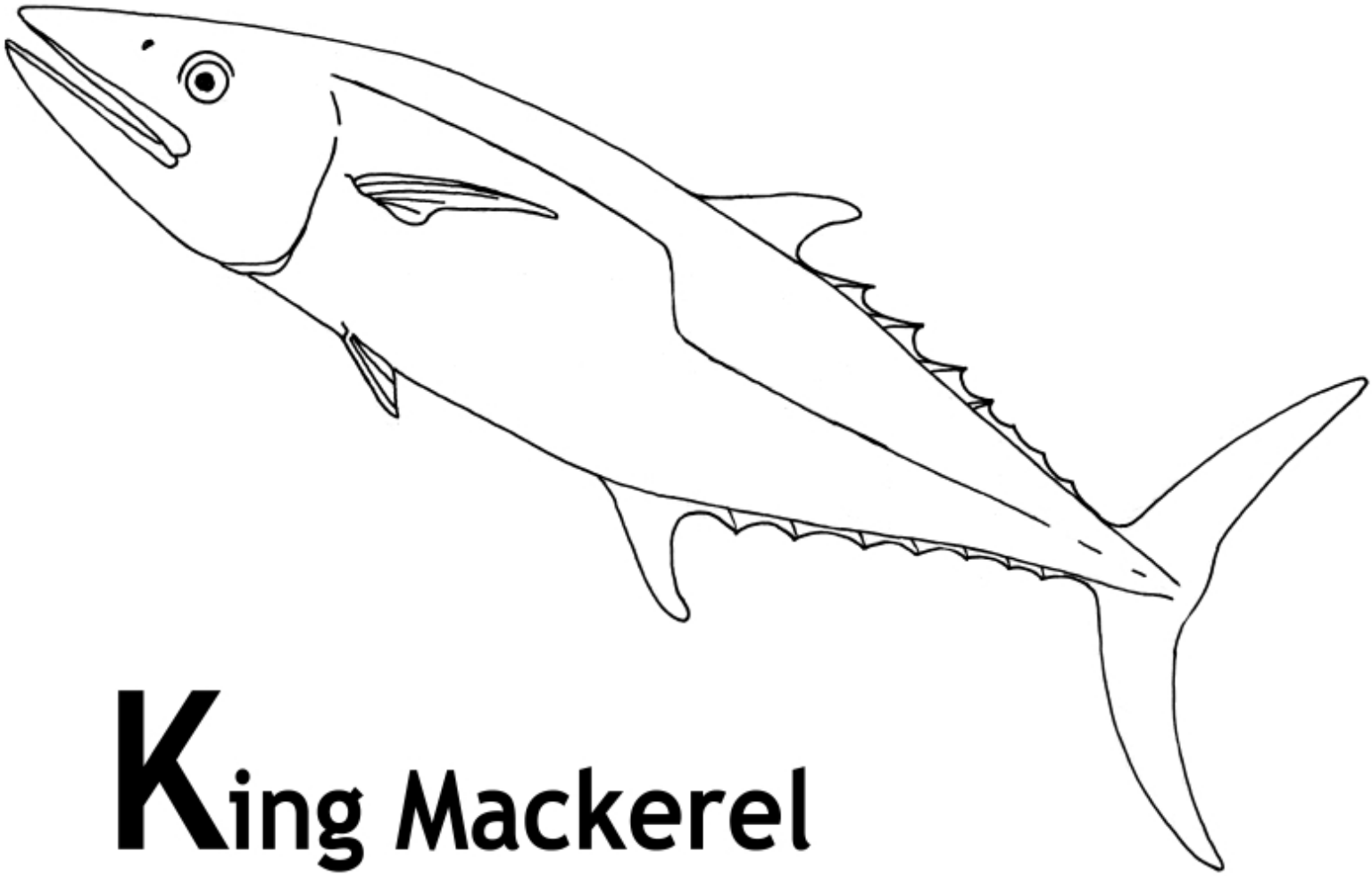
Dolphin

Eyed Flounder

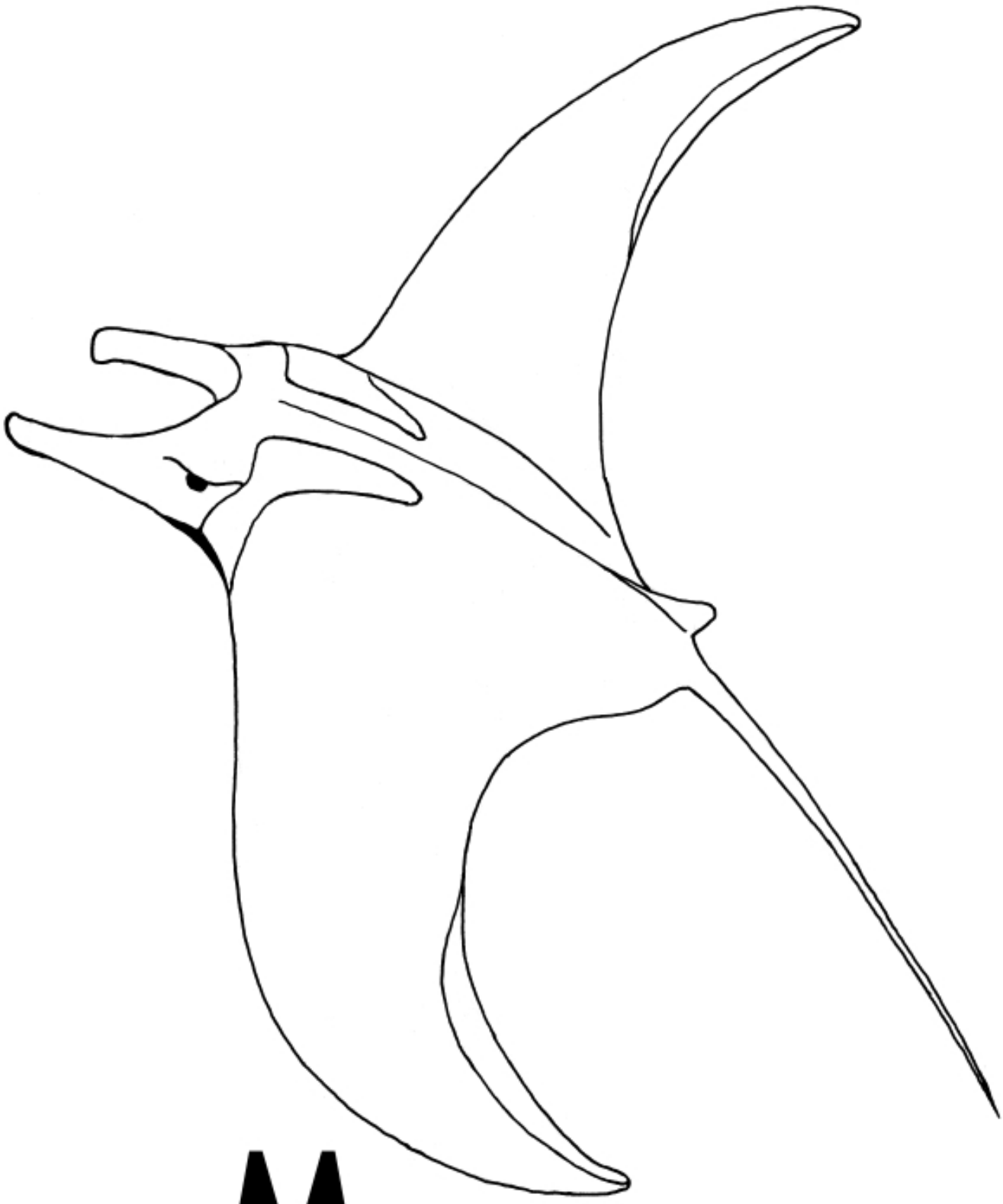




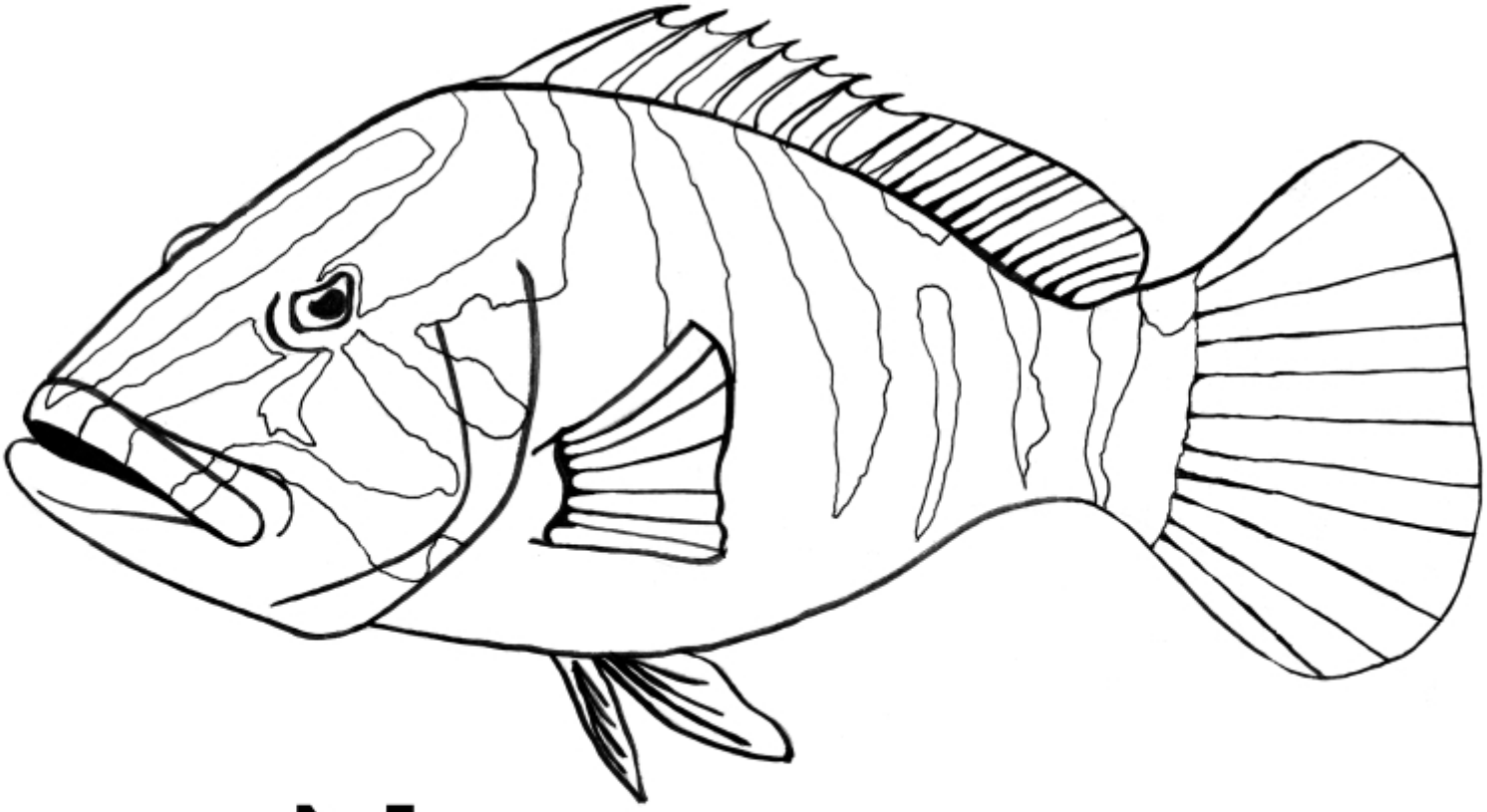
Green Turtle



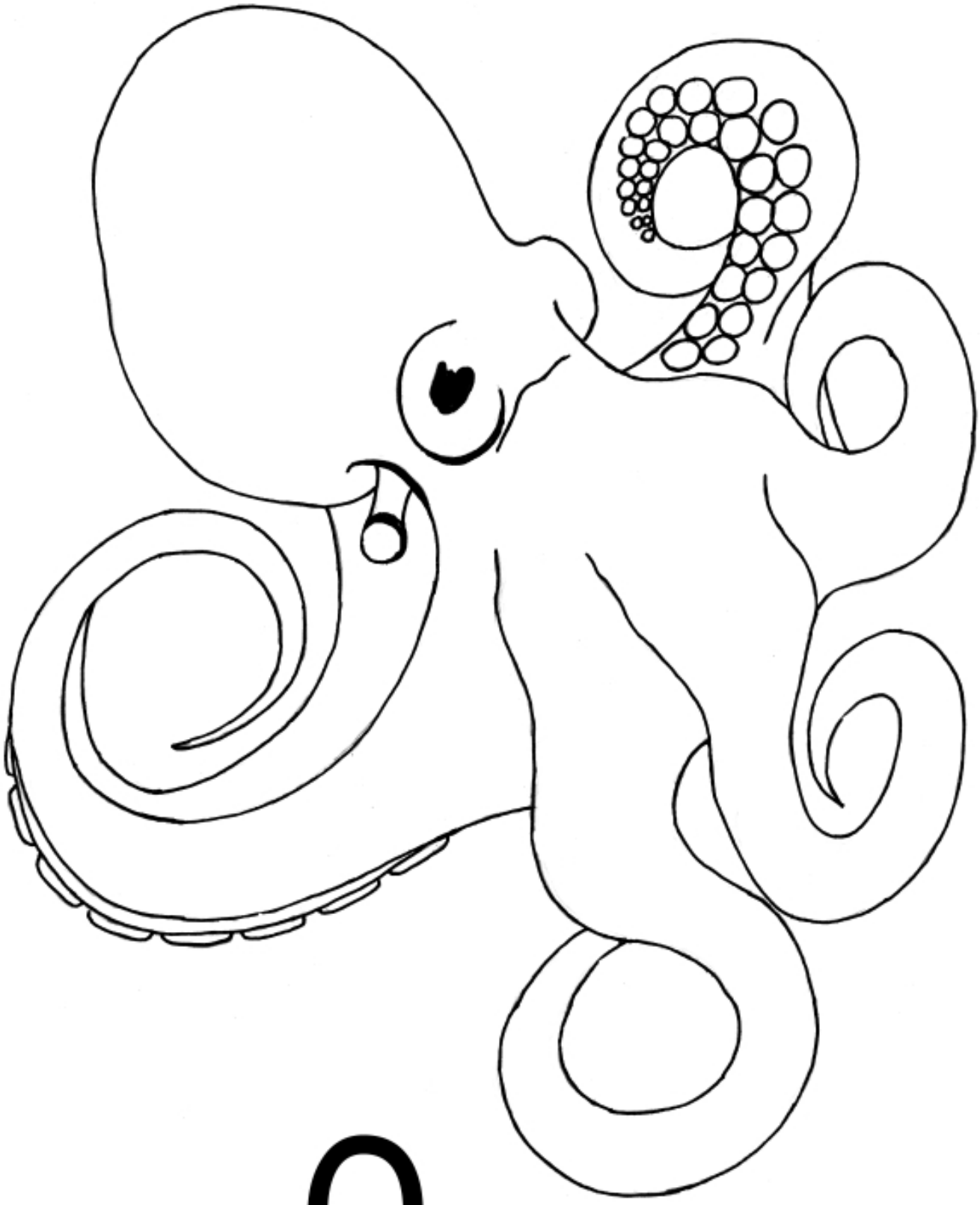
King Mackerel



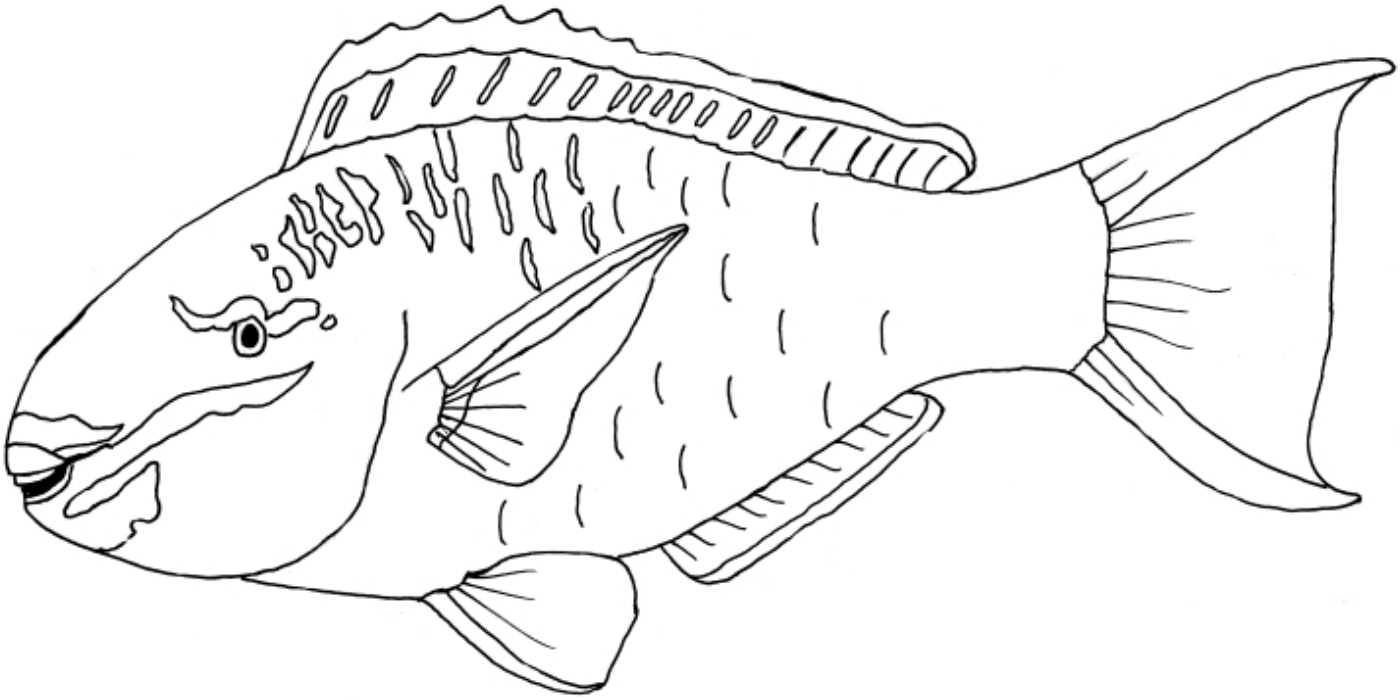
Manta Ray



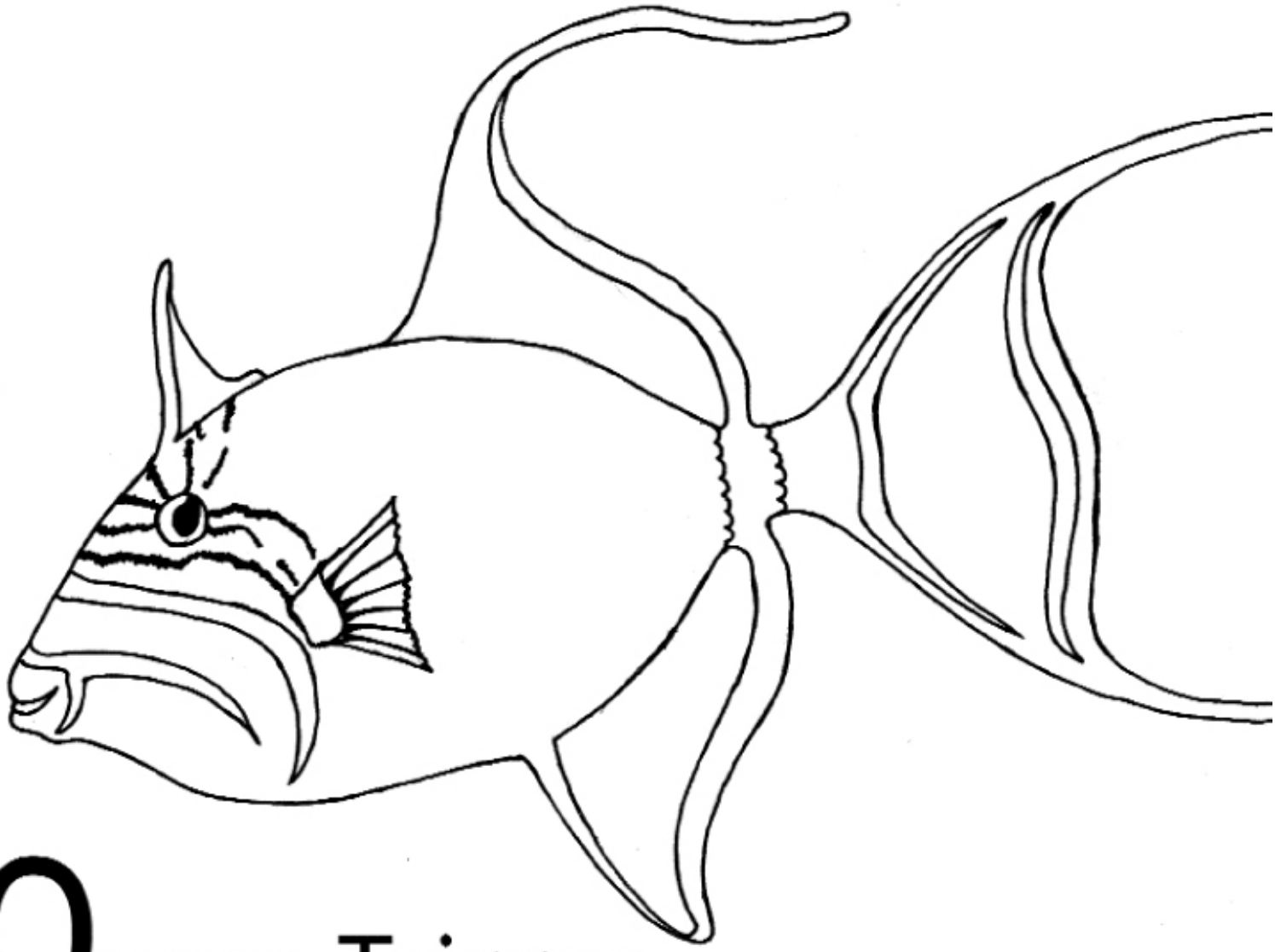
Nassau Grouper



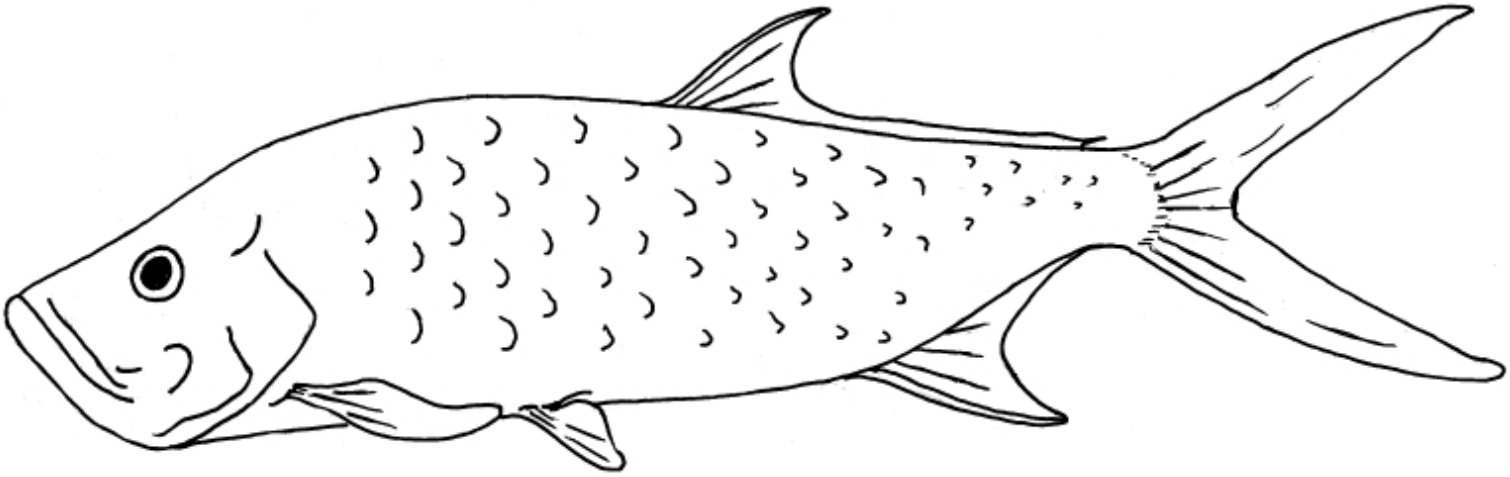
Octopus



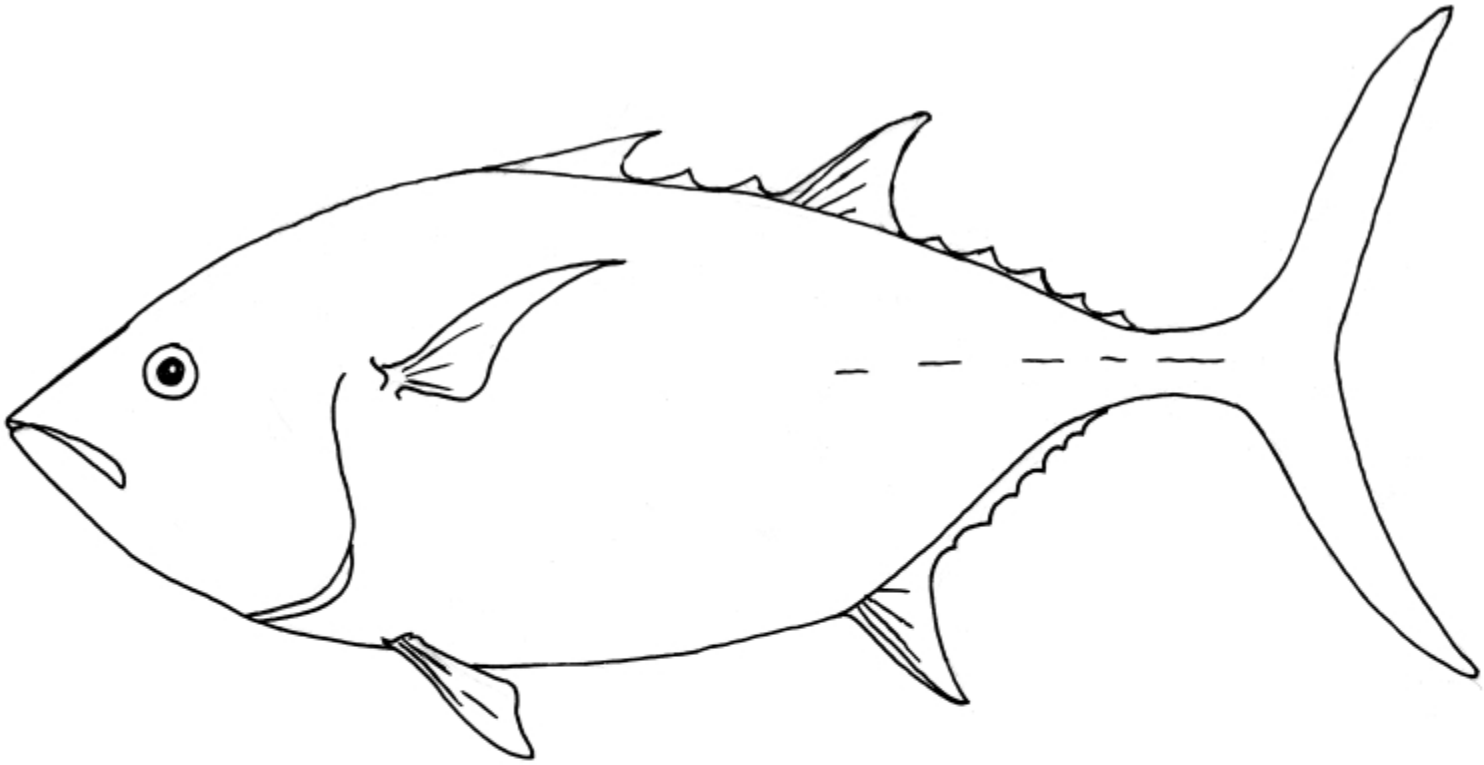
Queen Parrot Fish



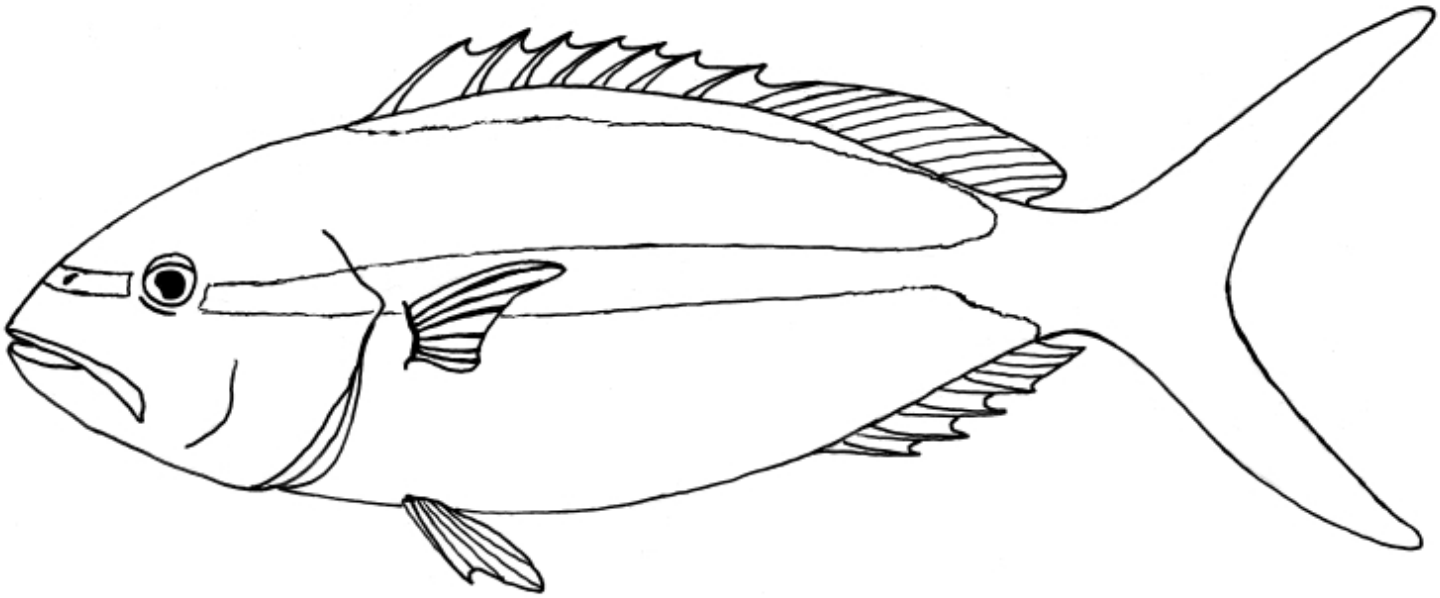
Queen Trigger



Tarpon



Yellowfin Tuna



Yellow Tail Snapper