HOOKED ON CONSERVATION

This lesson plan developed by:

THE PEW CHARITABLE TRUSTS

Overview:
Longline fishermen use fishing lines that can extend for up to 50 miles, with thousands of baited hooks branching off from the main line. Unfortunately, the baited hooks attract a vast array of species that are not intentionally targeted. This game demonstrates the effects of longline fishing on the overall health of an ecosystem.

Materials:
- String
- Long wooden rulers or bamboo poles
- At least 25 small magnets
- Glue
- Marine animal printouts
- Crayons, colored pencils or markers
- Scissors

Duration:
1-2 hours

Physical Activity:
Moderate

Set-up Prior to Activity:
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

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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.

Background:

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 spill 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.

Activity:

1. Divide the students into groups of 3-4 children and give each group a set of marine animal cutouts.
3. Have the students color and cut out the animals.
4. Help students glue one magnet of the back of each of the animal cut outs.
5. Help each group of students glue magnets onto the “longline” fishing line along the indicated marks.
6. Help each group glue one magnet to the end of each “fishing rod.”
7. Each group should spread out their marine animals along the floor at random.
8. As a whole group 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 and record results.
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.

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Discussion:

As a whole group, start a discussion about the activity with the following questions:

- What are 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.
- What does this activity 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?

Ocean Literacy Principles:

Ocean literacy is an understanding of the ocean's influence on us, and our impact on the ocean. There are seven Ocean Literacy Essential Principles that all people of our blue planet should have an opportunity to learn and understand. This activity touches upon the following Essential Principles:

5. The ocean supports a great diversity of life and ecosystems
6. The ocean and humans are inextricably interconnected
7. The ocean is largely unexplored

Further Your Impact with Sailors for the Sea Powered by Oceana:

As sailors and water-lovers, you are among the first to notice changes to our seas such as fewer marine animals, more pollution and damaged marine habitat. Through our Green Boating initiative, Sailors for the Sea Powered by Oceana provides opportunities for you and your community to address pressing ocean health issues. As a Green Boater, you will be provided with the information, resources and access to combat marine plastic pollution, prevent habitat destruction, source responsible seafood and protect marine animals. From demanding plastic-free alternatives to choosing sustainable seafood, your voice and actions are an important part of restoring the abundance of our oceans and protecting marine habitats. Join our growing Green Boating Community today.

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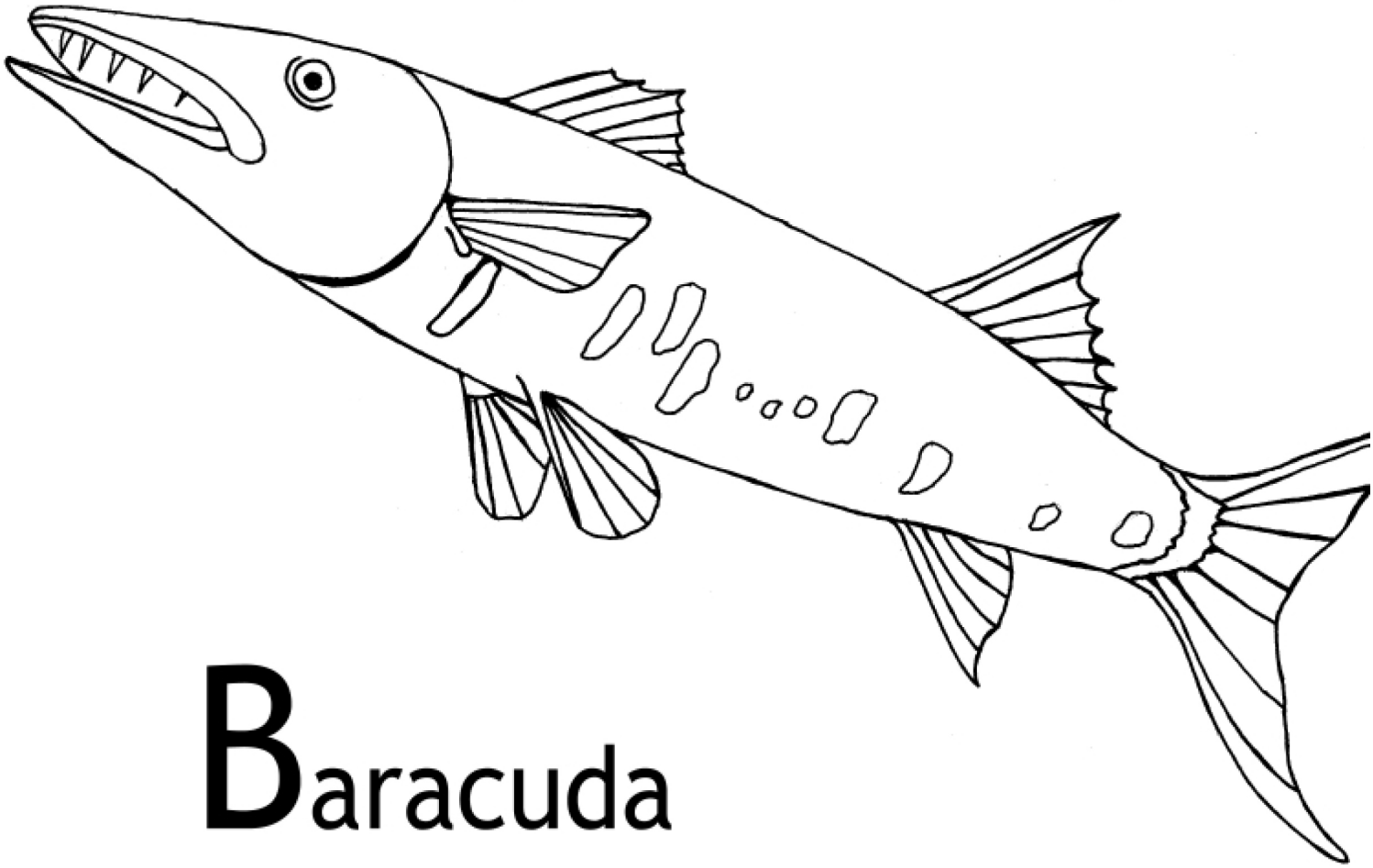
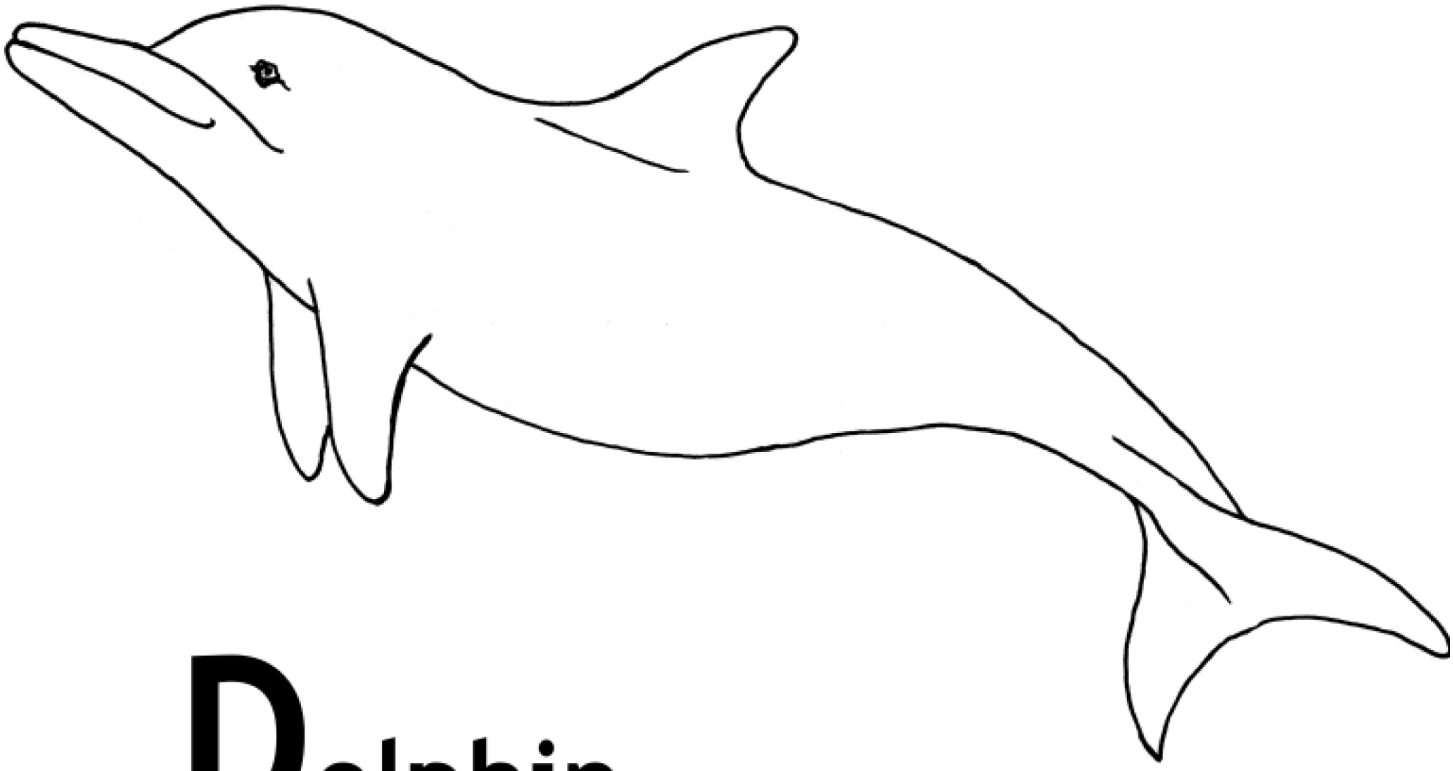
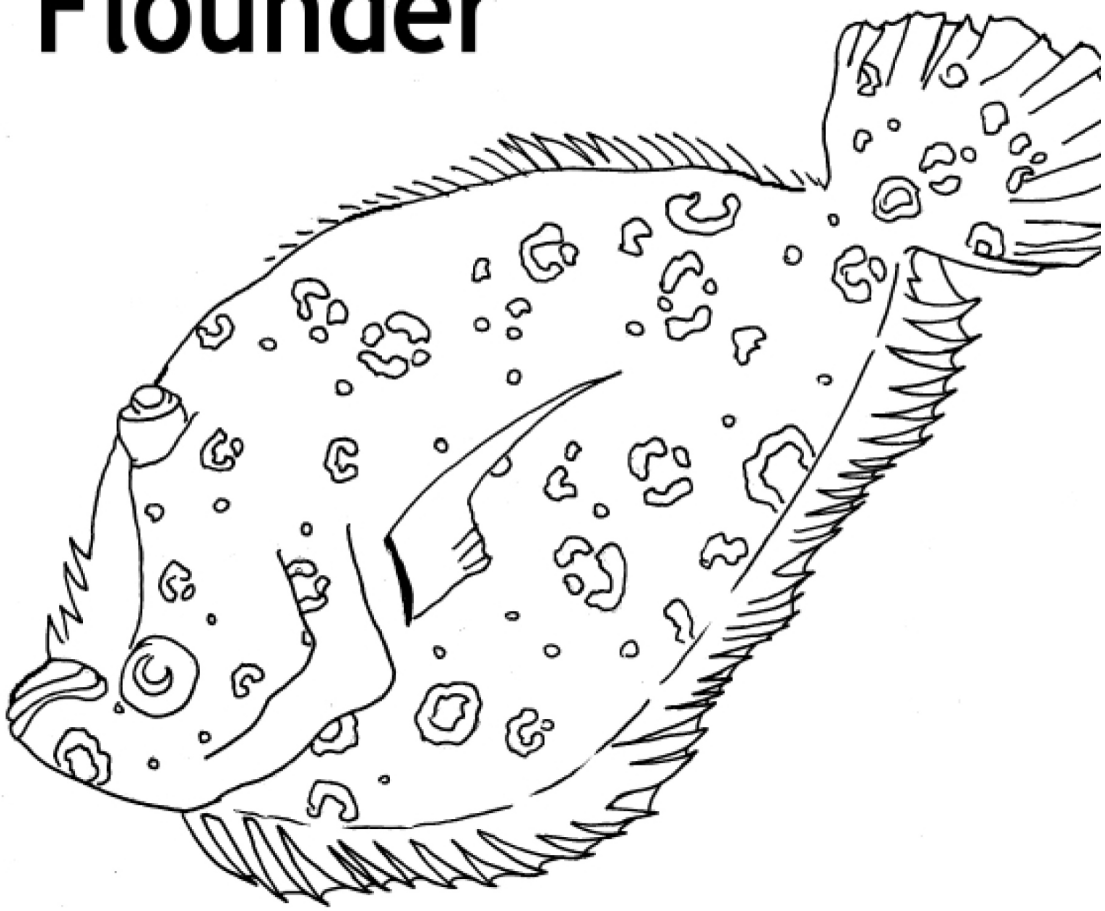


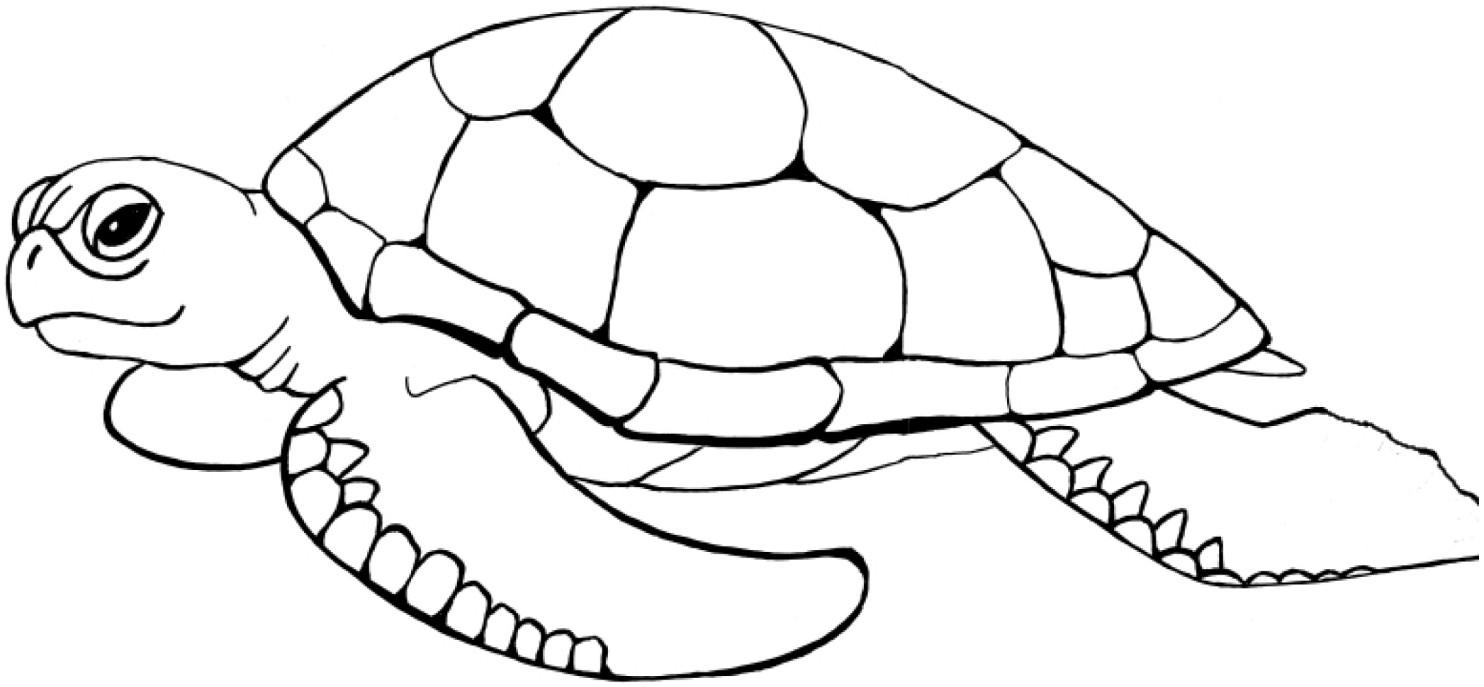
Baracuda



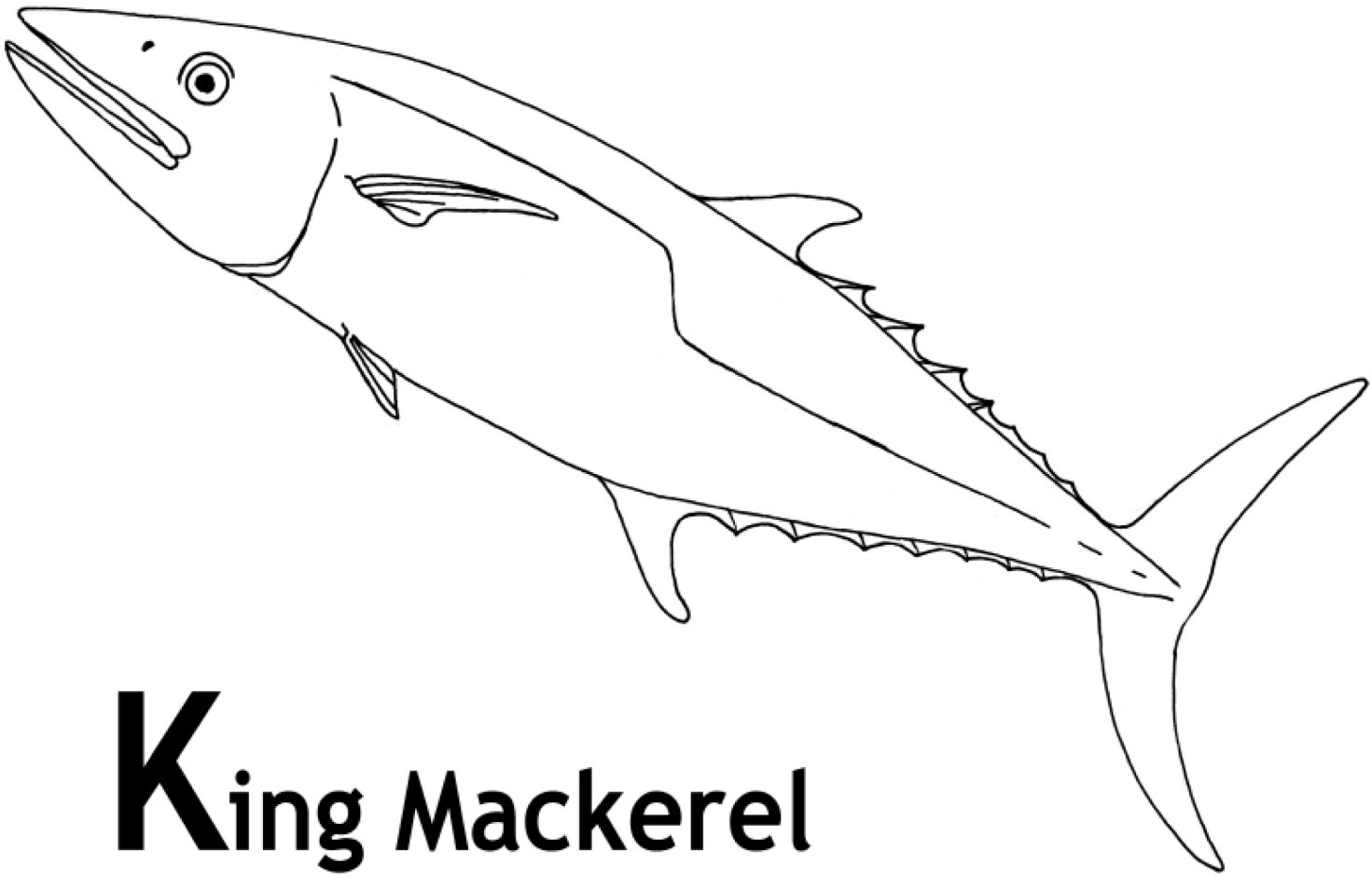
Dolphin

Eyed Flounder





Green Turtle



King Mackerel

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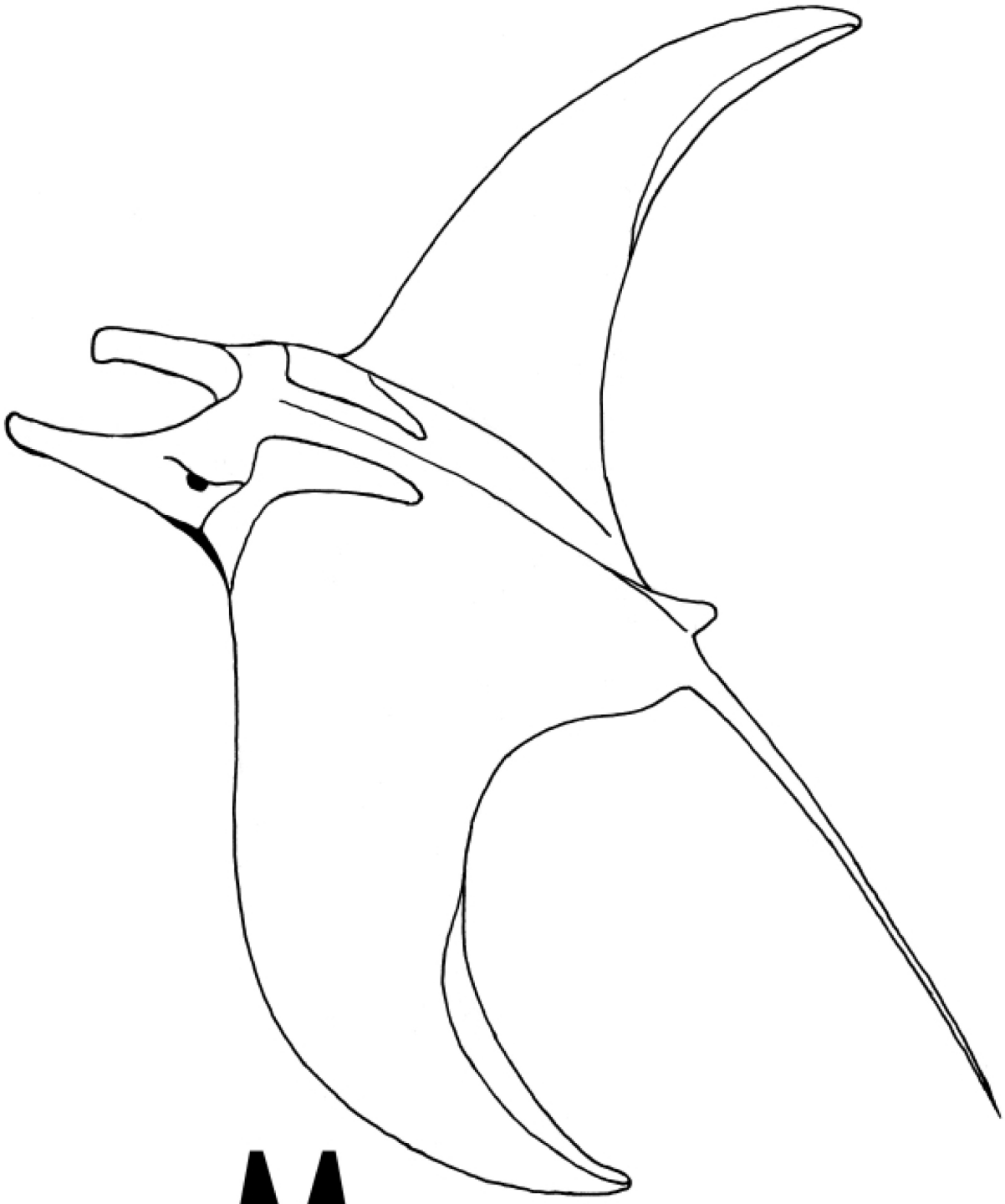
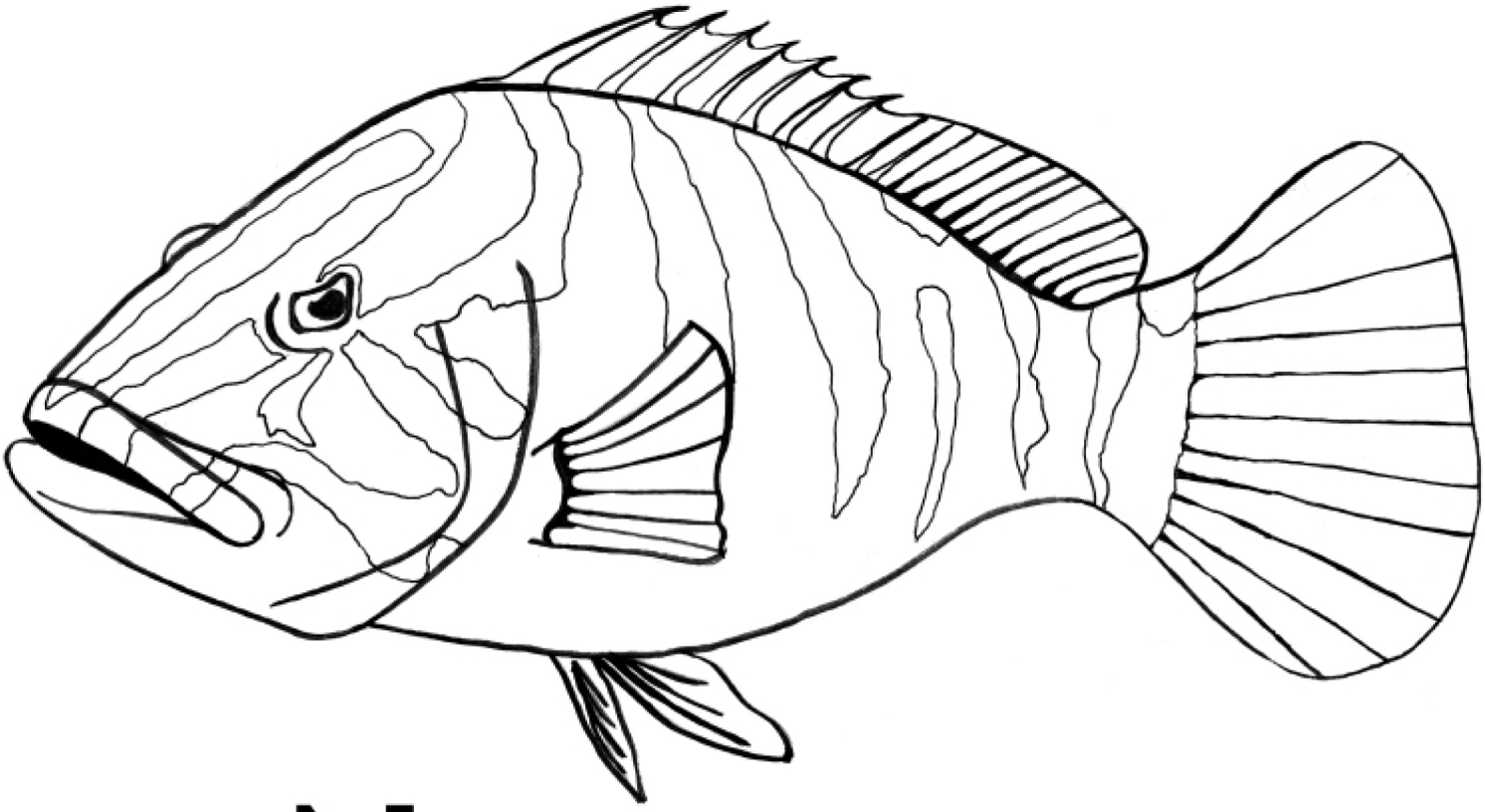
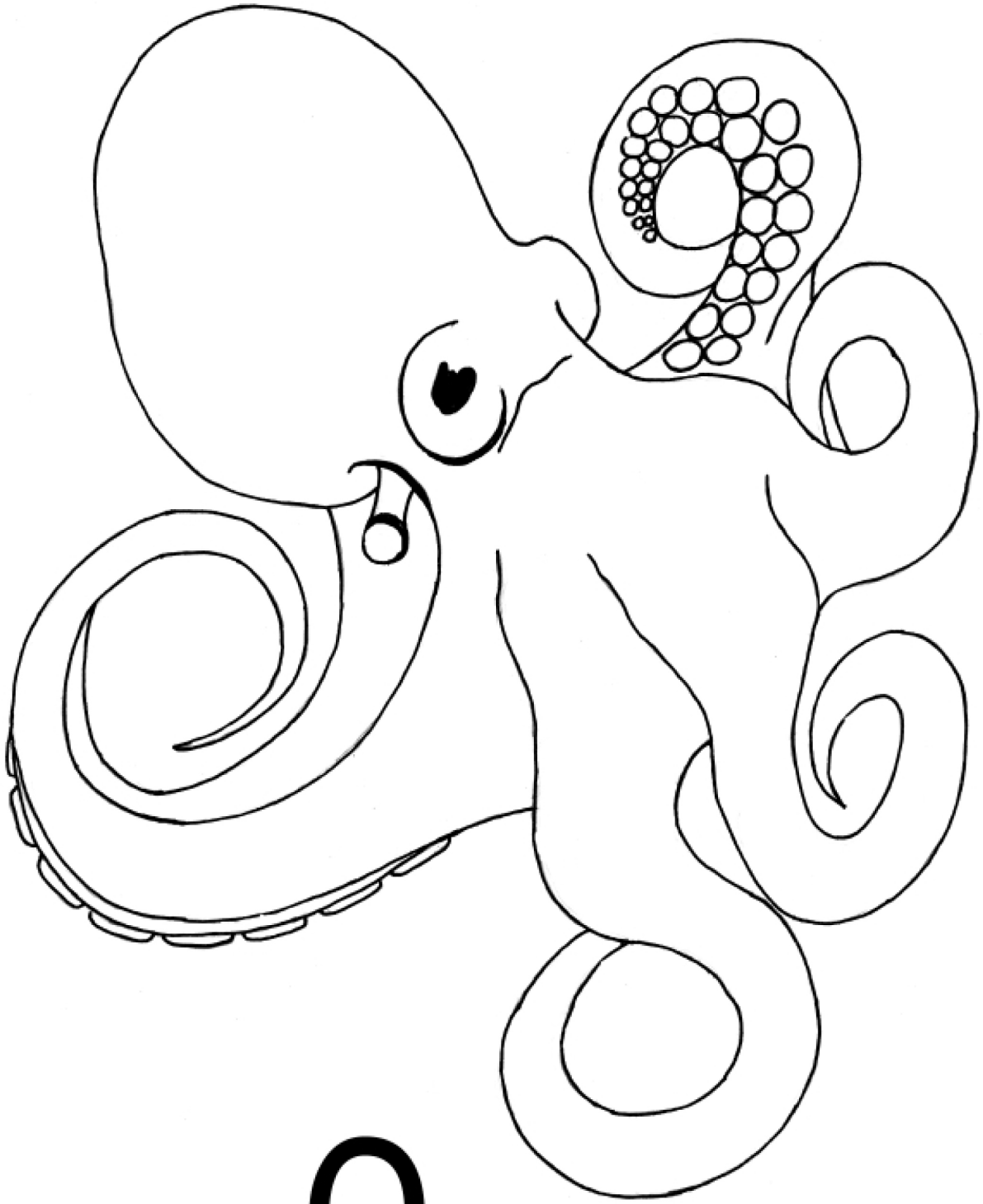


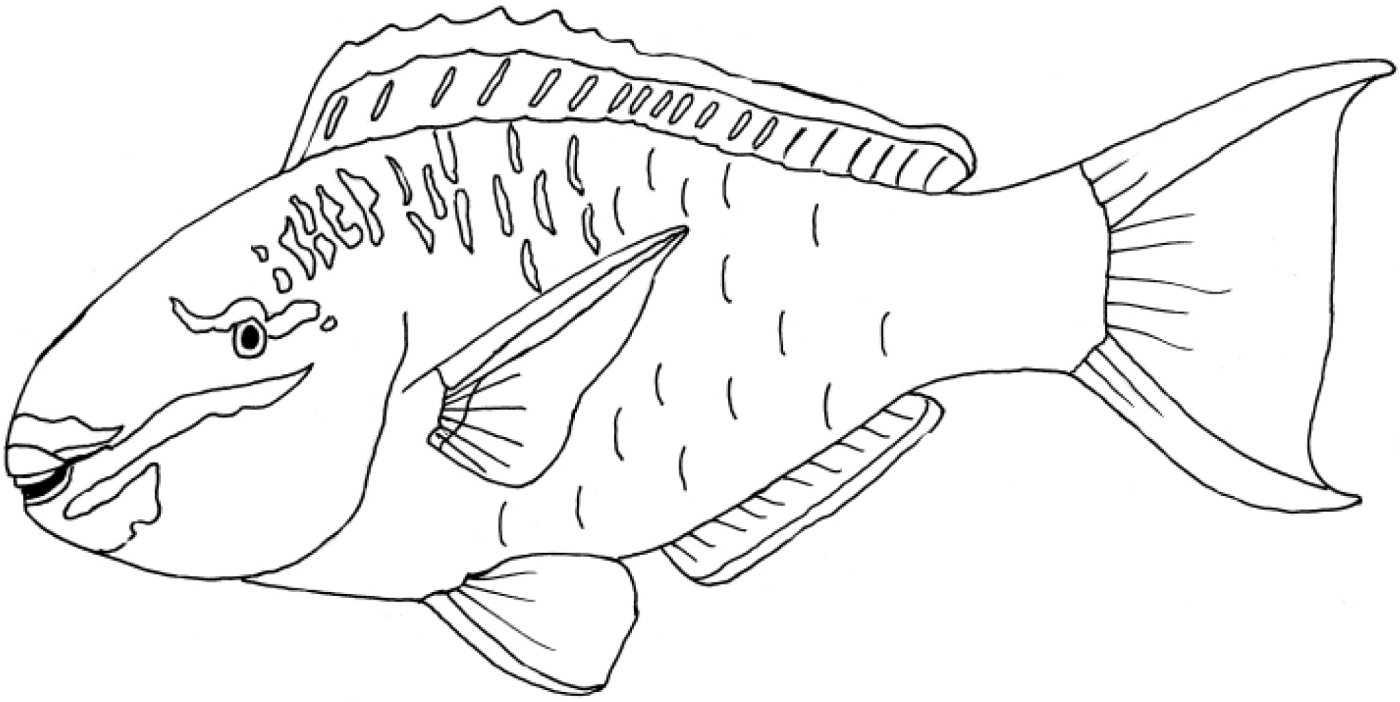
Manta Ray



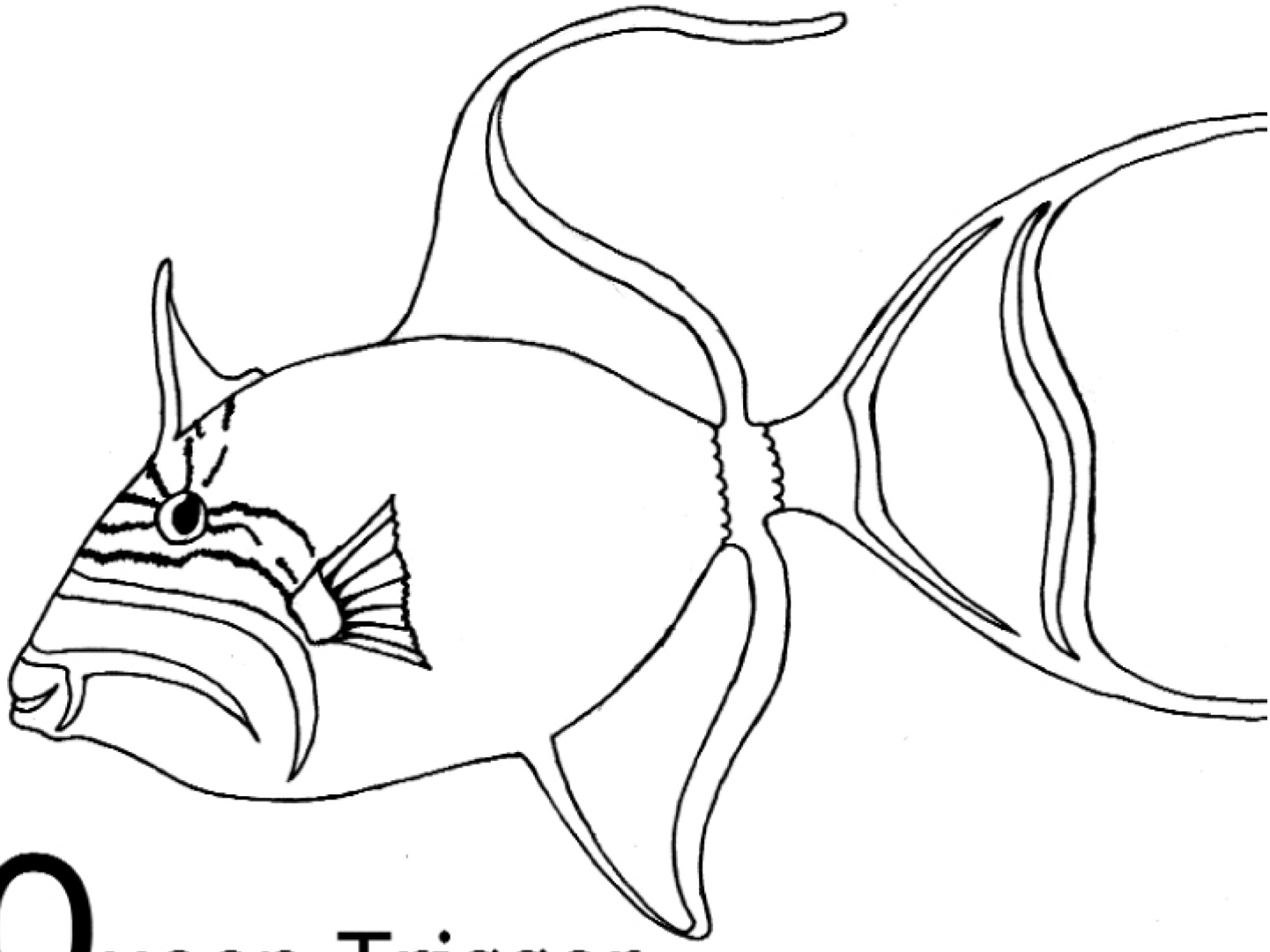
Nassau Grouper



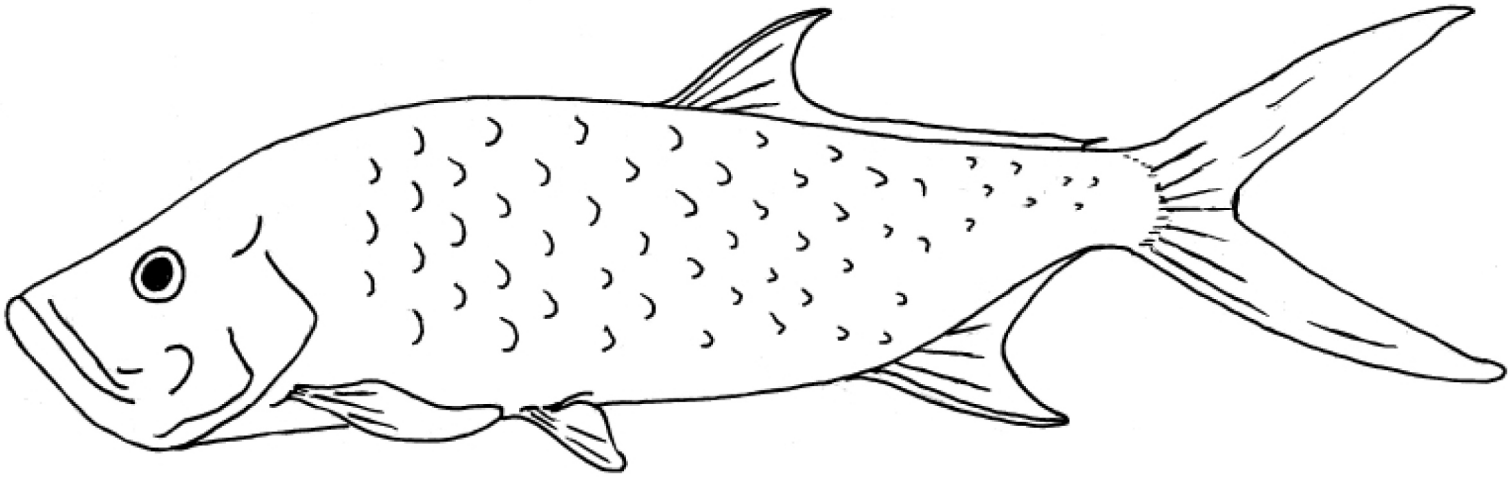
Octopus



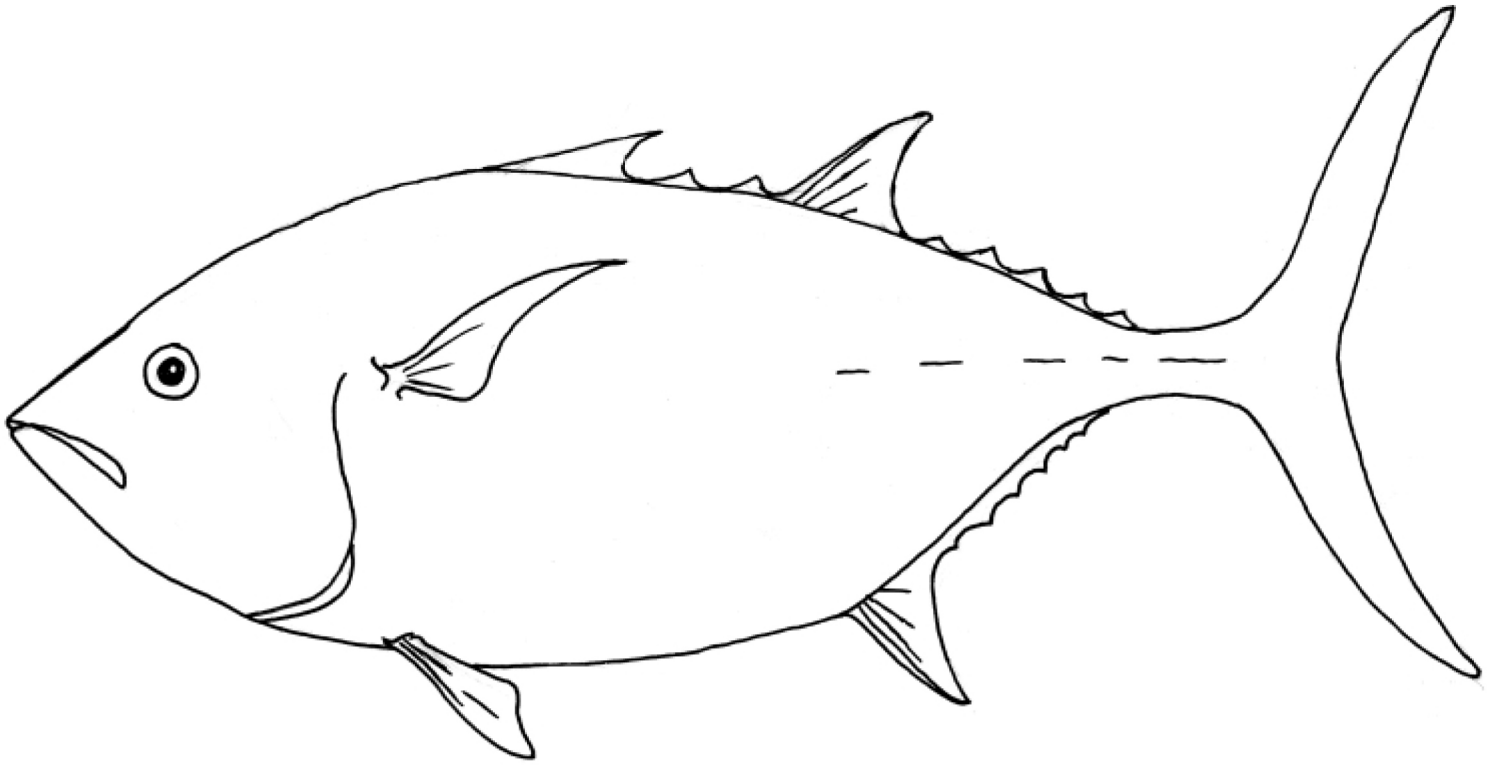
Queen Parrot Fish



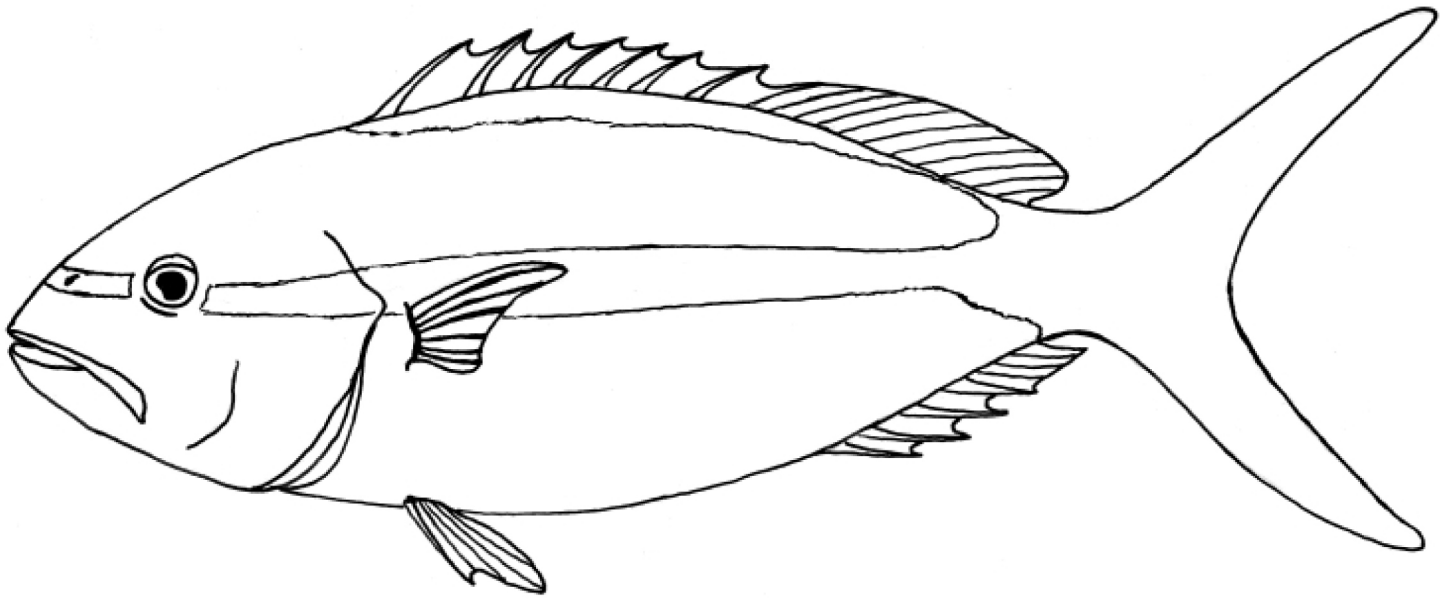
Queen Trigger



Tarpon



Yellowfin Tuna



Yellow Tail Snapper