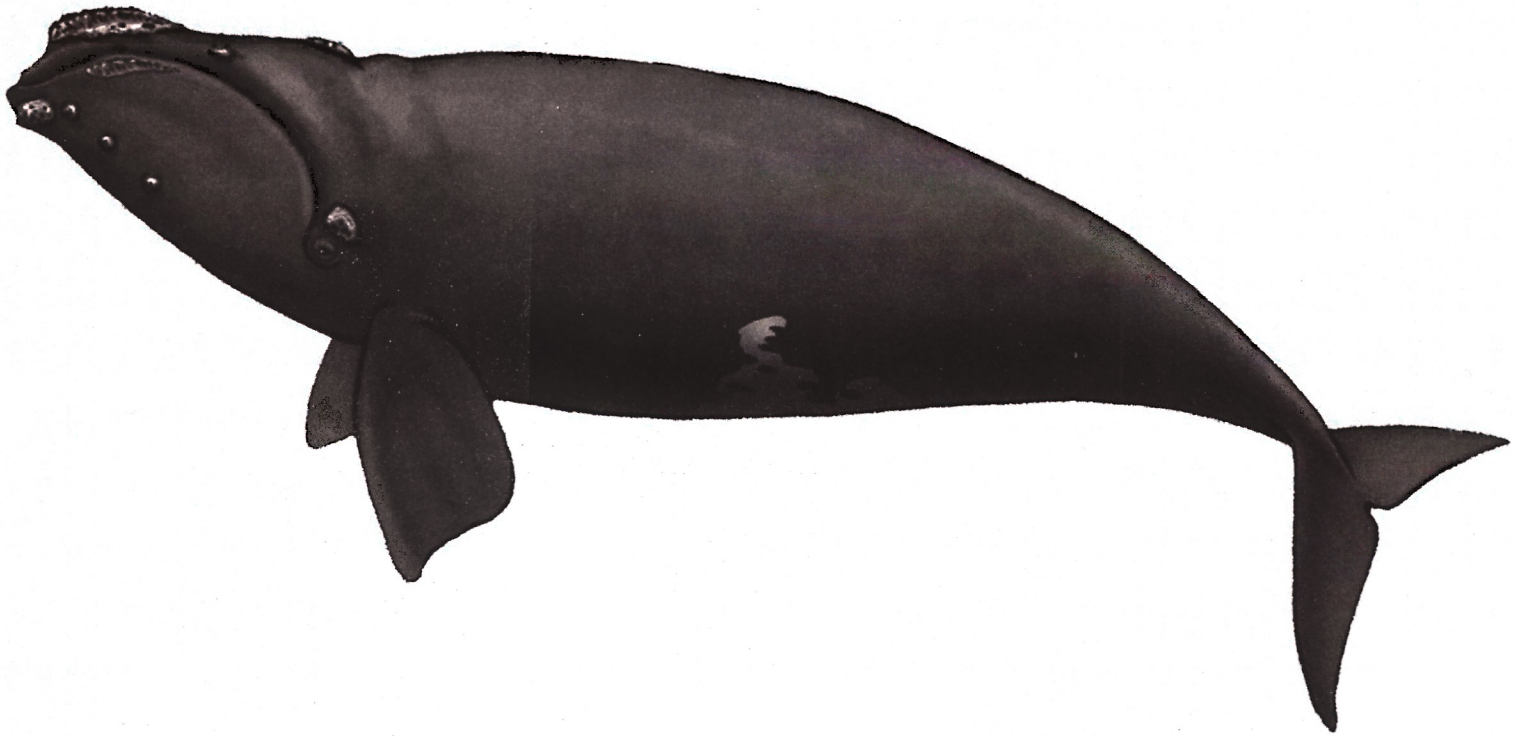
The World of North Atlantic Right Whales

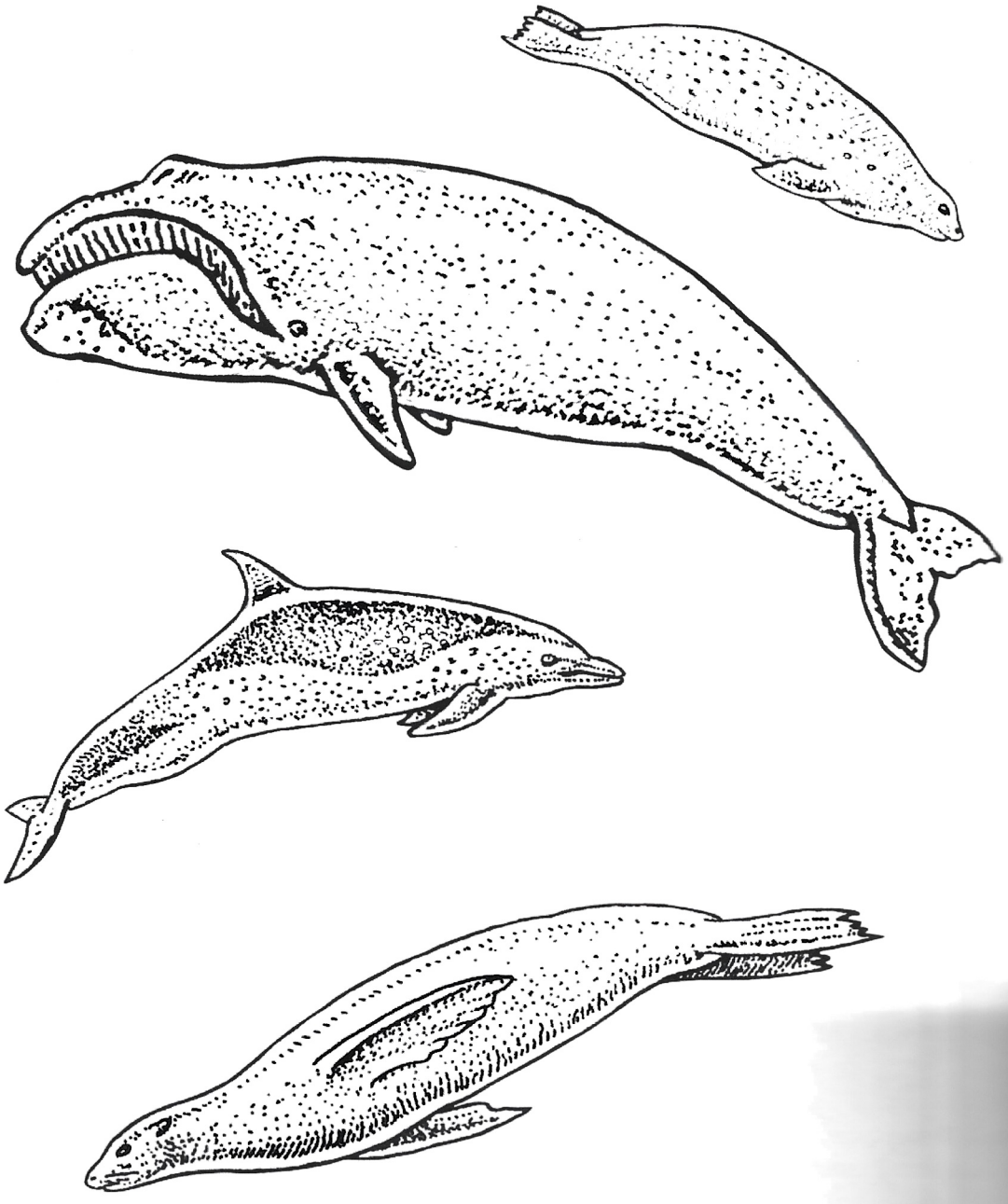
Discover the fascinating world of the North Atlantic right whale (*Eubalaena glacialis*) through lessons and activities on the biology, ecology, and conservation of this endangered species.

Grades 6-8



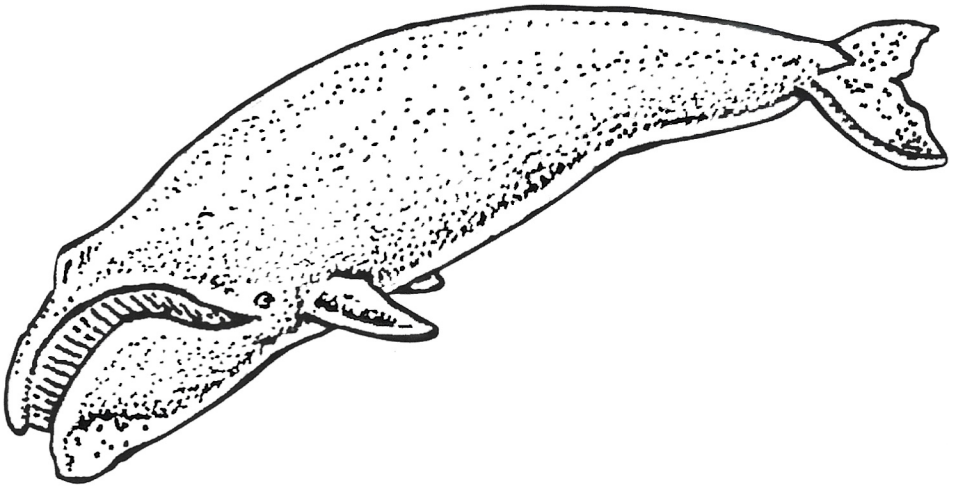
Produced by NOAA Fisheries Service's Northeast Regional Office

Introduction to Marine Mammals

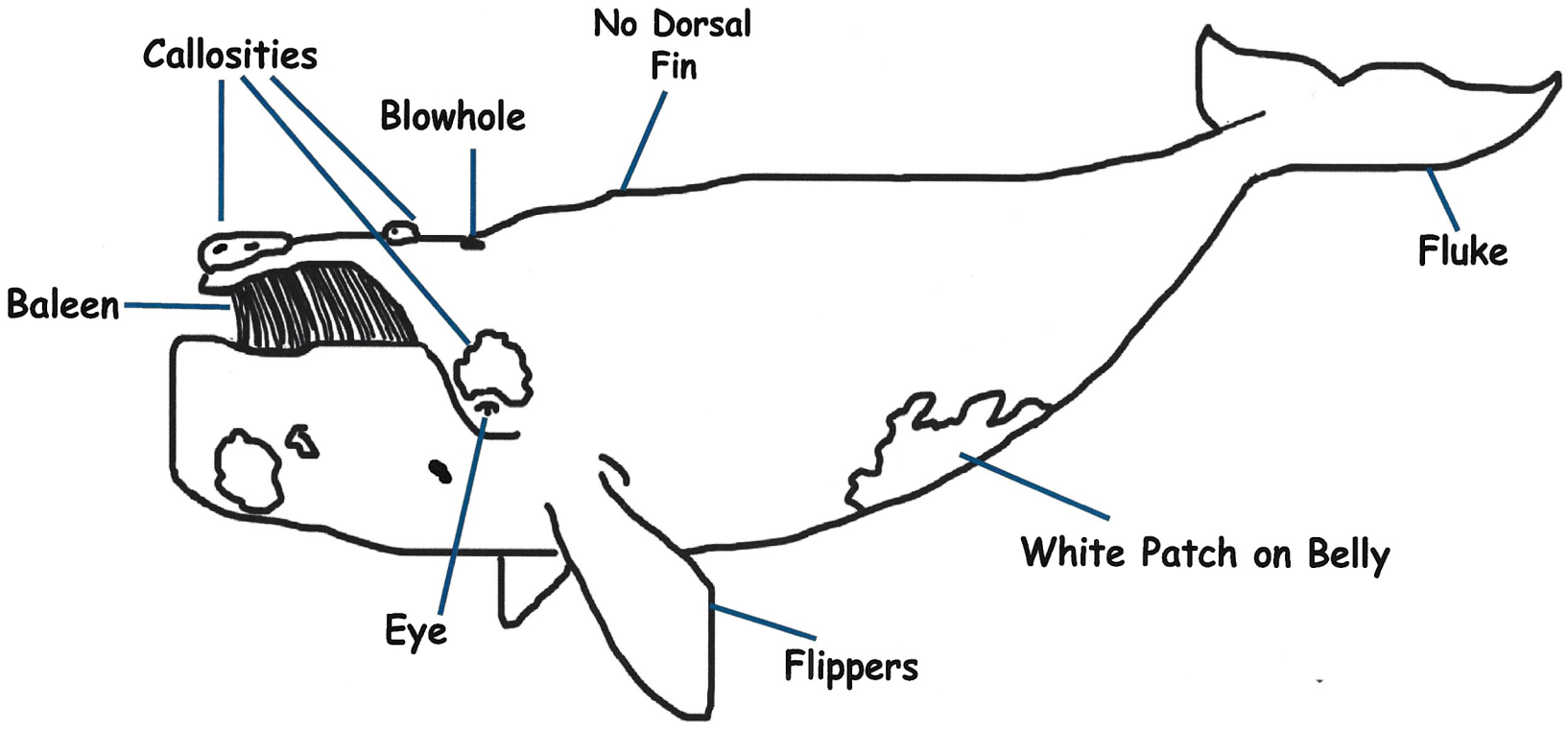


North Atlantic Right Whales

Right whales. Credit: NOAA



Right Whale Anatomy



Activity:

Whale of a Tale

Teaching Time: 30 min

Learning Objectives:

Students will use observations to describe physical characteristics of marine mammals.

Students will use creative writing to create a "sea monster" story based on marine mammal physical characteristics.

Background: The ocean's first explorers did not know much about the animals living beneath the waves. Given that very little can be seen of these animals from the surface, imaginations mixed with fear and awe, may have resulted in some inaccurate descriptions of these animals and their behaviors leading to the creation of sea monster stories. Since studying marine mammals still takes place primarily at the water's surface, scientists must be vigilant in their observations in order to make sure their assumptions can be supported by scientific data as they discover new ways to study these animals.

Materials: Pictures of marine mammals (Appendix), paper, pencils.

Instructions:

1. Have students break into groups of 3-4.
2. Provide each group with a picture of a whale or dolphin that the students may not have seen before (example pictures provided in the Appendix) with the corresponding Whale of a Tale Mystery Scenario. Tell the students they will be using their imaginations to pretend that they are some of the first sailors to cross the Atlantic ocean. They have just come across an animal in the sea that they have never seen before (in the picture). Have them describe the animal. What do the animals look like? What conclusions can they draw about what the animal eats? Encourage creativity with how they describe the scene.
3. Allow students to work together for 15-20 minutes.
4. Have students present their descriptions.
5. After they complete their descriptions, tell each group the name of the whale that corresponds to their mystery animal picture.
6. Pass out cetacean identification cards to students and have them locate their whales on the card (if you do not have cards, have students conduct an online search for pictures).
7. Have students complete a short report describing their whale including, details they were not able to infer from the mystery animal picture.

Assessment Questions:

- Can students compare their description to the image from the identification card?
- Can students identify what part of the animal they were seeing and if their mystery picture contained multiple animals?
- Can students communicate what additional information would have been helpful to make their description more accurate?
- Can students identify what made coming up with a description of the animal difficult?
- Can students draw conclusions about the origins of sea monster stories?

Follow-up Activities:

- Research new techniques for studying the underwater behavior of marine mammals.
- Research other sea monster stories and look for clues to determining what marine animals the stories' authors might have really been describing.

Activity:
Dolphin Echolocation Game

Teaching Time: 30 min

Learning Objectives:

Students will creatively visualize how echolocation is used by toothed whales and dolphins.

Students will identify how ocean noise may impact underwater communication and the ability for marine mammals to find food.

Background: Living underwater has many challenges. Finding food and others of the same species would be difficult if marine mammals solely relied on vision as the only sense helping them to locate these important things. Sound travels much further than light underwater, therefore making hearing a very important sense for all marine mammals. Marine mammals rely very heavily on sound for their survival, either for communication or for locating prey. Toothed whales (odontocetes) have the extra capacity to create and receive sound waves that help them to locate specific items, such as the fish they feed on, through the process of echolocation (see page 3 for description). As underwater noise increases in the oceans due to increased ocean use by boats and other underwater activities, communication and the use of sound by marine mammals may face new challenges.

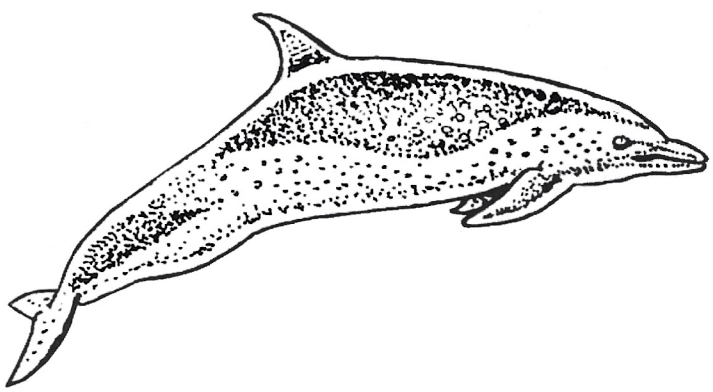
Materials: Blindfold. Open space.

Instructions:

1. This game is similar to the game "Marco Polo".
2. Gather students in a circle and ask for a volunteer dolphin and a volunteer fish. Have the volunteers stand in the center of the circle.
3. Blindfold the dolphin to eliminate its sense of sight (students can cover their eyes if blindfolds are too scary). Explain that this game works like "Marco Polo" where the dolphin says "dolphin" and then the fish echoes "dolphin" (at a similar volume). The dolphin tries to gently "tag" the fish within the circle boundary.
4. After playing a few rounds this way, have students on the outside circle create extra noise as the game progresses. Start with having students whisper and progress to normal conversation volume. Does the dolphin have to adjust their volume to compensate for the extra noise?

Assessment Questions:

- Can the students communicate what they observed?
- Can students identify some of the challenges of being a predator and prey?
- Can students describe, in their own words, how the process of echolocation?
- How did the addition of noise make the dolphin's job of catching the fish more complicated?



Activity:
The Blubber Glove

Teaching Time: 30-45 minutes

Learning Objectives:

Students will learn the biological function and benefits of blubber for whales.

Students will conduct an experiment and record their data.

Background: Whales are warm-blooded marine mammals that can tolerate cold water temperatures. Whales use blubber as an insulation layer to help maintain energy and warmth when they dive to cool depths or travel to cold waters such as in the North Atlantic Ocean. The blubber layer is a thick layer of fat found under the skin.

Materials: Baking sheet/pan (one per group), rubber gloves (one pair per group), ice, vegetable shortening, spoon (one per group), stopwatch or clock with second hand (one per group, water, pencils/pens, and paper.

Instructions:

1. Ask the kids if they've ever heard the word "blubber" and if they can they tell you what it means? (See glossary for definition.) Why do whales, and other animals need blubber? Explain to students that a thick layer of blubber, which is a type of fat, acts as an insulator to help keep animals, such as right whales, warm. Tell them they will prove it by making their own blubber glove.
2. Fill a baking pan with about 3-4 inches of cold water.
3. Add ice to the baking pan. This cold water will represent the cold ocean water.
4. Break students into groups of 2-4 students.
5. In each group, have one student put on a rubber glove.
6. A second student from each group should then cover the first student's gloved hand with shortening. The second glove should then be placed over the shortening. [This glove can also be prepared in advance by the teacher in order to save time during the lesson.]
7. One student with the glove on should then place his or her bare hand into the ice water.
8. Another student in the group should act as the timer, and keep track of how long the gloved student can keep the bare hand in the cold water. These results should be written down.
9. The gloved student should then place the gloved hand into the ice water. Again, the timer should keep track of how long the student can keep the hand in the cold water, and this time should be written down.
10. Each student should take a turn experimenting with the "blubber glove".
11. Ask each group to share their data and write the results on the board.

Assessment Questions:

- Are students able to identify which hand remained warm in the cold water?
- Can students describe how the blubber glove compares to whale blubber?
- Do students understand why blubber is important to whales & other marine mammals?

Activity:

Right Whale Heat Exchange

Teaching Time: 45 minutes.

Learning Objectives:

Students will compare heat loss in objects with different surface-to-volume ratios.
Students will learn the biological advantage for right whale body shape.

Background: Animals that live in colder climates, including cold water, need several adaptations in order to stay warm. Even though blubber layers are essential for helping whales stay warm in the cold waters of the North Atlantic, whales also have other characteristics that help them to stay warm. Whales are large animals, and the larger the animal, the smaller the surface area-to-volume ratio is. Therefore, even though it is counter intuitive, the larger the animal is, the less area there is for the animal to lose heat from. Right whales also have torpedo shaped bodies, with limbs that are not very long. This adaptation helps the surface-to-volume ratio to remain low, therefore allowing for even less area where heat can be lost from.

Materials: hot and cold water, 2 ziploc plastic sandwich bags, disposable plastic glove (similar material to the plastic bag), a styrofoam cup, a dishpan, bucket or similar container.

Instructions:

1. Fill the dishpan halfway with cold water. This container will represent the cold ocean water.
2. Put the same amount of hot water into the glove and each sandwich bag. Make sure the fingers of the glove are filled with water. Seal the bags and tie a knot in the glove to secure the water.
3. Have each student feel the bags and glove. Tell the students to remember how warm each bag/glove is (they should be the same temperature).
4. Put one bag of hot water in the styrofoam cup. Bend the top of the cup so that the bag is tightly contained inside the cup.
5. Place the glove, hot bag, and closed cup into the basin of cold water. Leave them in for about 5 minutes.
6. Remove the glove, plain bag, and styrofoam cup from the water.
7. Remove the bag from the cup.
8. Have students feel each again. The glove should feel the coolest and the bag from the styrofoam cup should feel the warmest. The glove represents an ocean animal with long legs. It has a lot of surface area, but little volume. If a whale had long legs, it would get too cold too quickly swimming in cold water. The plain sandwich bag represents an animal with no legs, but no insulation. It stays warmer than the animal with legs, but cooler than the bag that was insulated in the cup. The insulated cup/bag represents a whale: animal with no legs, and with insulation that acts like blubber.
9. OPTIONAL: You can conduct the same experiment with a thermometer and have students record the actual before and after temperatures.

Assessment Questions:

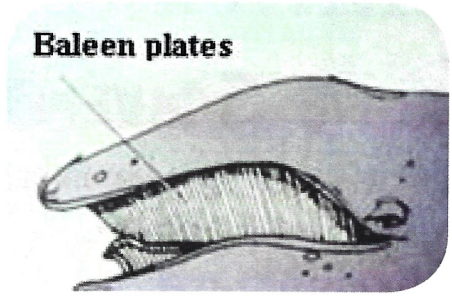
- Are students able to describe their observations?
- Can students draw conclusions about why whales are large and have flippers instead of hand and feet?

Follow-up Activity: Have students make a list of animals that live in the ocean. How many have long legs? Where in the world's oceans do they live (arctic, temperate, tropic, coastal, or open ocean)?

Source: The Northern Right Whale: From Whaling to Wathcing. NOAA's National Marine Santuary Program.

Activity:

Feeding Adaptations



Teaching Time: 20-40 minutes

Learning Objectives:

Students will learn the function of whale baleen.

Students will create a bar graph of results.

Background: Feeding adaptations allow for each animal to become specialized at capturing the prey they need. Baleen whales have adapted a unique system for capturing their prey using the filtration of water through baleen plates, instead of teeth. This adaptation allows some of the largest animals on Earth to feed on some of the tiniest animals on Earth.

Materials: Salad tongs, fork, spoon, strainer, candy sprinkles that will float, gummy fish candy, dishpan or bucket of water.

Instructions:

1. Fill container with water & add candy fish and sprinkles to water. Each utensil will represent different type of animal's tooth, with the strainer representing baleen. The candy represent small and large prey.
2. Have the students experiment, using each utensil to collect as many fish or sprinkles as possible within 1 minute.
3. Each student should create a table for each utensil he/she uses, and document how many of each prey item they are able to capture with each utensil. (See example below).
4. In a group, have students combine their results for each utensil and create a bar graph showing their combined results, identifying what tool was the most efficient for collecting each type of food (i.e. small versus large prey).
5. Have students describe how the tools worked.

Assessment Questions

- Do students understand the comparison of the strainer to baleen?
- Can students describe the function of how baleen works?
- Can students describe why the adaptation of baleen is more efficient for capturing small prey than teeth would be?
- Can students identify how specific feeding adaptations are related to prey type?

Example Table:

Student 1	Tongs	Fork	Spoon	Strainer
Candy sprinkles				
Gummy fish				

Follow-up Activity: Provide students with various examples of animals from the same group (birds with different shaped beaks work well for this activity). Have students research the animal's prey and how the animal captures its prey. Have the students describe the animal's feeding adapation that allow them to feed efficiently. Would a different feeding adaptation (ex. a differently shaped beak) work/not work for capturing this particular prey? Why or why not?

Activity:

Online Scavenger Hunt

Complete the sentences by searching for the answers on websites listed below.

1. Marine mammals are _____ that are well adapted for life in the marine environment.

2. All marine mammals are _____ under the Marine Mammal Protection Act (MMPA).

3. There are approximately 125 marine mammal _____ worldwide.

4. Whales are the largest animals that ever lived on the Earth. They are even larger than the _____ of prehistoric times.

5. There are 11 species of _____ whales and 67 species of toothed whales.

6. Almost all species of baleen whales were exploited by the commercial _____ industry from the 1700s to the mid-1900s.

7. Whales, dolphins, and porpoises all belong to the same taxonomic order called _____.

8. Right whales are large _____ whales.

9. Right whales are the _____ of all large whale species and among the rarest of all marine mammal species.

10. Using cross-sections of teeth is one way to age mammals. However, right whales have no _____.

11. Most known right whale _____ areas are in shallow, coastal waters.

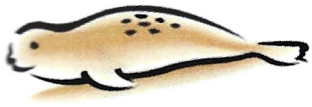
12. Right whales are large, rotund, black whales with large heads, long rostrums, and no dorsal _____.

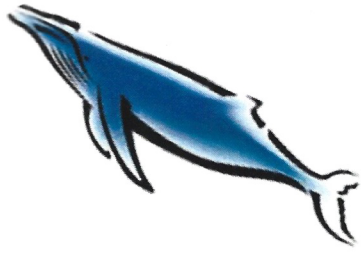
13. Right whales have distinguishing hard white patches called _____ which are the best identification both for the species and for individual right whales.

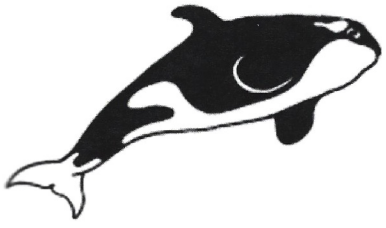
Websites to Use:

www.nmfs.noaa.gov/pr/species/mammals/
www.nmfs.noaa.gov/pr/species/mammals/cetaceans/
www.nmfs.noaa.gov/pr/species/mammals/cetaceans/rightwhale_northatlantic.htm
www.nero.noaa.gov/prot_res/mmv/regs.html
www.afsc.noaa.gov/nmml/education/cetaceans/
www.nmfs.noaa.gov/pr/education/whales.htm

Activity:
Marine Mammal Word Search







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E V C B A A O R N A W Z U O W N S U F O
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A D L A Y N I R T C B M R X K J V M G V
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T N A I R B R E A T H I N G B V N S Y S
E I S C E T A C E A N N O I T A R G I M
E A Y S T V K U C D R S N N W O B Y T N

Words to Find

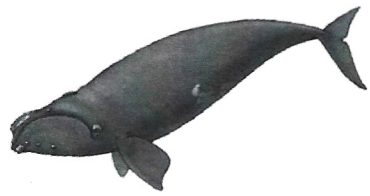
AIR BREATHING
BALEEN
BLOWHOLE
BLUBBER
CALLOSITIES
CAPECOD
CETACEAN
COMMON DOLPHIN
CONSERVATION
COPEPODS
DOLPHIN
DORSAL FIN
ECHOLOCATION
ENDANGERED
ENTANGLEMENT
EUBALAENA GLACIALIS
FEEDING
FIN WHALE
FLORIDA
HARBOR SEAL
HUMPBACK WHALE
MAMMAL
MANATEE
MARINE MAMMAL PROTECTION ACT
MIGRATION
MYSTICETE
NORTH ATLANTIC
ODONTOCETE
OTTER
POLAR BEAR
RIGHT WHALE
SEAL
SEA LION
SKIM
WARM BLOODED
WHALING
ZOOPLANKTON

Activity:

Right Whale Double Puzzle

Unscramble each of the clue words related to right whales. Take the letters that appear in the circles and unscramble them for the answer to the following right whale joke.

Q: What is a Right Whale's Favorite TV Show?



BELBRUB

TANLONPK

BEALEN

ROTHN NATATCIL

RGIMATONI

PU - LLCA

NALGWHI

DENRENGEAD

FALC

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ON LASROD FNI

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A: W _ _ _ _ _ _ F _ _ _ _ _ _

Right Whale Illustration Credit: Scott Landry, Provincetown Center for Coastal Studies

Glossary & References

Right whales. Credit: NOAA

GLOSSARY

ACOUSTIC BUOY- A buoy that collects and records information about underwater sound.

ADAPTATION- Physical and behavioral changes that occur slowly over time and help an organism to live more easily in an environment.

BALEEN- Rows of triangular plates hanging from the upper jaw of mysticetes. The plates are composed of a protein called keratin, similar to human hair and fingernails. The baleen filters planktonic prey and fish from the water.

BIODIVERSITY- The diversity of species.

BLOWHOLE- The nasal opening of a whale, located on the top of the head. Mysticetes have two external nasal openings and odontocetes have only one.

BLOW- Cloud of vapor and sea water that is exhaled by cetaceans, often called a "spout".

BLUBBER- The layer of fat and oil beneath the skin providing insulation for marine mammals.

BULL- A mature male whale.

CALF- A newborn, or young whale that is still dependent on its mother for protection and/or nourishment.

CALLOSITY- An area of hardened skin that forms irregular patterns unique to each right whale. Can be found on top of the heads, above the eyes, and along the lower jaw. Callosity patterns are used by researchers to identify individual animals.

CARNIVORE- An animal that feeds on other animals.

CETACEAN- Marine mammals of the order Cetacea which include all the great whales, dolphins, and porpoises.

COMPETITION- Competition is an interaction between organisms or species in which the fitness of one is lowered by the presence of another. Limited supply of at least one resource (such as food, water, or territory) used by both is required.

COPEPOD- Small planktonic crustaceans (shelled marine animals) that are the main prey sourc of right whales.

COW- A mature female whale.

DISENTANGLEMENT- The act of removing fishing gear or fishing line from an entangled whale. Disentanglements can be dangerous operations, and therefore only trained NOAA Disentanglement Network Rescuers are legally allowed to attempt these activities.

DORSAL FIN- A triangle-shaped fin found along the back of many whales, thought to help stabilize the whale during swimming and diving and possibly aid in maintaining internal body temperature.

ECHOLOCATION- The production of high frequency sound waves and reception of echoes to locate objects and investigate the surrounding environment.

GLOSSARY

ECOSYSTEM- An integrated system of living species, their habitat, and the processes that affect them.

ENDANGERED SPECIES- A species that is in danger of becoming extinct throughout all or a significant portion of its range.

ENDANGERED SPECIES ACT (ESA)- The federal (national) law that protects endangered and threatened species from extinction.

ENTANGLEMENT- When an animal becomes caught, wrapped, or entrapped in fishing gear or lines. Entanglements can be life threatening to marine mammals by cutting off the animal's circulation if wrapped tightly or by not allowing the animal to move naturally or feed (if the line is on the head or in the mouth).

EVOLUTION- Change in a population's inherited traits from generation to generation.

EXTINCT- No longer exists.

EXTANT- Currently alive, the opposite of extinct.

FITNESS- The ability of an organism to survive and to transmit genetic information to future generations through successful reproduction.

FLIPPER- The distinctive forelimb structures found on either side of many marine mammals' bodies (with the exception of sea otters and polar bears). They are used primarily for steering, turning, and controlling the animal's vertical position in the water.

FLUKE- Tail of cetaceans.

FOOD CHAIN/WEB- The feeding relationships between species in a living community. Food chains & webs refer to diagrams that illustrate "who eats who" within an ecosystem.

HABITAT- The environment or surroundings in which a plant or animal lives.

GUNSHOT SOUND- A very loud pop or banging noise made by right whales that may be an aggressive call toward other males.

HARASSMENT- Under the MMPA, any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or interupt a marine mammal's natural behaviors (breathing, feeding, nursing, traveling, etc.).

HERBIVORE- An animal that feeds on plants.

HYDRODYNAMIC SHAPE- Shaped like a torpedo. This helps to reduce friction and allows the animals to move through the water quickly while using less energy.

HYDROPHONE- An underwater microphone.

KEYSTONE SPECIES- A species whose presence in (or absence from) a given ecosystem has a significant influence on the structure and function of the system, disproportionate to its numerical abundance.

KRILL- Shrimp like crustaceans that are an important food source for many filter feeding marine mammals.

GLOSSARY

MAMMAL- Warm-blooded animals with backbones (vertebrates) and hair, that nurse their young with milk. (Fine hair can be found on most juvenile marine mammals and adult whales possess sparse hair in the facial region).

MARINE MAMMAL- Diverse group of mammals that dwell primarily in the ocean or that depend on the ocean for food.

MARINE MAMMAL PROTECTION ACT (MMPA)- A federal(national) law that protects all marine mammal populations from decling to the point where they become ineffective contributors to their ecosystems.

MELON- The often bulging, fatty forehead of a toothed cetacean.

MIGRATION- Movement from one geographic region to another to feed or give birth, usually an annual pattern established in response to seasonal change.

MOAN CALL- An eerie, wavering note produced by right whales that lasts about 4 seconds.

MOLTING- A process in which pinnipeds shed their old coat of fur for a new one.

MYSTICETE- A taxonomic sub-order of whales that possess baleen instead of teeth. These whales strain food from the water with their baleen. Mysticetes have two external nasal openings. Right, humpback, fin, minke, blue, sei, and gray whales are examples of mysticete whales.

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA)- The Federal agency, within the Department of Commerce, whose mission is to understand and predict changes in Earth's environment and conserve and manage coastal and marine resources to meet our nation's economic, social, and environmental needs.

NOAA FISHERIES SERVICE (NMFS)- Within NOAA, is NOAA Fisheries Service (NMFS) which is charged with managing the nation's fisheries as well implementing the Marine Mammal Protection Act and Endangered Species Act in regards to most pinnipeds and all cetaceans.

ODONTOCETE- A taxonomic sub-order of whales with teeth of uniform shape and function. Odontocetes possess one external nasal opening. They also use echolocation for exploring their environment and finding food. Dolphins, porpoises, orca and sperm whales are examples of odontocetes. These animals primarily eat fish and squid, though orca whales may also eat other marine mammals.

OMNIVORE- An animal that feeds on both animals and plants.

PELAGIC- Living or occurring in the open sea.

PINNIPED- A taxonomic order of Pinnipedia, meaning "fin footed". This order includes seals, sea lions, and walruses. They are are carnivorous aquatic mammals that use flippers for movement on land and in the water. Pinnipeds spend the majority of their lives swimming and eating in water and have bodies that are adpated for moving easily through their aquatic habitat. Pinnipeds do not move well on land, however pinnipeds do venture onto land or ice floes to bear their young, sunbathe, rest, and molt.

PISCIVORE- A carnivore that feeds only on fish.

PHYTOPLANKTON- Plant plankton.

GLOSSARY

PLANKTON- Drifting of passively swimming organisms.

POPULATION- Group of organisms of the same species populating a given area.

PREDATION- Biological interaction where a "predator" organism feeds on another living organism or organisms known as prey.

PREY- Organism that is eaten by a predator.

RANGE- Maximum extent of geographic area used by a species.

REGULATION- A law or rule implemented by the government.

SCREAM CALL- Brief, shrill "scream" calls right whales make when gathering in groups at the surface.

STOCK- A group of marine mammals of the same species in a common spatial arrangement, that interbreed when mature.

TAKE- Defined under the MMPA as "harass, hunt, capture, kill or collect, or attempt to harass, hunt, capture, kill or collect." Defined under the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

TAKE REDUCTION PLANS- Plans created by an advisory group that help reduce entanglement and injury of marine mammals in fishing gear. Advisory groups include scientists, federal and state managers, fishermen, and conservationists.

TAXONOMY- The scientific classification of organisms into groups based on similarities.

THERMOREGULATION- The ability of an organsim to keep its body temperature within certain boundaries, even when the temperature surrounding it is very different.

THREATENED SPECIES- Defined under the ESA as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

THERMAL INSULATION- Materials or processes that reduce the rate of heat loss.

UP-CALL- Right whale contact call, resembling a deep, rising "whoop" that lasts about a second.

VERTEBRAE- Bones that make up the backbone of vertebrate animals.

VOCALIZATION- To communicate using sound.

WHALER- A person who hunts and kills whales.

WHALING- An expedition for the purpose of, or act of, killing whales.

ZOOPLANKTON- Animal plankton.

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Activity Books & Curriculum

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- Wynne, K. and M. Schwartz. Guide to Marine Mammals & Sea Turtles of the U.S. Atlantic & Gulf of Mexico. 1999.

Websites

- Cornell's Right Whale Listening Network: www.listenforwhales.org
- Discovery of Sound in the Sea: www.dosits.org
- National Marine Mammal Laboratory: www.afsc.noaa.gov/nmml/education/
- New England Aquarium Teacher Resources: www.neaq.org/education_and_activities/
- NOAA Fisheries Service's Northeast Regional Office: www.nero.noaa.gov
- NOAA Fun for Kids: http://oceanservice.noaa.gov/kids/
- NOAA Games: www.games.noaa.gov
- NOAA Office of Education: http://www.education.noaa.gov/students.html
- NOAA National Marine Sanctuary Program: www.sanctuaries.noaa.gov
- North Atlantic Right Whale Consortium: www.rightwhaleweb.org
- Provincetown Center for Coastal Studies: www.coastalstudies.org
- Seaworld Infobooks: www.seaworld.org/animal-info/info-books/baleen/
- Whale and Dolphin Conservation Society: www.adoptawhale.org/kids
- Whale Center of New England: www.whalecenter.org/education/curriculum.html

Answers

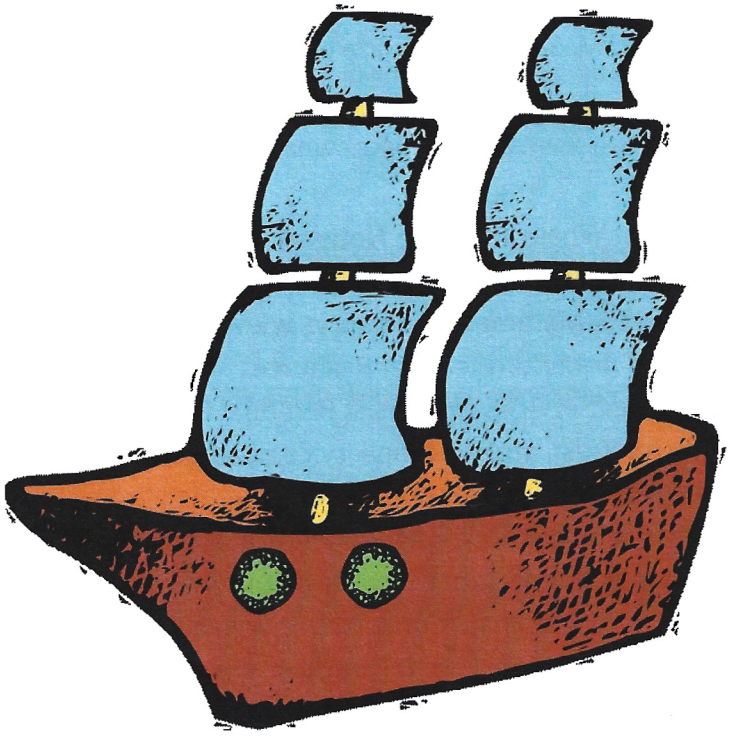
Scavenger Hunt:

1-mammals, 2- protected, 3- species, 4- Dinosaurs, 5- Baleen, 6-Whaling, 7-Cetacea, 8-Baleen, 9- rarest, 10- teeth, 11- Nursery, 12- Fin, 14- Callosities.

Double Puzzle:

1- blubber, 2-Plankton, 3-Baleen, 4-North Atlantic, 5-Migration, 6-Up-Call, 7-Whaling, 8- Endangered, 9-Calf, 10- Callosities, 11-No Dorsal Fin, 12-Copepods, 13-Blowhole, 14-Vocalization, 15-Fluke. Answer: Whale of Fortune!

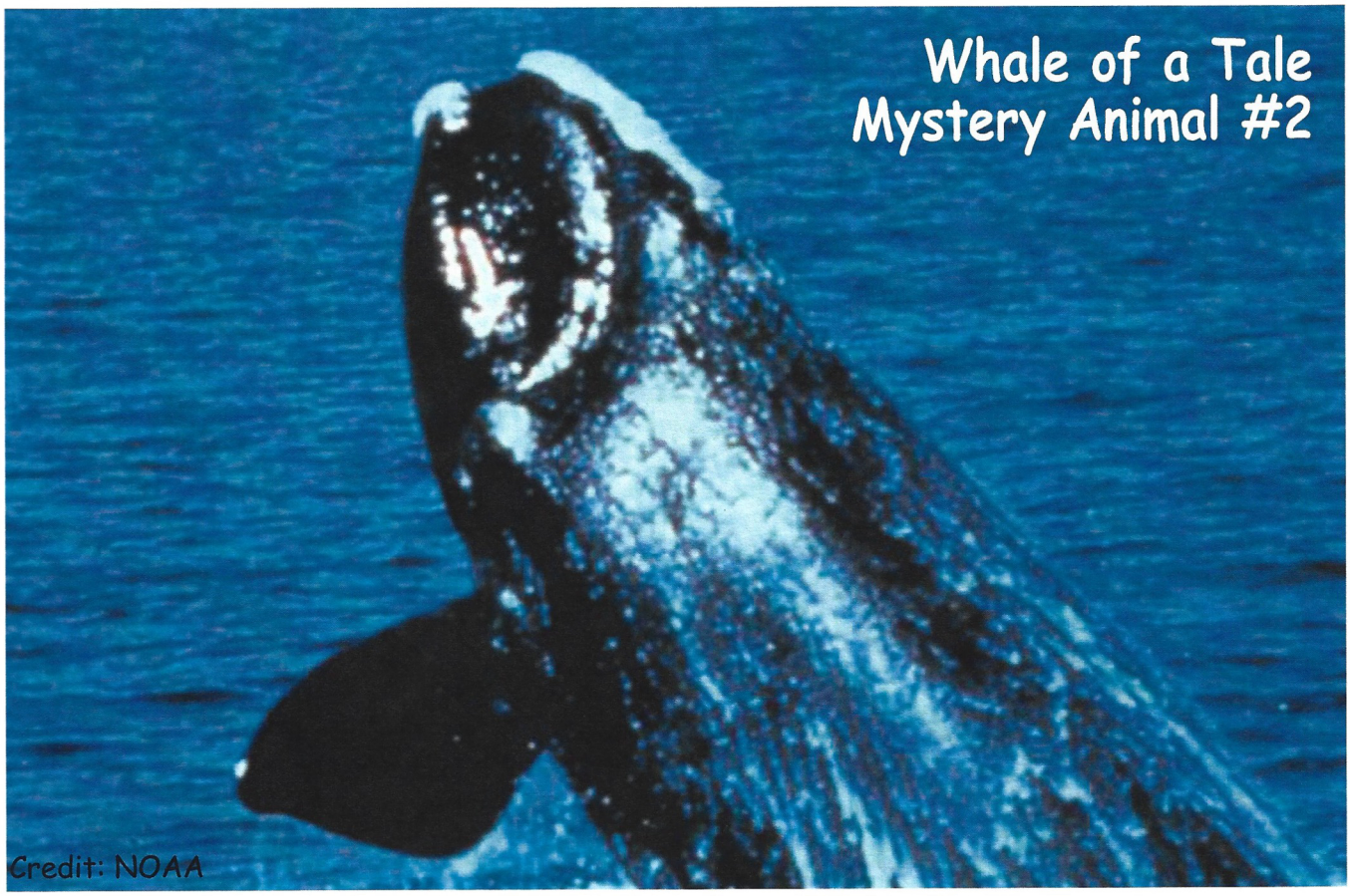
Appendix: Pictures for Activity 1



Whale of a Tale Mystery Animal #1

Credit: NOAA

Whale of a Tale Mystery Animal #2



Credit: NOAA

Whale of a Tale Mystery Animal #1

Details of Sighting:

Seas are calm and you are scanning the horizon. You think you've sighted a boulder formation sticking out of the water. It suddenly moves, is followed by a puff of what looks like smoke, and then vanishes. When your vessel passes the area a few minutes later, you notice the air smells fishy.

Whale of a Tale Mystery Animal #2

Details of Sighting:

Seas are calm and you are scanning the horizon. A creature suddenly appears in the distance, propelling its huge body out of the water and creating a large splash as it hits the waters surface. It is at least the size of your vessel. It repeats this action twice more and then disappears from sight.


Credit: A. S. Friedlaender
Whale of a Tale Mystery Animal #3


Whale of a Tale Mystery Animal #4
Credit: NOAA

Whale of a Tale Mystery Animal #3

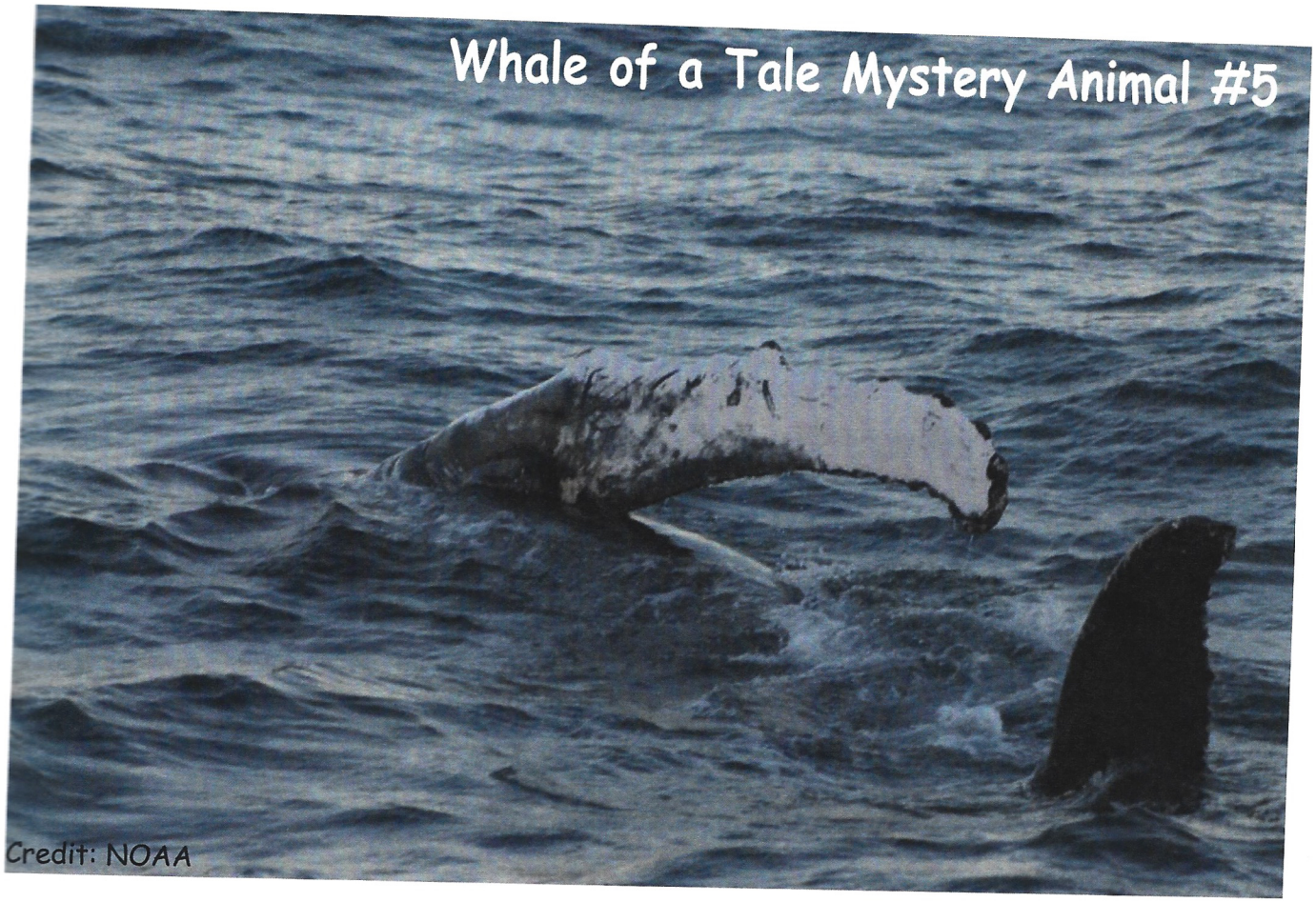
Details of Sighting:

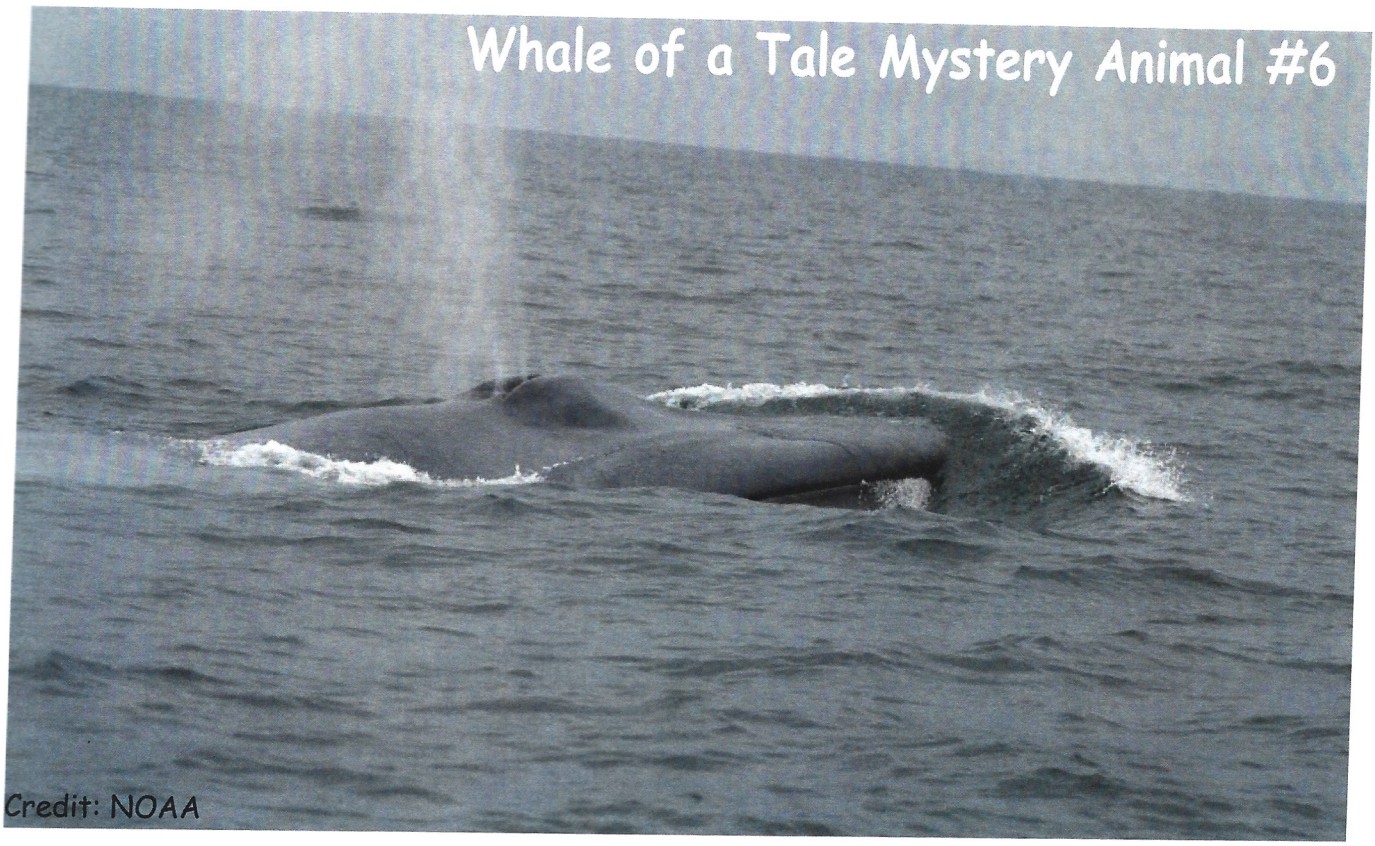
You are looking through your spyglass, scanning the horizon for pirates. Suddenly, you see a splash and spy a mysterious object. You see four or five more splashes and the object disappears from your view.

Whale of a Tale Mystery Animal #4

Details of Sighting:

You are looking through your spyglass, scanning the horizon for pirates. Suddenly, you see a splash and spy a mysterious object. You see four or five more splashes and the object disappears from your view.


Whale of a Tale Mystery Animal #5
Credit: NOAA


Whale of a Tale Mystery Animal #6
Credit: NOAA

Whale of a Tale Mystery Animal #5

Details of Sighting:

You are looking through your spyglass, scanning the horizon for pirates. Suddenly, you see a splash and spy a mysterious object moving through the water. It continues for approximately 5 minutes. The long part crashes against the water surface multiple times causing quite the splash!

Whale of a Tale Mystery Animal #6

Details of Sighting:

You are looking through your spyglass, scanning the horizon for pirates. Suddenly, you see something moving, a puff of what looks like smoke, and movement under the water. It disappears. After 5 minutes you see the same thing, only further ahead of the area where you saw the first movement. After another 5 minutes you see it again!

Whale of a Tale Mystery Animals Solved:

1- North Atlantic right whale

2- North Atlantic right whale

3- Pilot whale

4- Narwhal

5- Humpback whale

6- Blue whale