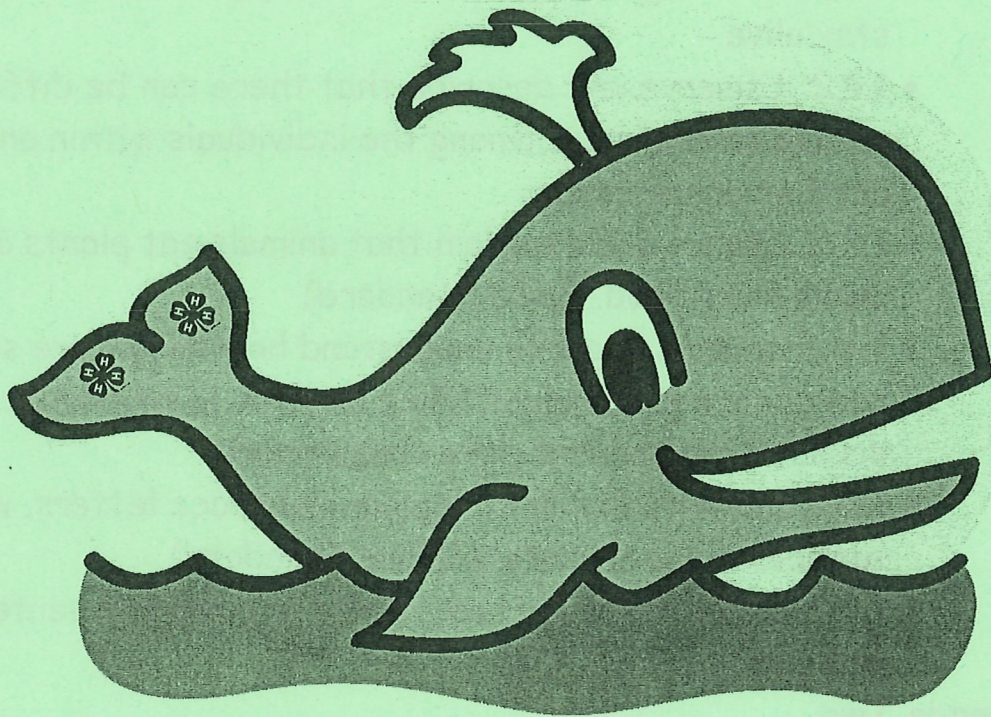


WHALES & DOLPHINS

Mini 4-H



Draft Developed by:

Purdue University Cooperative Extension Service
Area 7 4-H Youth Development Educators from
Blackford, Delaware, Fayette, Franklin, Henry, Jay,
Madison, Randolph, Rush, Union, & Wayne counties

Indiana Academic Standards

Indiana Academic Standards in this manual:

Grade One

- 1.4: Students ask questions about a variety of living things and everyday events that can be answered through observations. They become aware of plant and animal interaction. They consider things and processes that plants and animals need to stay alive.
- 1.4.2: Observe and describe that there can be differences, such as size or markings, among the individuals within one kind of plant or animal group.
- 1.4.3: Observe and explain that animals eat plants or other animals for food. (Core Standard)
- 1.6: Students begin to understand how things are similar and how they are different. They look for what changes and what does not change and make comparisons.
- 1.6.1: Handwriting: Print legibly and space letters, words, and sentences appropriately. (Core Standard)
- 1.6.2: Sentence Structure: Write in complete sentences. (Core Standard)

Grade Two

- 2.2.11: Identify text that uses sequence or other logical order (alphabetical order or time). (Core Standard)
- 2.2.2: Analysis of Grade-Level-Appropriate Nonfiction and Informational Text: State the purpose for reading. (Core Standard)
- 2.2.8: Follow two-step written instructions.
- 2.2.9: Use context (the meaning of the surrounding text) to understand word and sentence meanings.





Mini 4-H Parent's Page



Welcome to the Mini 4-H Program! Mini 4-H is designed for youth to explore a variety of project areas.

Your child received this project manual when enrolling in Mini 4-H. This manual will provide fun, age-appropriate learning activities throughout their year(s) in Mini 4-H and their interest in this project.

As a Mini 4-H parent, your job will be to guide and encourage your child through the activity. It is highly suggested that you do not complete the activities for them. Instead, help them, guide them, work with them, and let them do all that they possibly can. The 4-H motto is "learn by doing" and is the best educational tool that we can provide for youth.

Additionally, the Mini 4-H program is set up to allow your child to exhibit a project at the 4-H Fair. This project is based upon information within this manual.

The 4-H Fair is an exciting time for 4-H members and families. It is a time that allows community youth to showcase their talents, interests, and enthusiasm for learning.

Mini 4-H is fun! Your child will certainly enjoy it. You can have fun too, by guiding and helping as your child participates in the program. Encourage and praise your child as he/she has fun learning and sharing with you.

If you have any questions regarding Mini 4-H or other 4-H programs, please contact your local Extension Office.



Mini 4-Her's Page



Welcome to Mini 4-H! You are now a member of the 4-H family. You are a special person.

Mini 4-Hers have lots of fun! There are lots of activities for you to explore. You can try new things. You can share it with your friends and family.

Mom, Dad, or another adult can help you with your project. Bring your project to the 4-H Fair and lots of people will be able to see what you have done. You also get a ribbon made just for Mini 4-Hers.

Things to Know About 4-H

The 4-H Symbol:

A four-leaf clover with an "H" in each leaf.

The 4-H Colors:

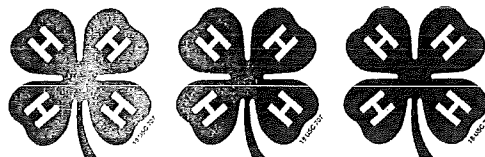
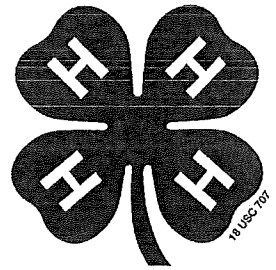
Green and white

The 4-H Motto:

To make the best, better.

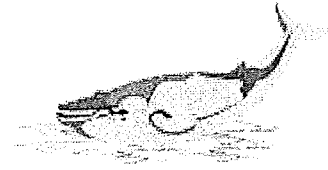
The 4-H Pledge:

I pledge my HEAD to clearer thinking,
my HEART to greater loyalty,
my HANDS to larger service, and
my HEALTH to better living, for my club,
my community, my country, and my world.





Whales



Whales are animals that live in the ocean. They live in groups called *Pods*. Whales are mammals, not fish. This means they are warm-blooded and breathe air through their lungs. They also give birth to live young, make milk for their young, and have some hair at birth.

Whales breathe through a *blowhole* on top of their head. Just like you and me, a whale needs to breathe above the water. To breathe, they must first go to the surface and get their blowhole above the water. Then they blow out the air (*exhale*) and then take in new air (*inhale*).

Some whales also have a *dorsal fin* on their back. It helps them to keep their balance. All whales have a tail called a *fluke*. It moves up and down, not side to side like fish.

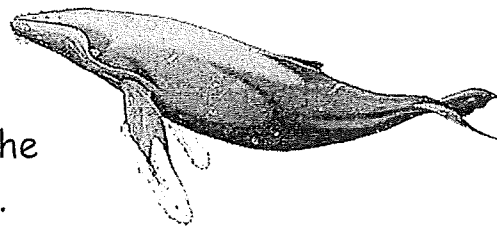
Activity 1 — Parts of a Whale

You will need:

- Crayons, colored pencils, or markers
- Whale picture on the next page

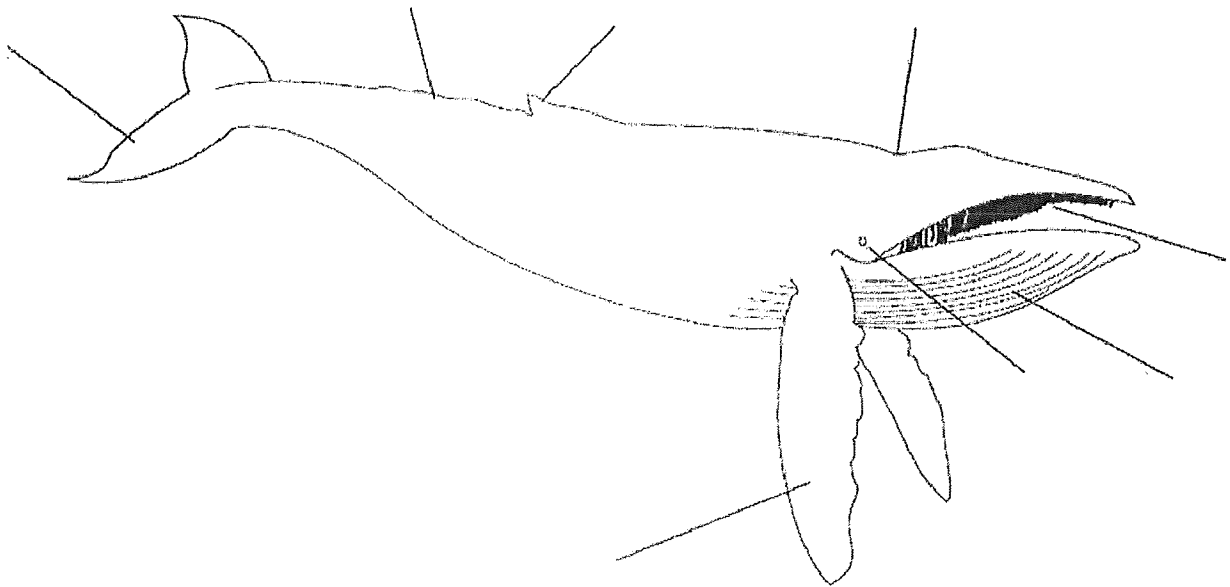
This is what to do:

1. Write the letter for each part of the humpback whale on the correct line.
2. Color the picture of the humpback whale.
3. Answer the questions.



*Activity 1, continued***Parts of a Whale**

- | | |
|-------------------|------------------|
| A. Blowhole | E. Dorsal Fin |
| B. Pectoral Fin | F. Fluke |
| C. Eye | G. Baleen |
| D. Throat Grooves | H. Dorsal Ridges |

**Activity 1 questions:**

1. Were you able to find all of the parts? _____
2. What helped you to find the location of each part? _____

3. Which part was the hardest to find? _____
4. Why was it hard to find? _____

Types of Whales

There are many different types of whales. The biggest whale is the Blue Whale, which can weigh up to 200 tons and grow as long as 100 feet. This is bigger than any dinosaur (the largest dinosaur may have weighed 35 tons). The Pygmy Sperm Whale is one of the smallest whales. It is about the size of a canoe.

Baleen vs. Toothed Whales

Baleen Whales — Humpback, blue, and right whales are baleen whales. They use baleen like a strainer to eat small animals like krill and crustaceans. They have two blow holes.

Toothed Whales — Sperm, beaked, and Beluga whales and Orca and dolphins are all toothed-whales. They eat fish, squid, and marine mammals. They have one blow hole.

Activity 2 — Whale Sightings

This is what you need:

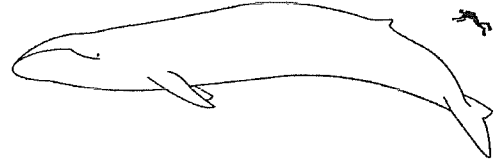
- Crayons, colored pencils, or markers
- Whale pictures on the following pages

This is what to do:

1. Write the name of each whale on pages 10-12 under each picture.
2. Use the descriptions on the next page to help you.
3. Color the pictures of the whales.
4. Answer the questions.

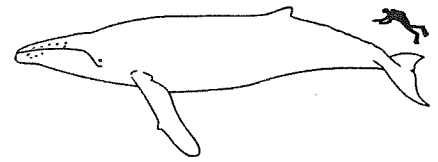
*Activity 2, continued***Whale Descriptions**

Blue Whale — This is the largest animal to ever exist. It can be as long as 100 feet and weigh more than 200 tons! The whale stays in the open ocean. Its color is blue-gray.

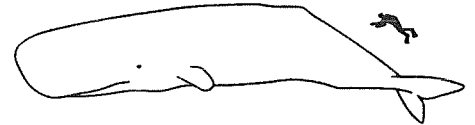


This picture shows how big the Blue Whale is compared to a person.

Humpback Whale — The humpback whale has a black back with a white throat and belly. It grows to over 50 feet.



Sperm Whale — This is the largest whale to have teeth. It is about 50 feet long. It has a big, flat snout (or nose) with a small jaw. Sperm whales like the deep ocean.



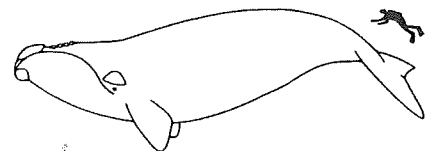
Beluga Whale — They are white and grow to be about 15 feet long. It has a small plump body and a blunt head. They live in the arctic waters.



Gray Whale — The gray whale does not have a dorsal fin. Instead, there is a medium hump with a lot of little bumps on its back toward the fluke. It has lots of bumps and parasites on its head.



Northern Right Whales — are called "right" because they were the right ones to catch by early whale hunters. They swim slowly and do not have a dorsal fin.



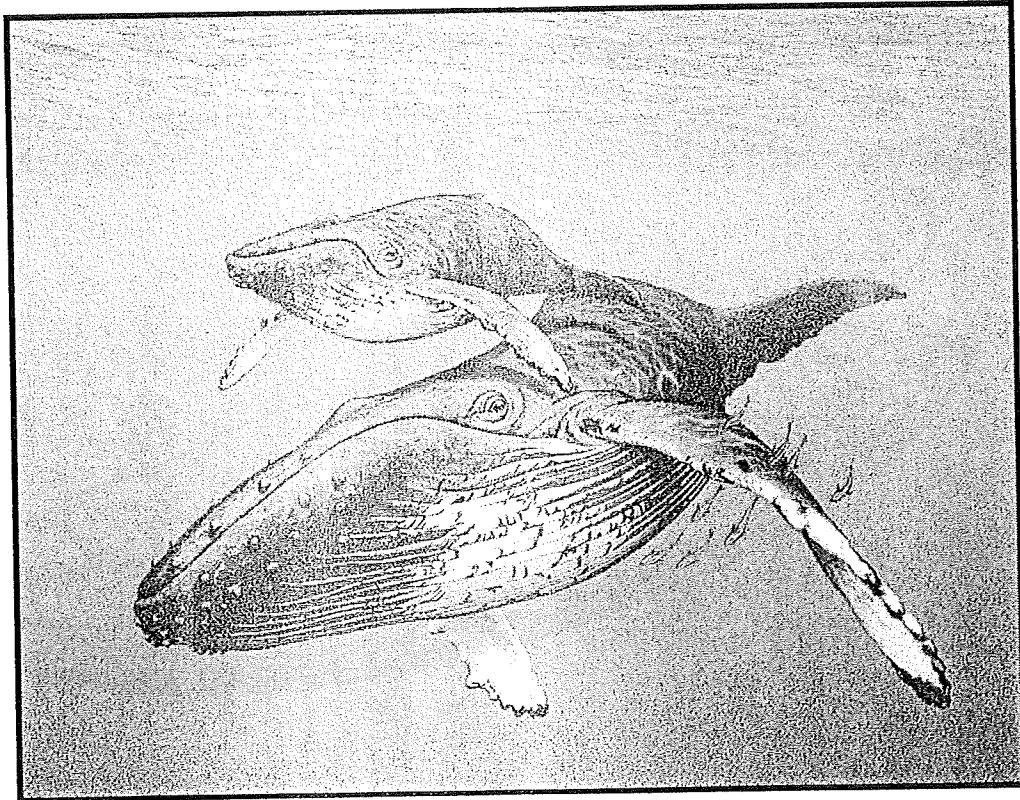
Activity 2, continued

Activity 2 Questions:

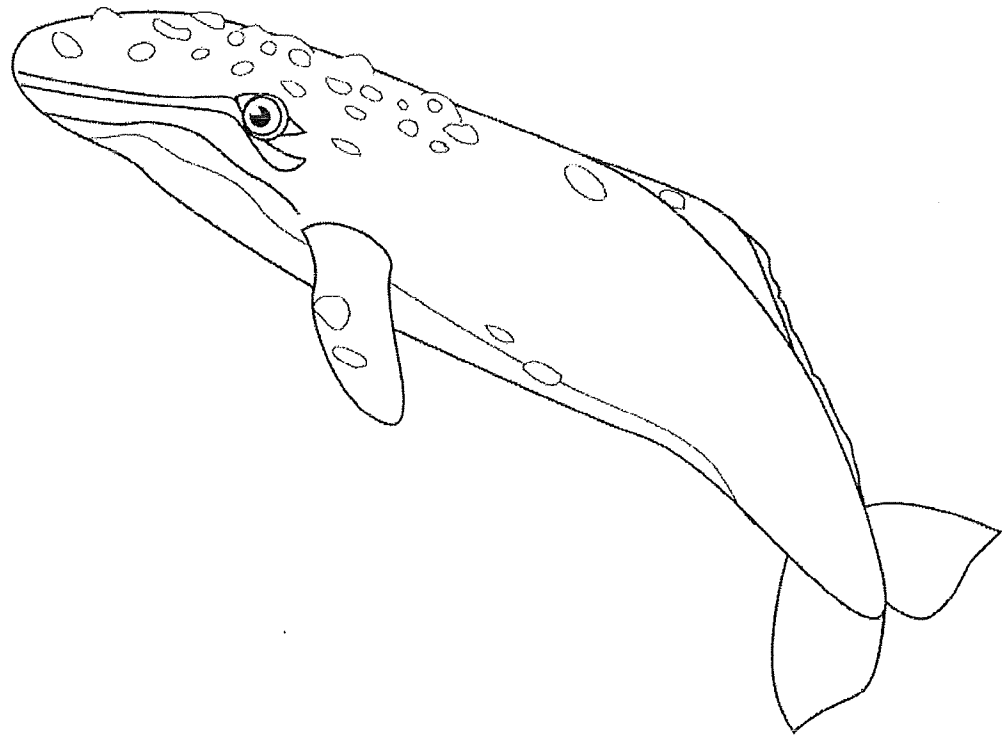
1. Which whale is your favorite? _____

2. Why did you pick that whale? _____

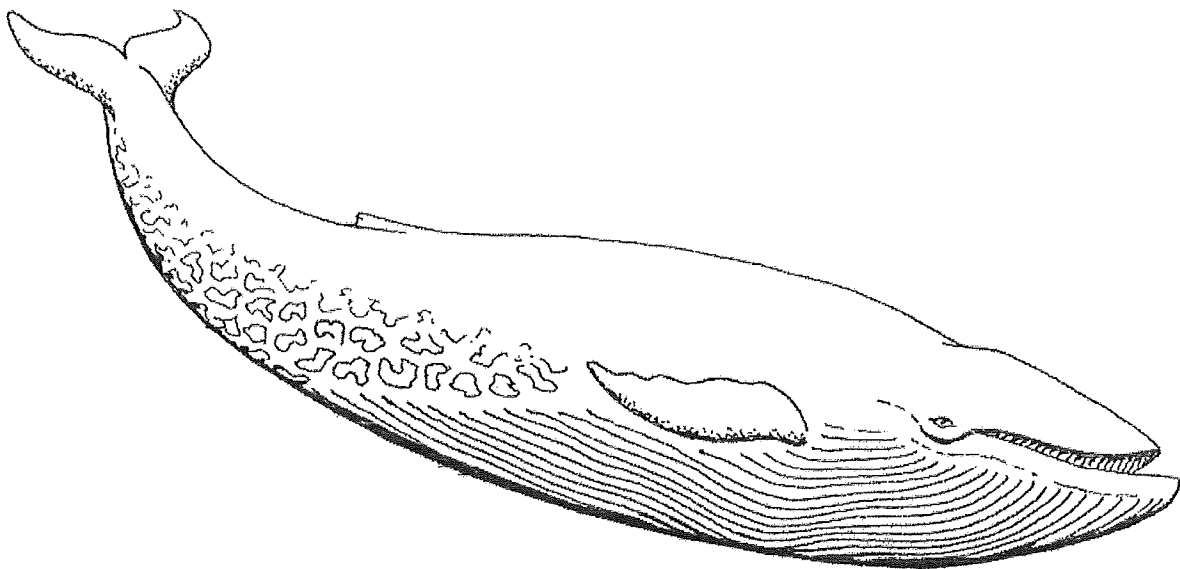
3. Which whales were easy to identify? _____



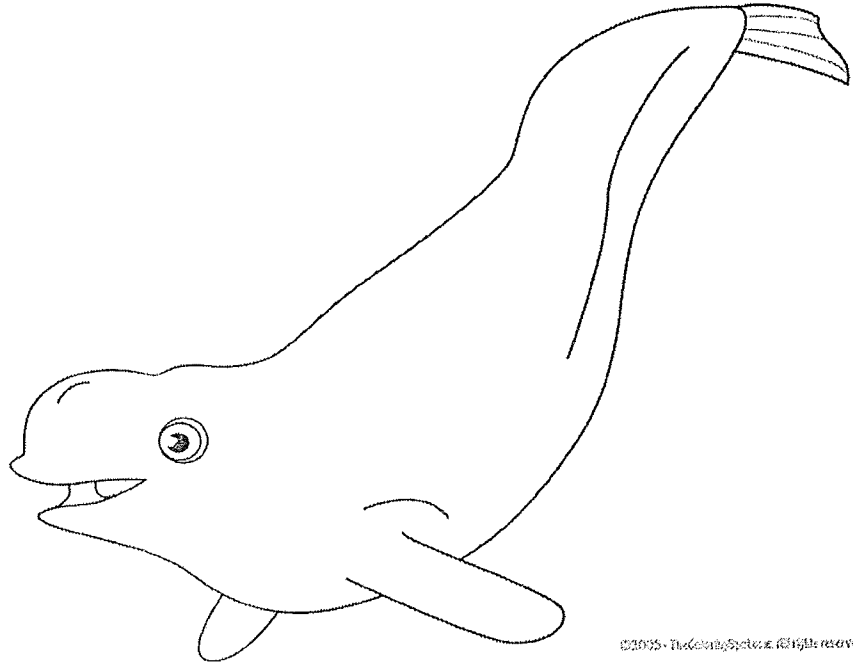
Mother and baby humpback whales. *Photo from NotSoPrivateLife,
www.sfondideldesktop.com*



1.

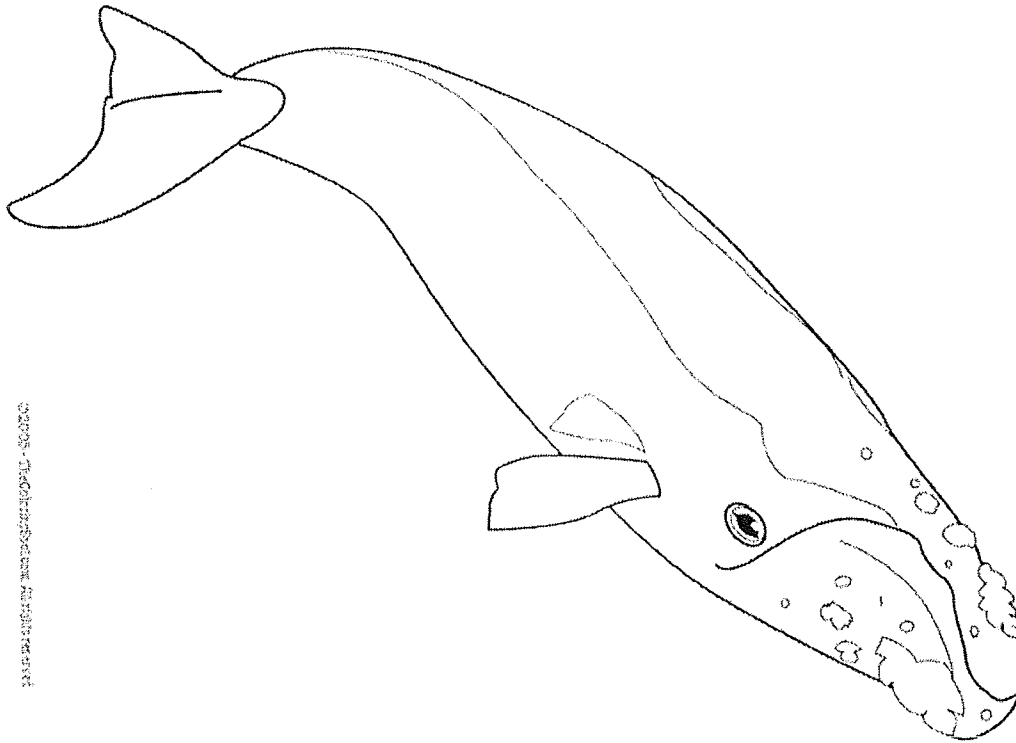


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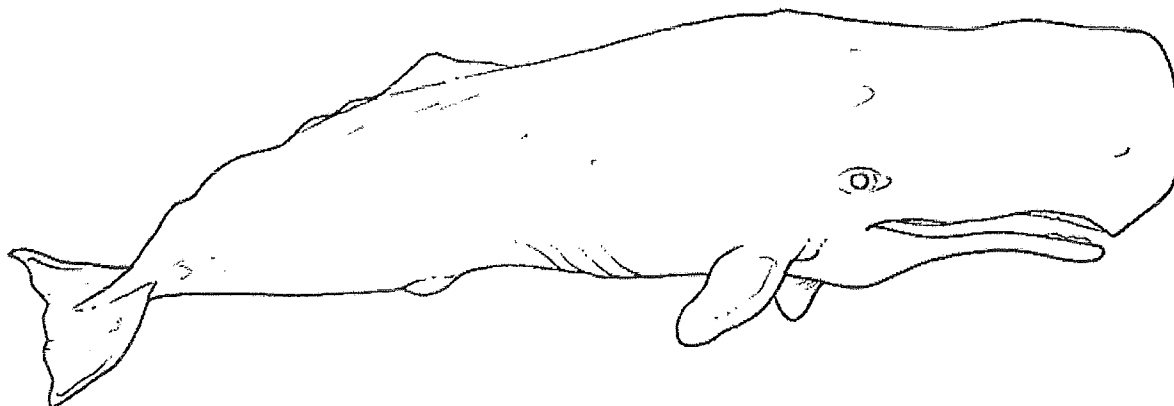
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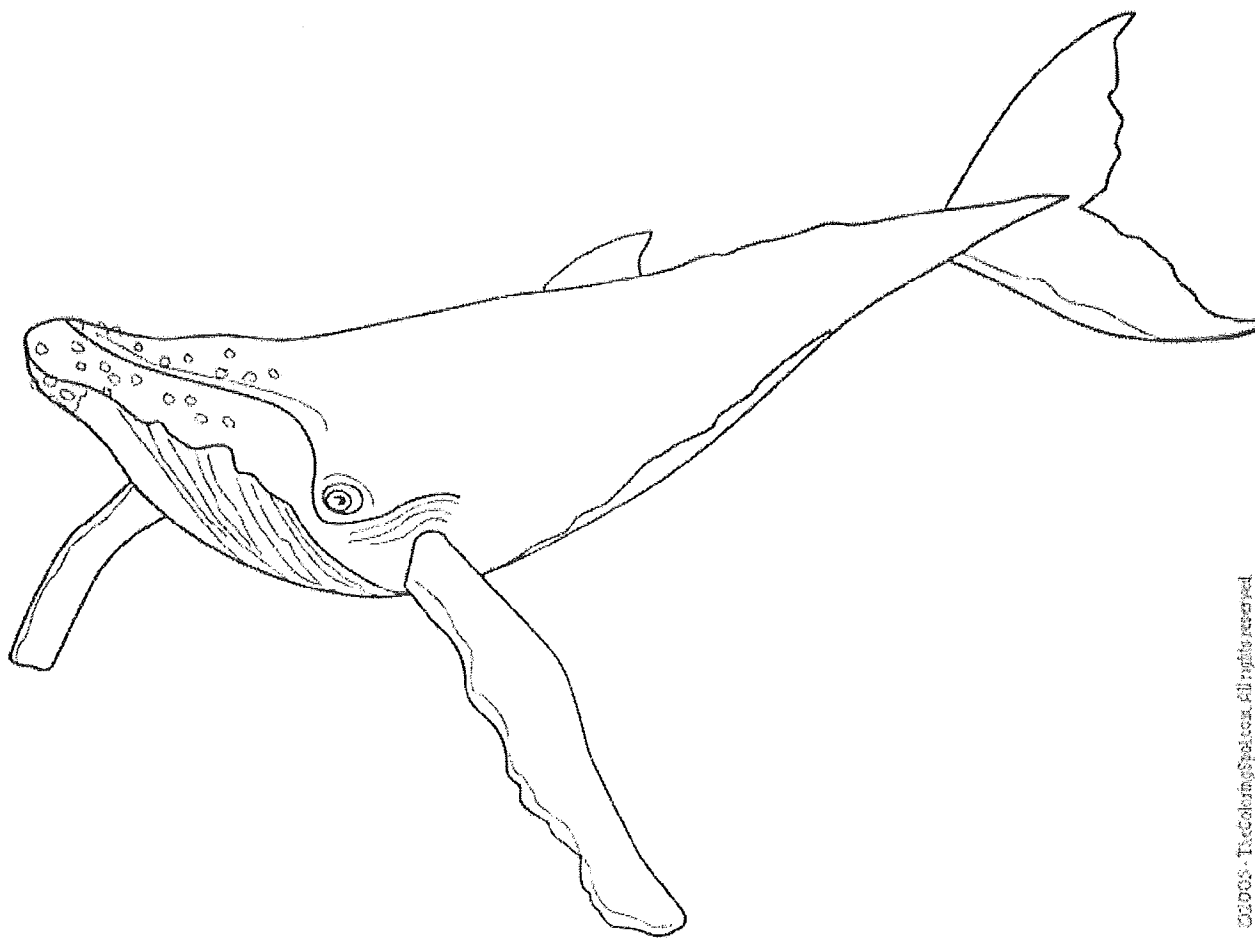


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5



6





Dolphins



Dolphins are part of the whale family. There are more than 40 different types of dolphins. Did you know that orcas or killer whales are actually dolphins?

Dolphins are mammals and have the same parts as whales, such as flippers, blowholes, and flukes. Dolphins have very good hearing and eyesight. They are smaller than most whales and very friendly. Dolphins have teeth and eat fish and squid.

There are 32 types of salt water dolphins and five types of fresh water dolphins.

Activity 3: Dolphin Match

This is what you need:

- Crayons, colored pencils, or markers
- Dolphin pictures on the next page

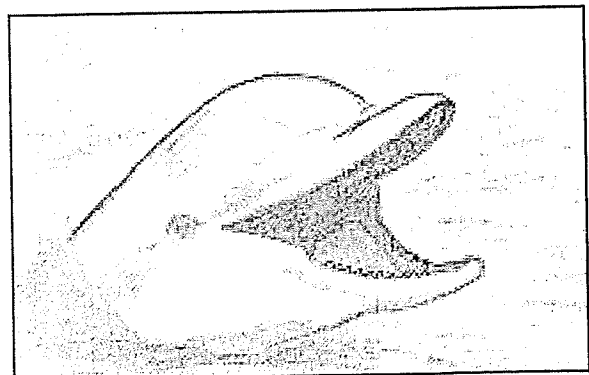
This is what to do:

Match the picture of each dolphin with the correct name and description.

Joke Time!

What is a dolphin's favorite TV show?

"Whale of Fortune!"



Activity 3, continued

Dolphin Descriptions

Bottlenose Dolphins

are the most common dolphins. They are gray and have a long "nose." This dolphin grows to about 10 feet long and looks like it is smiling.

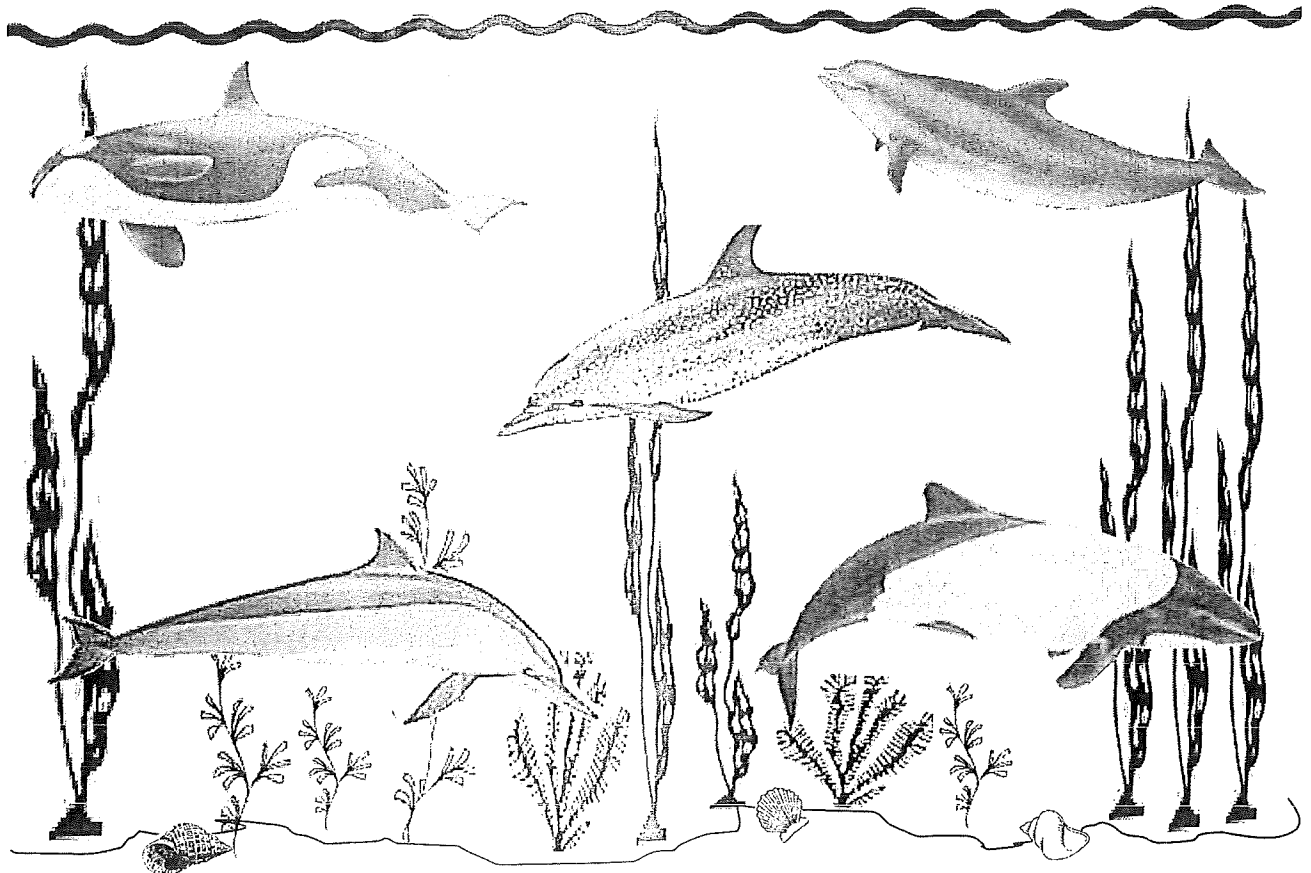
Spinner Dolphins are dark gray on top with a lighter gray stripe from eye to tail and a long thin beak. These often get caught in tuna fishermen's nets.

Commerson's Dolphins are black and white and loves to eat shrimp. They are sometimes called the skunk dolphin and are small and rare.

Spotted Dolphins

have dark spots on their bellies and light spots on their backs. They get more spots as they get older.

Orcas are also called Killer Whales, but they are actually dolphins.



Whale & Dolphin Songs

All whales make sounds. They make these sounds through their blowholes, not their mouths.

Whales and dolphins use sounds to talk to each other. They also use sounds as *sonar*, to find food and to see in the dark ocean. Sound waves are sent out and travel through the ocean. When the sound waves bump into something, like an ocean rock, they bounce off the rock and return. This tells the whale that something is out there. If an object is close to the whale, the sound comes back faster than from an object that is far away.

Toothed whales and dolphins make different sounds than baleen whales. Their sounds are called *echolocation*. They sound like high squeaks and clicks.

Baleen whales make sounds that are lower and harder for us to hear.

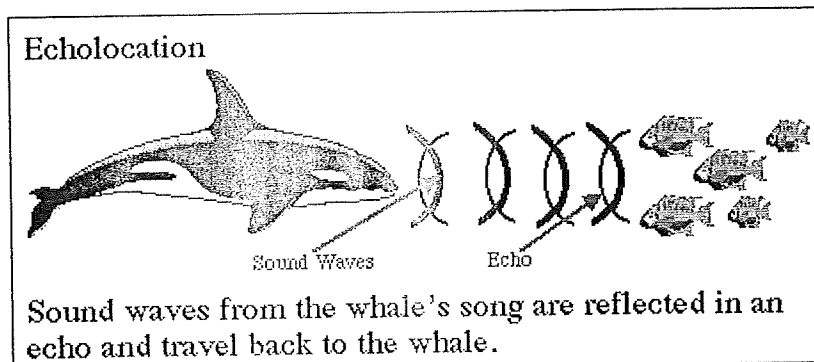


Illustration from the University of Richmond.

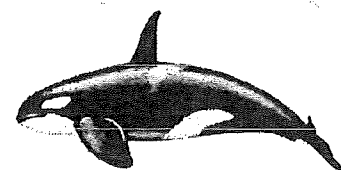
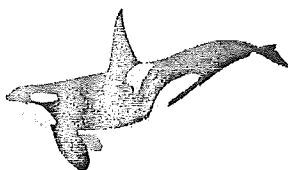
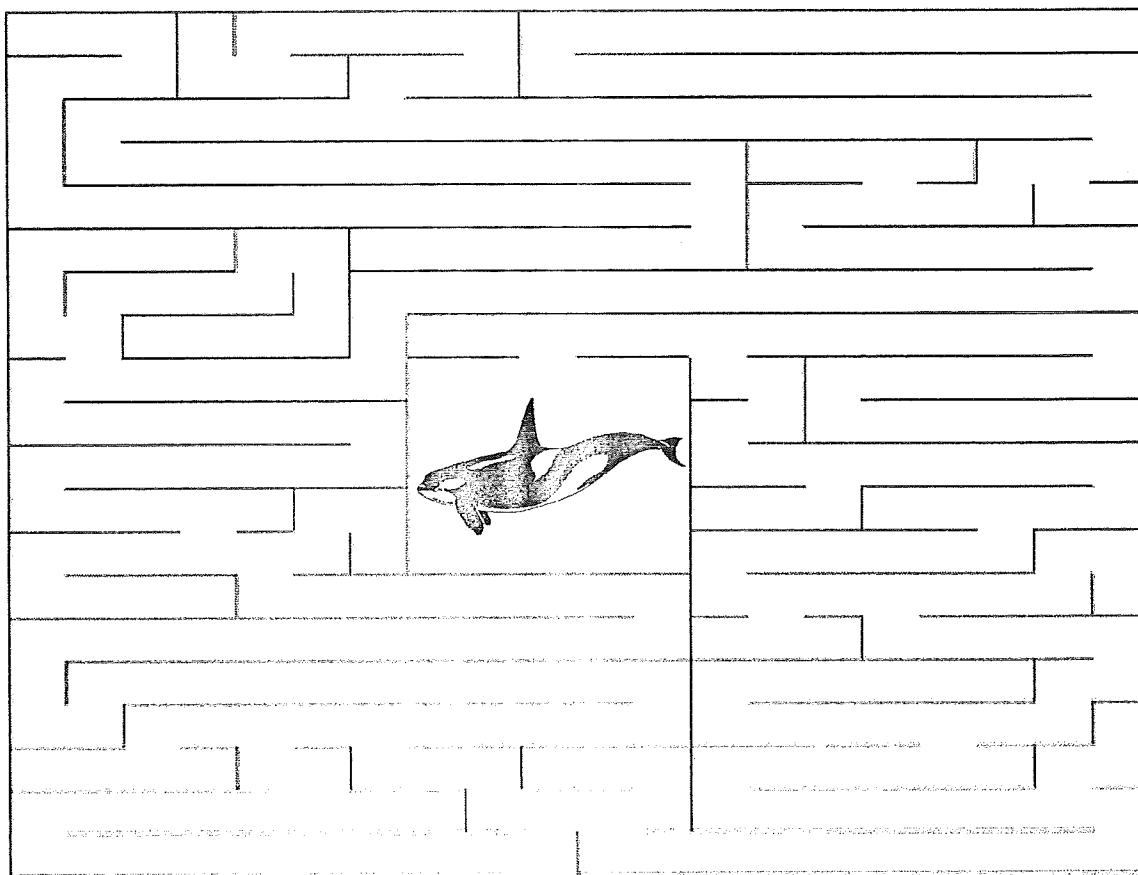
Activity 4: Amazing Orcas

This is what you need:

- Crayons, colored pencils, or markers
- Maze below

This is what to do:

Help the lost orca in the middle of the maze find its pod waiting at the bottom.



Activity 4, continued

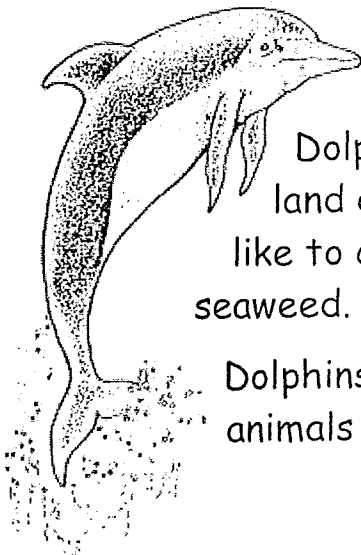
Activity #4 Questions

1. What does a whale need to swim around in the ocean? _____

2. What other animals use sonar to help them "see"? _____

The Learning Dolphin

Dolphins are very smart animals, and like many other animals, they learn through play. People train dolphins so they can care for and examine them. They are also trained so that others can enjoy them and learn more about them.



Dolphins can jump as high as 16 feet in the air and land on their side. This is called a *breach*. They also like to chase each other and carry and throw things like seaweed.

Dolphins like to ride the waves. They are very social animals and help each other when they are hurt or sick.

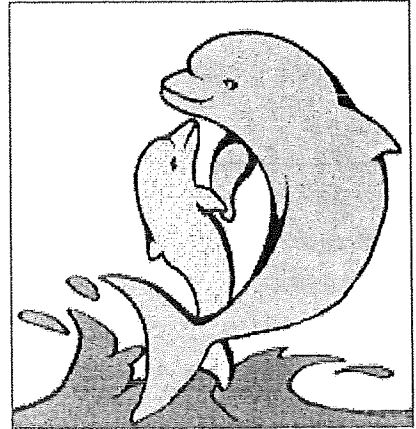
Activity 5: The Dolphin Show

This is what you need:

- Crayons, colored pencils, or markers
- Puzzle on the next page

This is what to do:

1. Find and circle the words in the puzzle.
2. Put the words in alphabetical order.
3. Answer the questions.

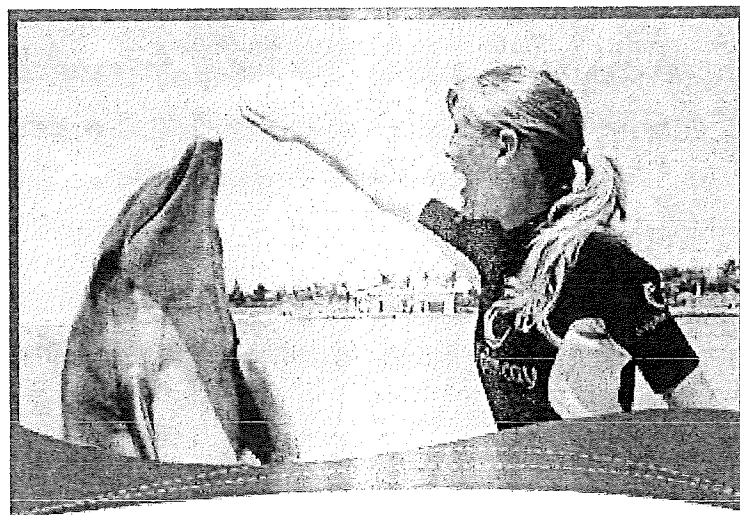


Activity 5 Questions:

1. Have you ever seen a dolphin show? _____

Where did you see it? _____

2. If you had a dolphin, what fun things would you like to teach it to do? _____



Activity 5, continued

Dolphin Show Word Search

Find these words in the puzzle, and write the words in alphabetical order on the lines to the right.

Jump

Hoop

Fish

Reward

Behavior

Trainer

Play

Catch

Splash

Signal

Throw

Ball

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

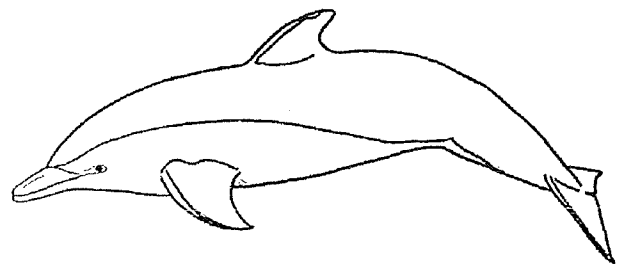
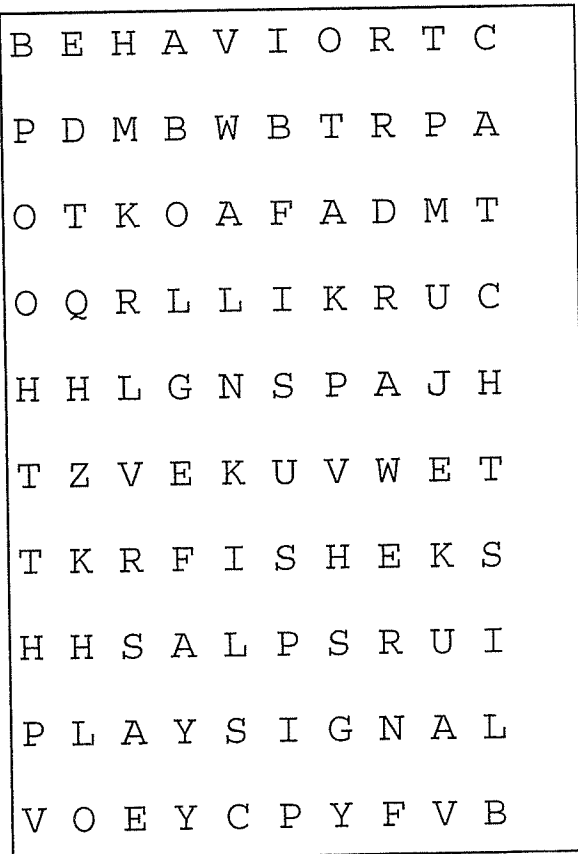
8. _____

9. _____

10. _____

11. _____

12. _____





4-H Fair Exhibit

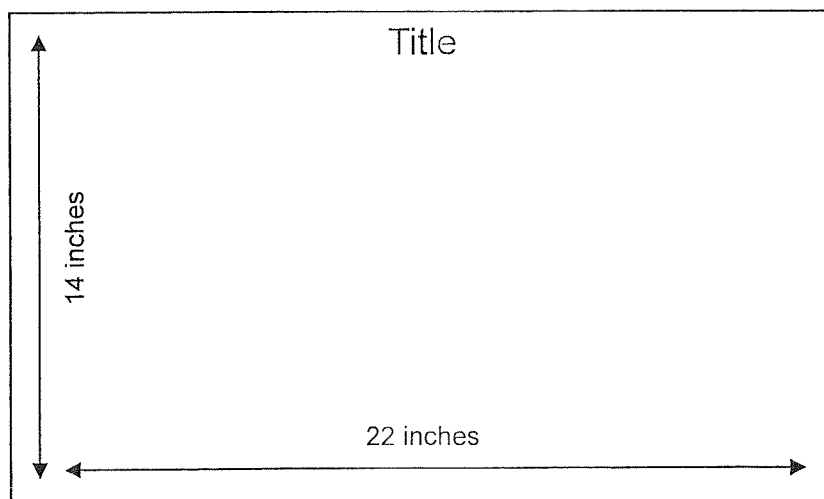


Here is a list of suggested projects that can be shown at the 4-H Fair. Pick one of the projects to exhibit at the fair. You do not need to make the projects in a special order.

- Make an Ocean Diorama with whales and dolphins.
- Make a whales and dolphins mobile.
- Make a whale or dolphin model out of paper maché or other materials.
- Find four pictures of whales or dolphins, color, and cut out and place on a poster and label with the name, size, weight and type.
- Make a poster that shows how big whales are, draw pictures of yourself, your house, your school and your favorite whale and label the pictures with the name and size.
- Visit a dolphin show, draw a picture of what you saw, and display it on a poster.
- Make an origami whale.
- There are lots of ideas on the Internet. Be creative and use your imagination!

For information on how to label your project, when to enter it in the Fair, and where the project needs to go, please contact your County Extension Office.

Good luck!



Sample poster

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Resources and References:

Bokoske, Sharon & Margaret Davidson, Dolphins. NY: Random House
Gardner, Robert, The Whale Watcher's Guide. NW: Julian Messner

November 1997

Revised, October 1998

Revised, November 2009

PURDUE AGRICULTURE

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