November 2002



SeaWorld/Busch Gardens Killer Whales

4-8 Classroom Activities

Then and Now

OBJECTIVE

The student will analyze dorsal fin drawings to draw conclusions about a pod of killer whales.

ACTION

- 1. Give each student a copy of the Then and Now funsheets.
- 2. Share the background information on this page with your students.
- 3. Students study the pictures on the funsheet to answer the questions.

MATERIALS

- copies of Then and Now funsheets
- pencils

BACKGROUND INFORMATION

In male killer whales, the dorsal fin is tall and triangular. In females, it is smaller and curves slightly toward the tail flukes.

Researchers have learned to recognize many individual killer whales from photographs. Researchers take photographs when the whale rises highest out of the water as it breathes normally and exposes its dorsal fin and saddle region. These researchers must be skilled at recognizing subtle differences in the whale's body appearance as they study the pictures. Photo-identification is an important research tool for studying various aspects of cetacean biology, including population changes.

A good book about identifying killer whales is *Killer Whales. A Study of Their Identification, Genealogy & Natural History in British Columbia and Washington State*, by Michael A. Bigg, Graeme M. Ellis, John K.B. Ford, and Kenneth C. Balcomb (published by Phantom Press & Publishers Inc., Nanaimo, British Columbia, Canada. 1987).

DEEPER DEPTHS

Students write a brief description of each whale's dorsal fin, making note of what differences they used to identify the whales.

Then and Now

A field biologist has asked you to help study of a pod of killer whales. Picture Set A was taken five years ago. Picture Set B was taken last month.

- 1. Which whales from picture set A and picture set B are the same? Write the numbers of the matching whales.
- 2. Has the pod grown or shrunk?
- 3. How many whales have left the pod in the last five years?
- 4. How many whales have joined the pod in the last five years?
- 5. How many males were in the pod five years ago?
- 6. How many males are in the pod in the most recent Picture Set?
- 7. The biologist suspects that Whale A3 and Whale B5 are the same animal. What do you think, and why? If it is the same whale, what might have caused the change in appearance?

