Watching Whales

by Bruce R. Mate, Extension Oceanographer, Oregon State University

Marine mammals—especially whales—are really popular with the American public.

A growing interest in firsthand observation of whales brings many hopeful whale watchers to the coast. Whale watching is something you definitely get better at with practice, but it takes some patience.

Once you have seen what you are looking for, additional sightings are much easier, and you will start to see more details of whale behavior.

Even without scientific training, you can contribute to what science is learning about whales. One way to do so is to build accurate and systematic habits of observing, identifying, recording, and reporting your whale sightings.

Table 1.—Blowing and diving characteristics of some of the large whales (reproduced by permission from Gordon C. Pike, Guide to the Whales, Porpoises and Dolphins of the North-East Pacific and Arctic Waters of Canada and Alaska)



Here are tips. Remember, patience is a virtue!

When and where

- 1. Observe from coastal headlands that jut out into the ocean—especially those with good elevation. When shallow-water whales move along the shoreline, they will usually go around headlands very close to the point-and you are closer to deepwater species as well.
- 2. Pick early morning hours. Conditions are usually more favorable before winds cause whitecaps on the water's surface.
- 3. Choose weather favoring a calm ocean. Don't go during or just after a heavy storm. Overcast days are good for whale watching because there is little glare.

What to look for

- 1. Scan the horizon and look for the blow—vapor, water, or condensation blown into the air up to 12 feet (3.6 m) when the whale exhales. (Backlighting by the afternoon sun can sometimes be helpful in spotting the blow initially.) See table 1.
- 2. Once you locate a blow, stay with it. Where you see one blow, you will see others, either from other whales or a single whale. Getting the range (distance) to whales is a frequent problem; but, once established, you can focus your attention on this area.
- 3. Whales have periodic blow patterns during their migration. Usually an individual will make up to a half dozen short, shallow dives before a more prolonged dive of up to 9 to 10 minutes (more generally, 3 to 5 minutes). Frequently the short dives leave turbulent eddies along the surface, so you can track the whale's progress and set up a camera or spotting scope to anticipate the next blow.
- 4. Usually, only a small portion of the whale's head and back show during a blow. Whales can be distinguished from each other by observing the position and/or shape of the dorsal fin, blow, head, back ridges, and tail. If the tail flukes are raised high, the dive will be a deep one (the whale is sounding); in shallow water, the animal may keep the flukes aloft for several minutes while head-standing.
- 5. Spy-hopping is a term applied to a whale with its head partially out of the water in a vertical posture, frequently bringing the eye above the surface. This is thought to be a visual-orientation behavior and may be done near boats to see, "What's that?"
- 6. Breaching is a term for the whale's rising vertically out of the water (often 1/2 to 3/4 of its length) and falling to its side or back, making a spectacular splash when it hits the water. The reasons suggested for breaching include knocking off whale lice (an external parasite), communicating, courting, or just having fun. Often where one whale breaches, others will start to breach also. Individuals frequently breach repeatedly, so if you see one breach, get your camera ready—you are in for a real treat!

Here are some keys to identifying most large whales along Oregon:

- Uneven gray color (splotchy) with barnacles in skin and ridges along the back just forward of the tail = gray whale.
- Long white flippers, "bumps" on the top of the head, very strong angle of the back when diving, short dorsal fin = humpback whale.
- Tall dorsal fin, very crisp black and white color pattern; often seen in groups = killer whale or orca.
- Square-shaped head, blows on a 45° angle from "front" of head; often seen in groups; ridges along tail stalk, wrinkled appearance to skin = sperm whale.

The Marine Science Center of Oregon State University would like to hear about it if you see a dead whale on the beach. Call Dr. Bruce Mate at (503) 867-3011.



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