WATCHING WHALES - Whale spouts

by Esta Lee Albright

Adapted from *Soundings*, November 1998

Sometime about 50 million years ago cetaceans' nostrils began moving from the front of the head to the top, becoming "blowholes." Toothed cetaceans have one and baleen whales have two. They do an extremely efficient job of inhaling and exhaling, exchanging about 90 percent of the oxygen in the lungs. Humans' poor job of breathing usually exchanges 15 per cent.

It seems efficient, also, if you're underwater most of the time, to have your air intake easily raised above the surface of the water. Also needed is a dependable way to close the nostrils and keep water out, so there are very powerful muscles around the blowholes. The large baleen whales seem to have a bump on the top of the head which is formed by these muscles, taller in front like a splashguard. Monterey Bay whalewatchers often are close enough to whales to see these muscles at work. Whalewatchers this close are sure to be anointed by the exhaled moist air, known as the spout or blow. This may be an experience fraught with oily odor. Oldtime whalers claimed the smell could be so rank it drove men mad, but none of us on the Bay have suffered so.

Sighting whales requires seeing the spout. Generally, the size and shape of the spout can identify the species of large whale (dolphins' spouts are so short and quick as to be hard to see even up close). Gray whales have short bushy spouts. Because we see Gray whales in migration we often see a whale from directly in front or behind, and the two distinct spouts are obvious before the white vapor blends together in a rather heart-shaped cloud. Humpback whales also have a roundish, plume-like blow, but it is taller and it rightfully seems to have more power; the

Gray whale spout

humpback may be 20 feet longer and 20 tons heavier than the Gray. Exhaled air may be rushing out the blowholes at 300 miles per hour. The Fin whale spout looks much like an exclamation point, tall and straight but seeming to taper at the bottom. As with everything about the swift Fin, the spout seems emphatic with force.

Blue whale spout

Most awesome is the tall powerful column of the Blue whale spout. Tall at 30 feet, the power keeps the thin columnar shape that looks like no other whalespout. A Blue whale spout in a strong wind looks much like a waterfall blowing in the wind but still has the remarkable height. At the other extreme is the almost invisible spout of the little Minke whale. Our first sight of a Minke whale often is not the spout but the graceful dark roll of the back with its curved dorsal fin.

Helping people watch whales always involves lessons in spout spotting, which is not easy for the novice. Whitecaps and wave crests are mistaken for spouts, but spouts look vertical instead of horizontal like parts of waves. The force of the exhale makes the spout appear suddenly, and, with luck and calm air, the white vapor hangs there a few seconds. In low sunlight it may have a brief rainbow.

In dense coastal fog of summer, whalewatchers sometimes must find whales by the SOUNDS of spouting, which may seem to be a tale of mythical proportions. At times, after seeing telltale prints close on the surface of the water, we can remain silent long enough to hear the mighty sounds of Blue whales breathing, can move quietly, then see the massive blue-gray backs roll toward us out of the fog. Now there's a sight to take the breath away!