

Local Culture



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Thar She Blows!

IT'S ALWAYS a thrill to spot a large whale from the shores of Bogue Banks. Perhaps you've noticed a blow (a whale exhaling from its blowhole) followed by the dark back of a whale – sometimes perhaps catching a glimpse of a relatively small dorsal fin. You may have even seen a whale lunging above the water's surface (a behavior called "breaching") or raising its tail (also known as "flukes").

During the last week of 2004 and the first week of 2005, there were a lot of whale sightings in the nearby coastal waters.

The most frequently sighted large whales we see along the shores of Carteret County are humpback whales (*Megaptera novaeangliae*), which are generally seen here during the months of November-April. The ones

we see are presumably migrating between their summer feeding areas in the Gulf of Maine and their winter breeding areas in the West Indies. The near shore habitats and travel routes of humpback whales made them easy prey for whalers and their numbers were so reduced that recovery has been slow.

They are now a protected species listed as endangered under the Endangered Species Act. Distinctive features include large pectoral fins (flippers) that are approx. 1/3 of the body length (or 15 feet) and a small dorsal fin in the middle of the back.

They also have a distinctive black and white pigment pattern on the underside side of their tail (flukes). This pigment pattern persists for many years, is different for each whale, and

enables researchers to identify individual whales from photos (a process called 'photo-identification') in order to study life history, migration, and population size.

When marine researchers from the NC Maritime Museum encounter humpback whales, we attempt to get good photographs of the dorsal fins and flukes to contribute to this study. The above photos of the flukes and dorsal fin of a humpback whale were taken on January 3, 2005 off of Shackleford Banks, about half way between Beaufort Inlet and the Cape Lookout Lighthouse. The whale was near an area being fished by menhaden boats with purse seines. Humpback whales eat both krill and small fish, thus it may have been after the same fish as the menhaden fleet from Beaufort.



Humpback whale flukes,
photo by John Russell



Humpback whale dorsal fin,
photo by Keith Rittmaster

There are two ocean-wide photograph catalogues of humpback whales containing 8000 + photographs dating back to the 1950s at the College of the Atlantic in Bar Harbour, Maine. There are also catalogues of Gulf of Maine whales at the Center for Coastal Studies in Provincetown, MA, and at The Whale Center of New England in Gloucester, MA. Further south, there is a Mid-Atlantic Humpback Whale Catalogue of photographs at the Virginia Marine Science Museum in Virginia Beach, VA. Marine scientists at other locations send photographs to the catalogue curators, as has been done with the photos above, along with location and date of the observation.

Female humpback whales can be 49 feet long and males 46 feet. Females reach sexual maturity at 35 feet (5 years) and give birth to 14-foot newborns after a 12-month gestation period at two-three year intervals. The major known environmental threats to humpback whales are ship strikes and fishing gear entanglements. Note the scars on the tail photo above that suggest the photographed humpback survived entanglement in some sort of line. The summer feeding areas and migration routes of humpback whales in the western North Atlantic coincide with areas of intense net and longline fishing and some of the heaviest ship traffic in the world creating threats to this endangered species.

Another species of large whale that is occasionally seen here traveling close to shore is the right whale (*Eubaleana glacialis*).

Recently several right whales have been sighted and photographed locally. Right whales (so named because they were the 'right whale' to kill as they 1) migrate close to shore, 2) float when dead, and 3) yielded many products of significant commercial value such as blubber and long baleen plates) were hunted to near extinction as recently as the mid-1900s.

The current population estimate is only around 300 right whales making it one of the most endangered species on earth. They face the same hazards as humpback whales and have a lower population growth rate. This is because of a reproductively active female pool of only about 50 individuals and a calving interval of 3.7 years. Recently a right whale entangled in fishing gear off South Carolina was released by a response team significantly aided by the U.S. Coast Guard. Many other right whales each year aren't so lucky and perish as a result of human activities.

A unique feature of right whales is that their backs are smooth - they have no dorsal fin. Photo-identification is also used to study right whales with the identifying features being the bumps (called "callosities") on the top of the whales' heads. The photo of the right whale above, taken near Sportsman Pier in Atlantic Beach, was identified by researchers at the New England Aquarium in Boston as "an old friend of ours 'Slalom', a whale born in 1982" who, at 14 years old, just had her first calf.

So the next time you are walking along the beach on a cool winter day, scan the horizon periodically. You may be lucky enough to enjoy one of nature's many treats. For more information visit the whale links at capelookoutstudies.org. ★



Right whale,
photo by Keith Rittmaster