

The Whale Watching Cruise

Commercial whale watch cruises are conducted in the sanctuary from April through October, when the greatest concentrations of whales are present. In 2006, at least 13 dedicated whale watching businesses with between 18–23 boats operated from six Massachusetts ports—four out of Gloucester; three out of Boston; two out of Provincetown and Plymouth respectively; and, one each out of Barnstable and Newburyport. Some operators use their boats for other purposes such as fishing, sightseeing or commuter transportation (Wright, 1994). Additionally, other chartered vessels may engage in whale watching.

Commercial whale watch boats range in size from approximately 15 m (50 ft. with 35-40 passenger capacity) to over 42 m (140 ft. with 400 passenger capacity). Some boats are propelled by screw propellers and other by jet drives. The whale watch operations can be categorized into two groups: those that deploy boats that regularly operate at speeds from 16-20 knots, and those that deploy high speed boats that regularly operate at speeds from 25-38 knots (Wiley *et al.*, in press).

Vessels may make one to three trips per day to the sanctuary. A 4-6 hour trip averages \$30-40. The tour schedule of most commercial whale watch boats begins in April, with one trip scheduled daily through June with two trips scheduled on weekends. School groups are the main market during this time. The season peaks during July and August; operators generally offer two to three trips per boat daily, catering to a generalized tourist market. Schedules are reduced after Labor Day. Seasonal demand and variable weather conditions determine trip frequency. Some companies have more than one vessel and also operate charter fishing trips or other types of sightseeing tours.

overall to frequent the sanctuary), to the shorter period of residence within the sanctuary (generally late winter or early spring to approximately July) and regulations restricting vessel approach.

Until the 2006 season when numbers rebounded to a historic high, the total number of whale sightings in the sanctuary had been declining over the past decade. Scientists suggest that reduced local availability of sand lance, the main food source of humpback and fin whales which attracts the whales to the sanctuary, may have been the primary cause of this earlier decline in sightings (Payne *et al.*, 1990; Weinrich *et al.*, 1997; Kenney *et al.*, 2001). Prey field mapping by sanctuary scientists tagging humpback whales during the 2006 season revealed large quantities of sand lance in the sanctuary and in the immediate vicinity of feeding humpbacks.

RECREATIONAL WHALE WATCHING

Recreational boaters are most numerous and often aggregate in the sanctuary during the major portion of the whale watch season from May to September. While participation in whale watching by this sector is presumed high, there are no quantitative assessments to indicate levels of participation. These smaller private craft, dubbed the “mosquito fleet” by commercial whale watch operators, follow commercial whale watch boats and/or seek out whales independently.

NOAA whale watch guidelines have been in place since 1985 for the GoM Region. These guidelines represent the best practices for the industry as endorsed by the federal government. There are occasional, albeit largely undocumented, reports of whale harassment and collisions between non-commercial vessels and whales. Evidence of smaller boat vessel collisions (i.e., less than 15.2 m or 50 ft.) are supported by photographs of cuts and scars on the backs, flukes and fins of cetaceans (CCS, 1991). A more detailed description of the guidelines is found in Appendix M.

In an attempt to educate private boaters whale watching in the sanctuary, the Whale and Dolphin Conservation Society, in collaboration with the sanctuary, developed a public education program entitled “See a Spout, Watch Out! Responsible Whale Watching.” Additionally, the International Fund for Animal Welfare worked with the Commonwealth of Massachusetts, the Provincetown Center for Coastal Studies and NOAA Fisheries Service to distribute educational material on this subject to registered boaters throughout Massachusetts. Development of such cooperative outreach programs can inform boaters when whales are in the vicinity and to act responsibly around these animals. However, these programs have been largely land-based and an on-the-water program is needed to increase outreach to vessels in the vicinity of whales.

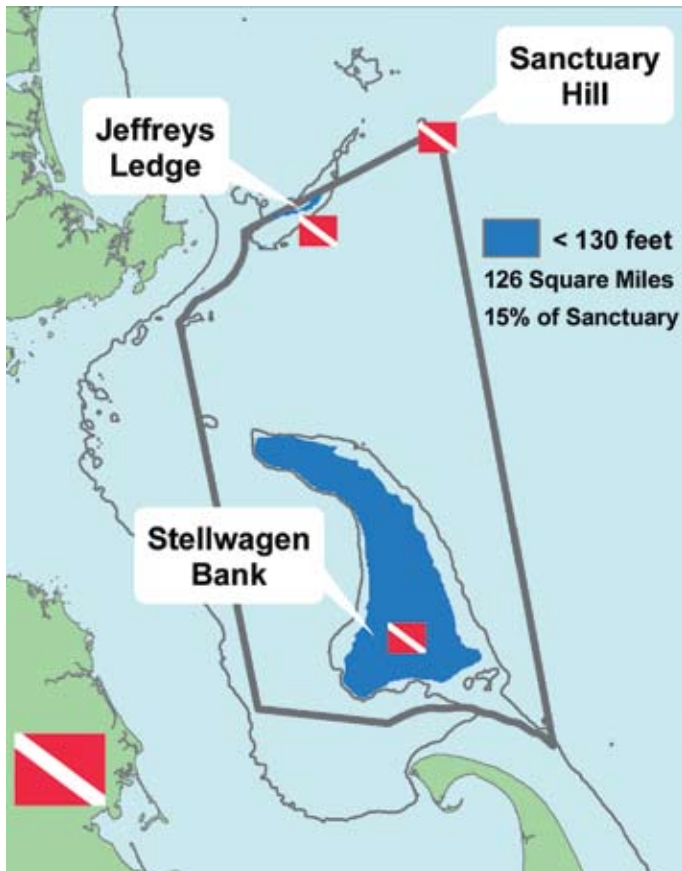


OTHER RECREATION AND TOURISM

In addition to fishing and whale watching mentioned above, other popular recreational and tourism activities include diving, bird watching and boating, some of which take place in and around the waters of the sanctuary. There are 65 small boat harbors and over 80 boating and yacht club

FIGURE 107. SANCTUARY MAP SHOWING THAT ALMOST 15% OR 126 SQUARE MILES OF THE STELLWAGEN BANK SANCTUARY IS WITHIN THE RECREATIONAL DIVE LIMIT OF 130 FEET.

Most of this area, depicted here in blue, lies on top of Stellwagen Bank but additional areas include parts of southern Jeffreys Ledge and Sanctuary Hill.



sites along the Massachusetts coast giving access to the sanctuary.

DIVING

While the most frequently visited New England dive spots are relatively close to shore, the sanctuary offers SCUBA divers a chance to explore different offshore environments at the mouth of Massachusetts Bay; however, strong currents and exposed waters create challenging dive conditions. Almost 15% of the sanctuary's total seafloor area (126 square miles) is less than 130 feet deep and within depth limits for recreational diving. The shallower areas are found on top of Stellwagen Bank as well as on parts of southern Jeffreys Ledge and Sanctuary Hill (Figure 107). Despite the potential dive sites, very little diving occurs in the sanctuary.

BIRDWATCHING

The sanctuary provides a rewarding birding opportunity for both novices and experienced birders. Approximately 34 seabird species occur within the sanctuary's boundaries; however, their abundance and distribution change constantly from season to season and from year to year. A

more detailed list of species found within the sanctuary and the GoM area can be found in Appendix J. Each year since 1998, the Massachusetts Audubon Society (MAS) and the sanctuary conduct the Stellwagen Bank Sanctuary Christmas Bird Count. The count covers a 15-mile circle that includes the southern end of Stellwagen Bank and the northern tip of Cape Cod.

BOATING

Personal boating in the sanctuary often occurs as an ancillary activity to recreational fishing, whale watching, bird watching and diving which have been previously discussed. The considerable distance offshore and open ocean conditions constrain sanctuary access to day trips by larger more expensive boats. Sailboats frequent the sanctuary in coast-wise transit from port to port, but rarely as the primary destination. Recreational boaters typically transit the sanctuary going to and from Boston, coming from the Cape Cod Canal or Cape Cod Bay, and from Provincetown or Cape Ann.



MARITIME TRANSPORTATION

Massachusetts Bay is a body of water in which commercial maritime activities abound and which is home to many harbors that ring the coast from Cape Cod to Cape Ann. The historic Ports of Boston, Gloucester, Salem Sound and Plymouth are active industrial ports, but the former two account for the majority of the commercial shipping traffic. As an indication of volume, there were 4,561 vessel trips made to and from these ports and an additional 2,149 vessels traveled through the Cape Cod Canal in 2003 (USCG, 2006). The majority of these vessels cross the sanctuary en route to and from these ports or in transit to ports to the north and south along the eastern seaboard. Approximately 800 commercial fishing vessels use Massachusetts Bay as a fishing area or as a transit zone to open ocean fishing areas (USCG, 2006).

TRAFFIC AND ROUTING

Vessels crossing the sanctuary come from multiple sources, but two in particular. The first is vessels arriving at and departing from the Port of Boston. There is a vessel Traffic Separation Scheme (TSS) established by the International