

# Monthly Sightings of Eastern North Pacific Southern Resident Killer Whales (1990 - 2003)



In 1978, The Whale Museum in Friday Harbor, Washington, began managing the Whale Hotline public sighting network. The purpose of the network was to track killer whale (*Orcinus orca*) sightings in Washington State. The Whale Museum has received an average of 400 to 1,000 calls per year reporting sightings of marine mammals and has maintained an archived database of these sighting data until the present. The Whale Museum data are predominantly opportunistic sightings from a variety of sources (public reports, commercial whalewatching industry pager system, Soundwatch, Lime Kiln State Park land-based observations, and independent researcher reports). The Whale Museum personnel match the location data from each of the sighting reports to The Whale Museum's historic quadrant system.

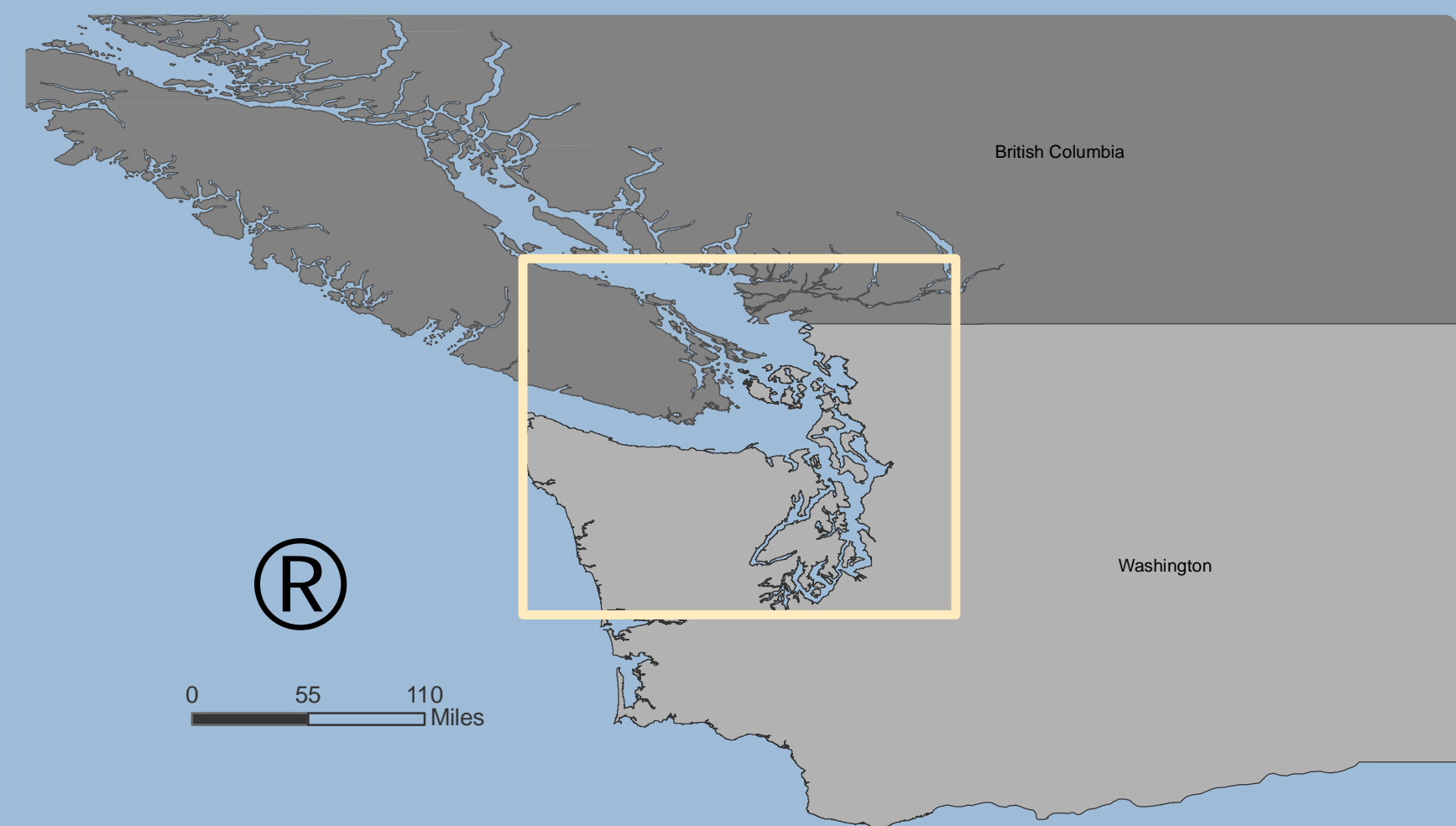
Sightings are displayed as points that represent the center of each quadrant (Osborne 2005).

The Whale Museum prepared for the National Oceanic and Atmospheric Administration (NOAA) a compilation and summary of its available historical killer whale sighting data from 1990 through 2003, the "Southern Resident Killer Whale Sighting Compilation 1990-2003." The dataset does not account for level of observation effort by season or location. The 1990-2003 Whale Museum dataset is, however, the most comprehensive long-term data available to evaluate broad scale habitat use by Southern Residents in inland waters at this time (total number of sighting records = 22,509).

Using The Whale Museum data, NOAA determined the number of times killer whales have been sighted within each quadrant by month. NOAA limited its analysis of the dataset to one sighting per quadrant per day to reduce the bias introduced by multiple sightings of the same whales in the same location on the same day (total number of unique sightings = 11,836). The maximum number of sighting in any one month was 2,738 in July with most sightings occurring along the western and southern shores of the San Juan Islands and the southern end of Vancouver Island. The minimum number of sightings in any one month was 179 in March with sightings spread throughout Puget Sound.



Reference: Osborne, R.W. 2005. Southern Resident Killer Whale Sighting Compilation 1990-2003.



**Total Number of Sightings Per Month:**

January = 249	July = 2,738
February = 199	August = 1,904
March = 179	September = 1,516
April = 399	October = 341
May = 1,138	November = 278
June = 2,596	December = 299

**Legend**

**Sightings Per Location**

- 1 - 5
- 6 - 25
- 26 - 100
- 101 - 325

**Proposed Critical Habitat Areas**

- Area 1: Core Summer Area
- Area 2: Fall/Winter
- Area 3: Strait of Juan de Fuca

