



Blue Whales and Ships — not a good mix!



Eastern North Pacific Blue Whales

- Population estimate is 1,500 animals – “Endangered”
- Feed off the west coast of the U.S. and Canada in summer and fall
- Mortality from collisions between ships and whales is cause for concern
- Knowing what areas are important to whales can help mitigate this problem



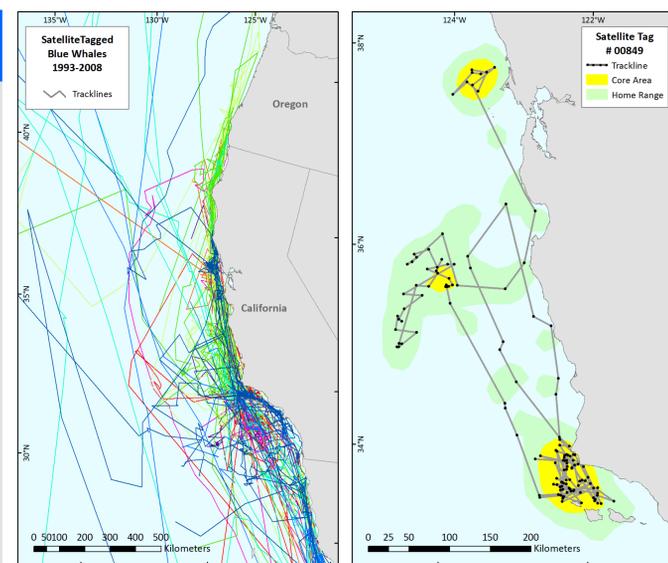
Satellite Tagging

- From small boats we attach tags to whales
- Tags transmit when whales are at the surface
- Transmissions are received by satellites and whale locations are sent to our computers
- This technology allows us to track whales anywhere in the world



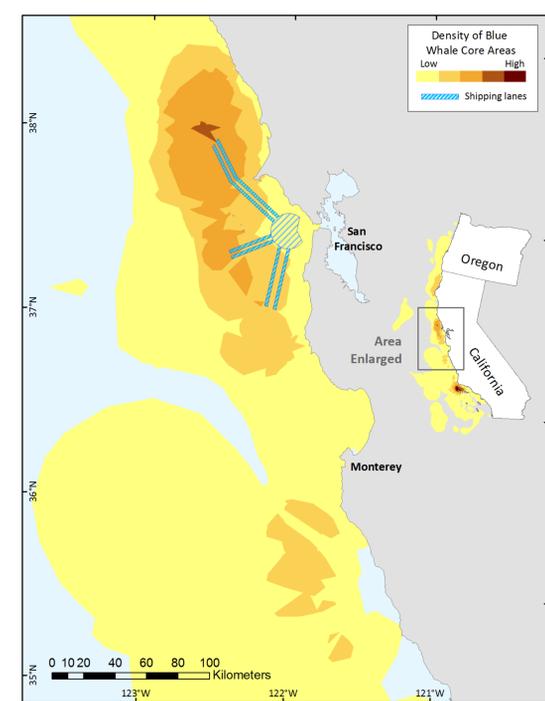
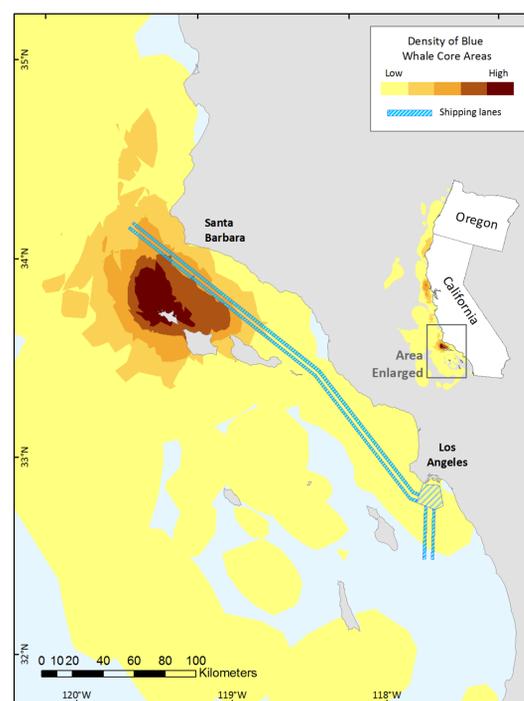
Analysis

- 171 blue whales were tagged from 1993-2008
- Individual *home ranges* and *core areas* were calculated for each whale's track in the U.S. Exclusive Economic Zone (EEZ)
- Overlap in *core areas* among individual whales used as indicator of areas of highest use



What Tags Revealed...

- Blue whales were generally present in EEZ waters from July to early December
- The main sites of *core area* overlap were in highly productive upwelling centers
- These sites coincided with the most important port access routes on the West Coast: Los Angeles and San Francisco
- This raises the risk of exposure to human activities for whales, either through increased underwater sound or vessel collisions



Implications

- The areas of highest use by blue whales identified in this study provide information that managers can use to modify shipping traffic during times of high whale occurrence
- Route modifications and vessel speed reductions are among the changes being considered by management agencies, the U.S. Coast Guard, and shipping companies to help mitigate impacts to whales near shipping lanes

Sponsors



Click [here](#) to see the related publication for more information

NMFS Permit #s 841, 369-1440, 369-1757