

POPULATION SIZE

Reliable estimates of abundance for this stock are currently unavailable.

Minimum Population Estimate

At this time, it is not possible to produce a reliable minimum population estimate (N_{MIN}) for this stock, as current estimates of abundance are unavailable.

Current Population Trend

No reliable estimates of abundance are available for this stock; therefore, reliable data on trends in population abundance are unavailable.

CURRENT AND MAXIMUM NET PRODUCTIVITY RATES

A reliable estimate of the maximum net productivity rate is currently unavailable for the Alaska stock of Baird's beaked whale. Hence, until additional data become available, it is recommended that the cetacean maximum theoretical net productivity rate (R_{MAX}) of 4% be employed (Wade and Angliss 1997).

POTENTIAL BIOLOGICAL REMOVAL

Under the 1994 reauthorized Marine Mammal Protection Act (MMPA), the potential biological removal (PBR) is defined as the product of the minimum population estimate, one-half the maximum theoretical net productivity rate, and a recovery factor: $PBR = N_{\text{MIN}} \times 0.5R_{\text{MAX}} \times F_R$. The recovery factor (F_R) for these stocks is 0.5, the value for cetacean stocks with unknown population status (Wade and Angliss 1997). However, in the absence of a reliable estimate of minimum abundance, the PBR for this stock is unknown.

ANNUAL HUMAN-CAUSED MORTALITY AND SERIOUS INJURY

New Serious Injury Guidelines

NMFS updated its serious injury designation and reporting process, which uses guidance from previous serious injury workshops, expert opinion, and analysis of historic injury cases to develop new criteria for distinguishing serious from non-serious injury (Angliss and DeMaster 1998, Andersen *et al.* 2008, NOAA 2012). NMFS defines serious injury as an “*injury that is more likely than not to result in mortality.*” Injury determinations for stock assessments revised in 2013 or later incorporate the new serious injury guidelines, based on the most recent 5-year period for which data are available.

Fisheries Information

Twenty-two different commercial fisheries operating within the potential range of the Alaska stock of Baird's beaked whale were monitored for incidental take by fisheries observers from 2007-2011 (see 76 FR 73912, final List of Fisheries for 2012). There were no serious injuries or mortalities of Baird's beaked whales incidental to observed commercial fisheries reported between 2007-2011 (Breiwick 2013). The estimated annual mortality rate incidental to commercial fisheries is zero.

Subsistence/Native Harvest Information

There is no known subsistence harvest of Baird's beaked whales by Alaska Natives.

Other Mortality

Between 1925 and 1987, 618 Baird's beaked whales were reported taken throughout the North Pacific (International Whaling Commission, BWIS catch data, February 2003 version, unpublished). The annual quota of Baird's beaked whales for small-type whaling in Japan was 62 from 1999-2004, which increased temporarily to 66 from 2005-2010 and will remain a permanent increase (Kasuya 2011). Due to the unknown stock structure and migratory patterns in the North Pacific, it is unclear whether these animals belong to the Alaska stock of Baird's beaked whales.

STATUS OF STOCK

Baird's beaked whales are not designated as “depleted” under the MMPA or listed as “threatened” or “endangered” under the Endangered Species Act. Reliable estimates of the minimum population, population trends, PBR, and status of the stock relative to its Optimum Sustainable Population size are currently not available.

Because the PBR is unknown, the level of annual U.S. commercial fishery-related mortality that can be considered insignificant and approaching zero mortality and serious injury rate is unknown. However, the estimated annual rate of human-caused mortality and serious injury seems minimal for this stock. Thus, the Alaska stock of Baird's beaked whale is not classified as strategic.

Habitat concerns

Disturbance by anthropogenic noise is an increasing habitat concern for most species of beaked whales, particularly in areas of oil and gas activities or where shipping or military activities are high. Shipping noise and the use of military sonars have been found to alter dive behavior and movements, as well as vocal activity in some species of beaked whales (Aguilar de Soto et al. 2006, McCarthy et al. 2011, Tyack et al. 2011). Little is known about the effects of noise on beaked whales in Alaska. Ingestion of marine debris, particularly plastics, is a concern; plastic is occasionally found in the stomach contents of stranded beaked whales, including Baird's beaked whales. (Smithsonian Institution, Cetacean Distributional Database, accessed 04 June 2012).

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