

Where to for Whales?

Dr Rochelle Constantine
School of Biological Sciences
University of Auckland

Tikapa Moana
Hauraki Gulf State of the Environment Report Launch
9 August 2011



Bryde's whales in Hauraki Gulf

46 (CV = 0.08) Hauraki Gulf core range (Wiseman 2008)

Variation in population structure

Year round residents; non-migratory

Nationally critical (Baker et al. 2010)



A photograph of a whale breaching the ocean surface, with a large ship visible in the background. The whale's dark back and tail are visible above the water. The ship is a large, multi-decked vessel with a red hull and white superstructure, positioned in the upper right quadrant of the image. The ocean is dark blue with small waves.

1989 -2010

46 whales

85% Bryde's whales ($n = 39$)

16 probable cause of mortality known

13 vessel-strike mortality

3 gear entanglement (Behrens 2009)

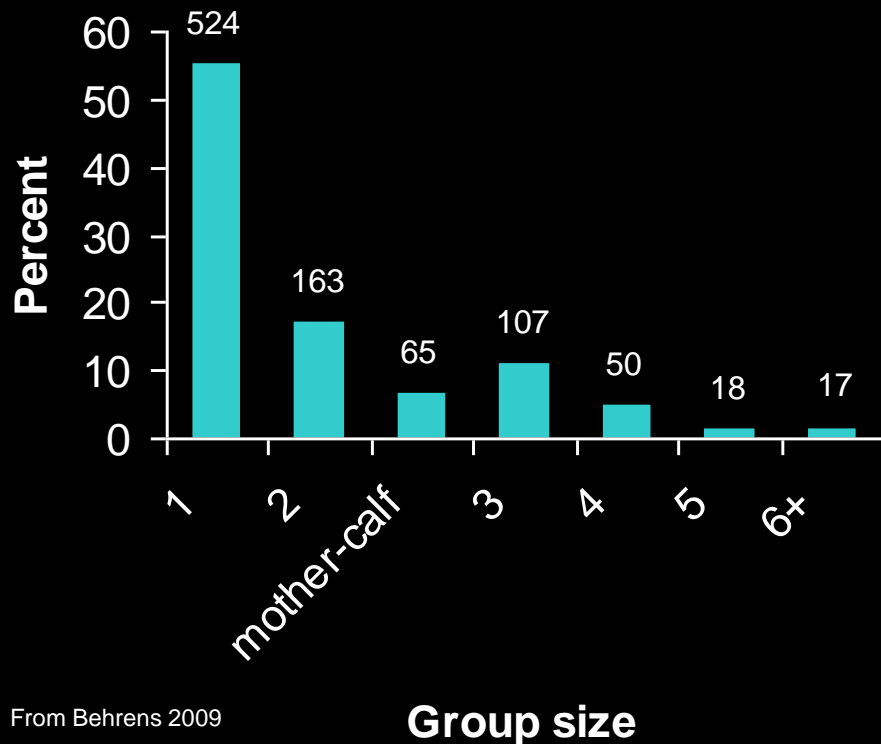
whales concentrated in inner gulf

1,820 boat surveys

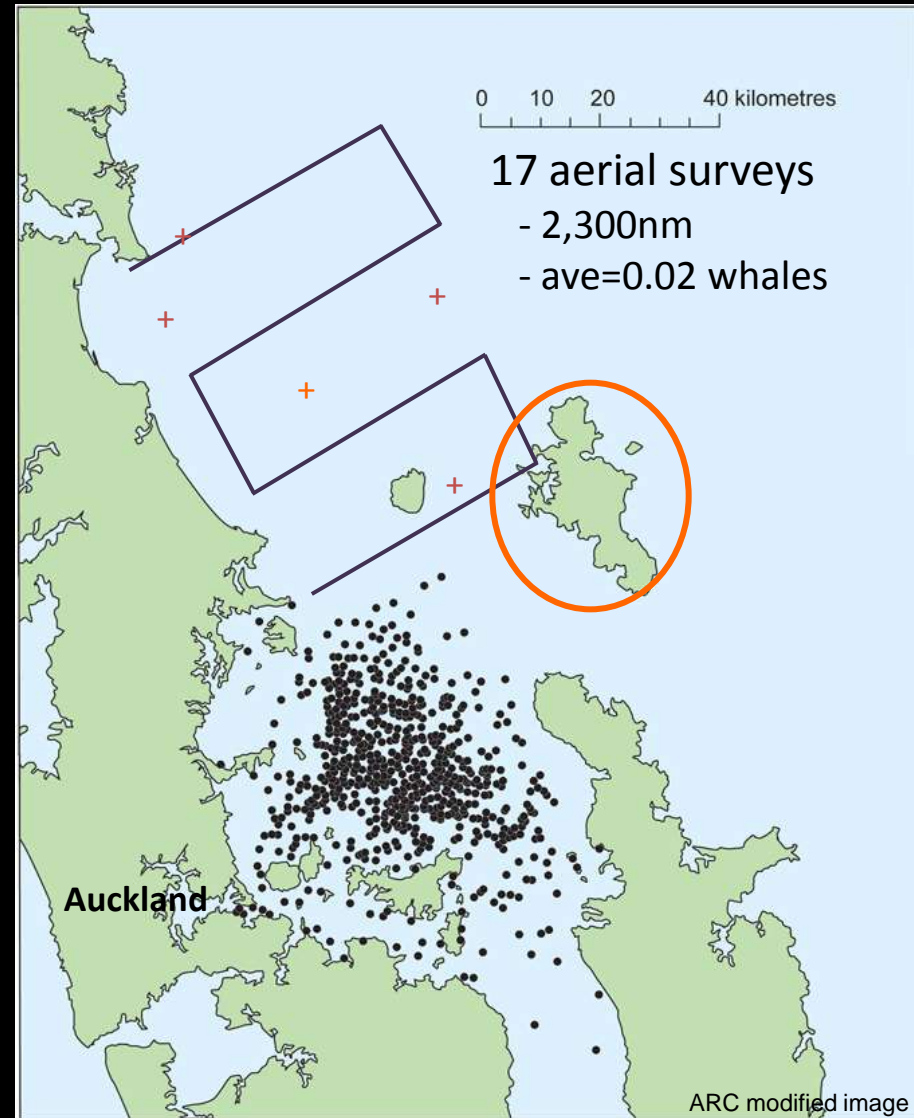
- 944 groups of whales

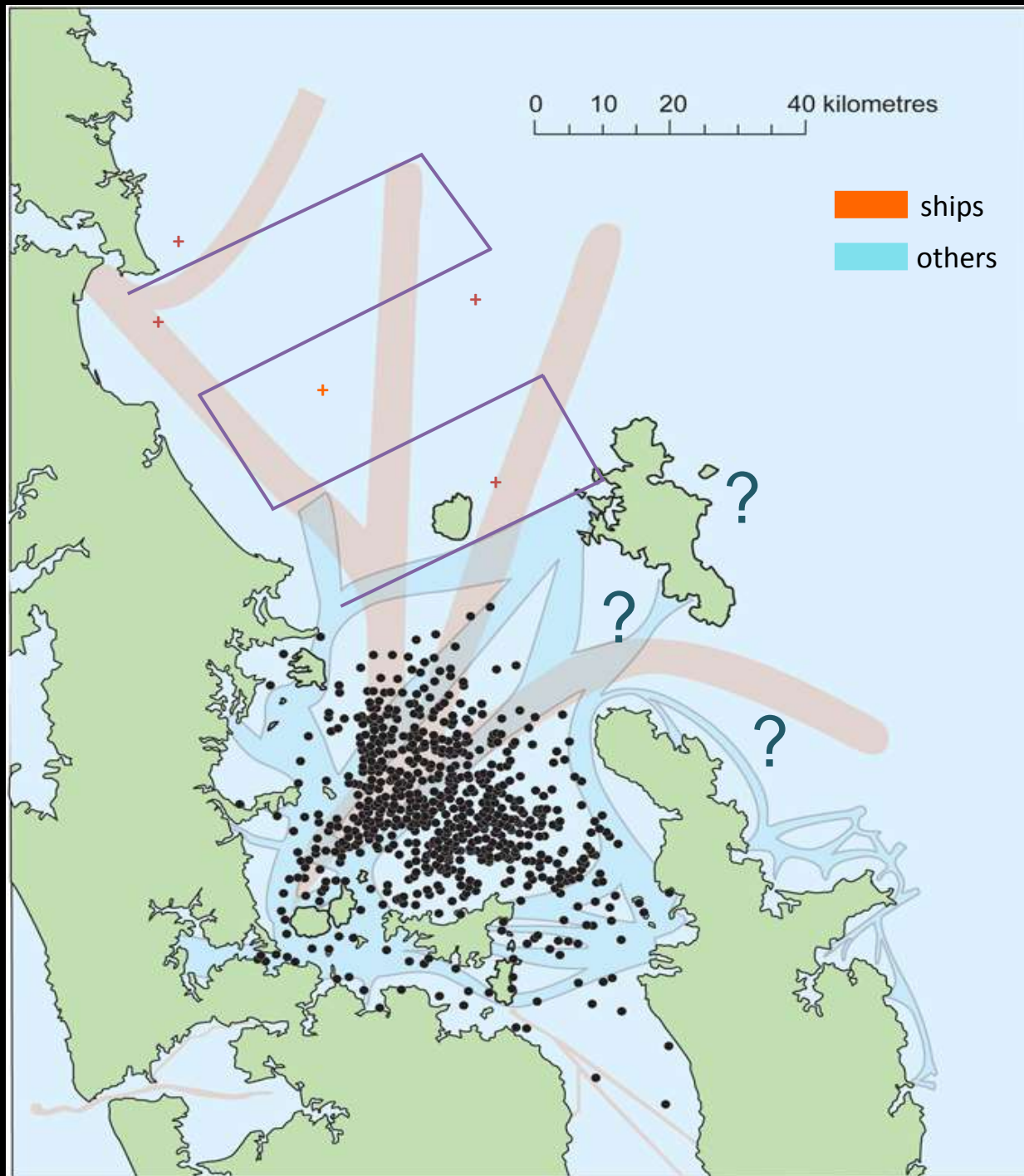
- 1,710 whales

(ave = 1.8 whales/survey)



From Behrens 2009







Hawere





thanks

- Natacha Aguilar Soto, Mark Johnson, Angela Little, Emily Duder, Brady Doak, Murray Birch, Peter Brown, Arthur Cozens & Steph Behrens – University of Auckland
- Tim Higham – Auckland Council
- DoC – Phil Brown, Martin Stanley & Callum Bourke
- William Goodfellow & crew from Whale & Dolphin Safaris

Funding

ARC Coastal Enhancement Fund

University of Auckland FRDF & Post-Grad Scholarship

Department of Conservation Hauraki Gulf Trust Fund