Humpback Whales in the Mariana Archipelago:

Local Breeding Habitat and Links to Other Western North Pacific Breeding and Feeding Grounds

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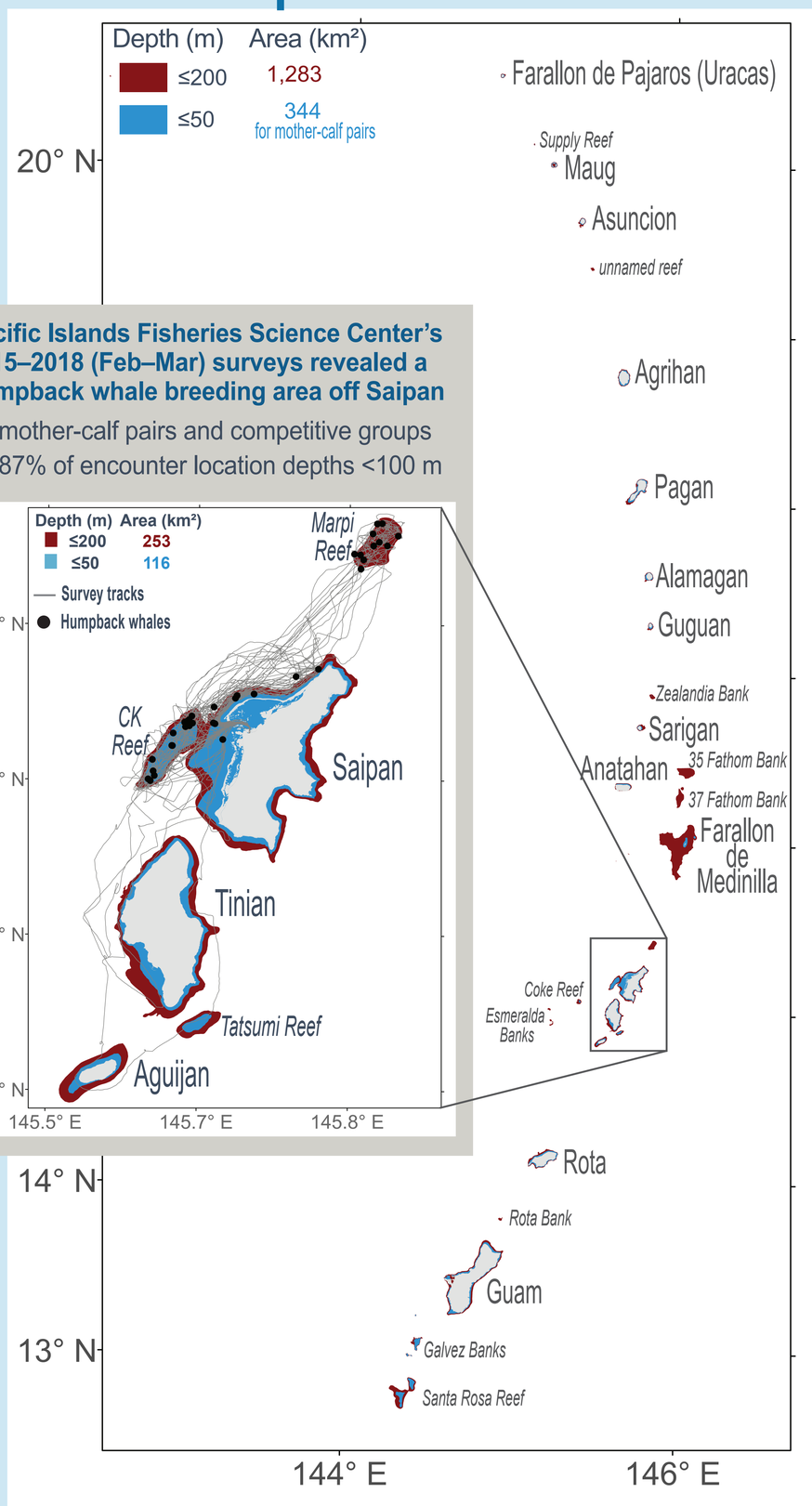
The Mariana Archipelago has 1,283 km² available breeding habitat (depths ≤200 m) for endangered western North Pacific humpback whales



Pacific Islands Fisheries Science Center's 2015–2018 (Feb–Mar) surveys revealed a humpback whale breeding area off Saipan

- mother-calf pairs and competitive groups
- 87% of encounter location depths <100 m

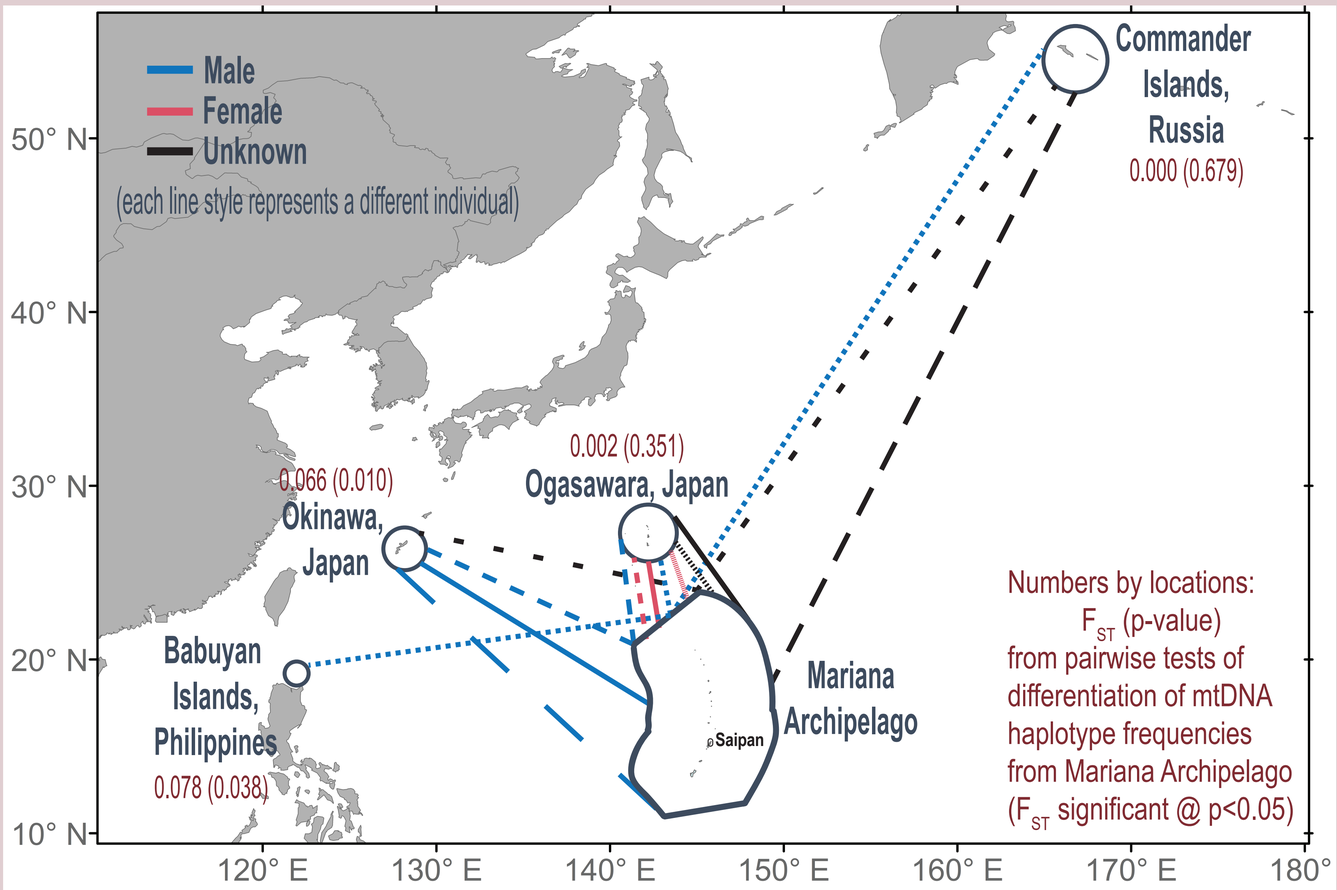
Surveys are needed at other shallow water locations throughout the archipelago to determine the full extent of the humpback whale breeding area

Mariana Archipelago humpback whales were photo-identified in the Philippines, Japan, and Russia

Western North Pacific (WNP) humpback whale photo-ID catalogs used for investigating movements between the Mariana Archipelago and previously known WNP breeding and feeding grounds

Location	Breeding/ Feeding	Organization	Years	No. Flukes
Mariana Archipelago – Saipan	Breeding	U.S. Navy Pacific Islands Fisheries Science Center	2007 2015–2018	33
Japan – Ogasawara	Breeding	Ogasawara Marine Center	1997–2014	1,696
Japan – Ogasawara	Breeding	Ogasawara Whale Watching Association	2014–2018	283
Japan – Okinawa	Breeding	Okinawa Churashima Research Center	1991–2016	1,632
Philippines – Babuyan Islands, northern Luzon	Breeding	BALYENA.ORG	1999–2016	234
Russian Far East – Chukotka & Kamchatka Peninsulas, Commander & Kuril Islands	Feeding	Russian Cetacean Habitat Project	1997–2017	1,905

- 11 humpback whales (1/3 of the Mariana Archipelago photo-ID catalog) moved between the Mariana Archipelago and previously known western North Pacific breeding and feeding grounds
- 3 individuals (2 males, 1 unknown) were identified in multiple locations



Genetic data from Mariana Archipelago humpback whales show the greatest identity with Ogasawara and the Commander Islands, and a significant difference from Okinawa and the Babuyan Islands

This supports the suggestion that there are two western North Pacific humpback whale breeding populations (Bettridge *et al.* 2015, Hill *et al. In Press*)

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