



**U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE/NOAA FISHERIES**

Pacific Islands Fisheries Science Center
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CRUISE REPORT¹

VESSEL: F/V *Marie M*, Cruise NC-07-01

CRUISE PERIOD: 16 June 2007–14 July 2007

AREA OF OPERATION: Necker Island and Gardner Pinnacles, NWHI (Fig. 1)

TYPE OF OPERATION: Personnel from the Joint Institute for Marine and Atmospheric Research (JIMAR) conducted lobster trapping and tagging in the waters around Necker Island and Gardner Pinnacles, NWHI from June 16 to July 14, 2007 in support of a Pacific Islands Fisheries Science Center research project to study lobster population dynamics.

ITINERARY:

- 16 June Start of cruise. On board Lisa Hussey, Joseph O'Malley, and John Wickstrom. Departed Pier 35, Honolulu, Oahu at 1000; transited to Gardner Pinnacles.
- 19 June Arrived Gardner Pinnacles. Commenced lobster trapping and tagging operations.
- 20 June Continued lobster trapping and tagging operations.
- 30 June Hauled lobster traps and departed Gardner Pinnacles. Transited to Necker Island.
- 01 July Arrived Necker Island. Commenced lobster trapping and tagging operations.
- 02 July Continued lobster trapping and tagging operations.
- 12 July Hauled lobster traps and departed Necker Island. Transited to Honolulu, Oahu.
- 14 July Arrived Pier 35, Honolulu, Oahu, at 2000. End of cruise.

¹ PIFSC Cruise Report CR-07-13
Issued 20 July 2007



MISSIONS AND RESULTS:

2.1 Missions of the cruise are:

- A. Collect, tag, and release live trap-captured Hawaiian spiny lobster (*Panulirus marginatus*) and scaly slipper lobster (*Scyllarides squammosus*) to provide data necessary for reestimation of key biological and population parameters for the Necker Island and Gardner Pinnacle lobster stocks.

A total of 330 trapping stations were fished with black plastic lobster traps. Each trapping station consisted of a string of 20 traps. Traps, set between 0930 and 2200 hours, were baited with mackerel and allowed to soak overnight. A total of 300 traps were set each night. In addition to collecting the tag number from previously tagged *P. marginatus* and *S. squammosus*, sex, carapace length, and reproductive information were collected from each lobster caught. All untagged *P. marginatus* and *S. squammosus* were tagged. All tagged lobsters were released.

- B. Collect data on abundance and species composition of trap-captured lobsters at Necker Island and Gardner Pinnacles.

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- C. Obtain lobster length-frequency data to compare with previous research and commercial fishery data.

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- D. Collect 25 spiny and 25 slipper lobsters from each bank for nutritional analysis.

Twenty-five spiny and 25 slipper lobsters were collected from each bank for nutritional analysis.

- E. Collect lobster, shark, eel and crab samples for researchers at the Hawaii Institute of Marine Biology.

Fifty spiny and slipper lobsters and 30 whitetip reef shark samples were collected each from Necker Island and Gardner Pinnacles. Fifty smooth box crab samples were collected from Gardner Pinnacles. Eels were collected at Gardner Pinnacles and were collected from Necker Island.

**SCIENTIFIC
PERSONNEL:**

<i>Name</i>	<i>Title</i>	<i>Sex/Nat.</i>	<i>Organization</i>
Lisa Hussey	Cooperating Scientist	F/USA	JIMAR
Joseph O'Malley	Chief Scientist	M/USA	JIMAR
John Wickstrom	Cooperating Scientist	M/USA	Northwest Obs., Inc.

Submitted by: (/s/Joseph M. O'Malley)
Joseph M. O'Malley
Chief Scientist

Approved by: (/s/Michael Seki) for
Samuel G. Pooley
Science Director
Pacific Islands Fisheries Science Center

Attachments

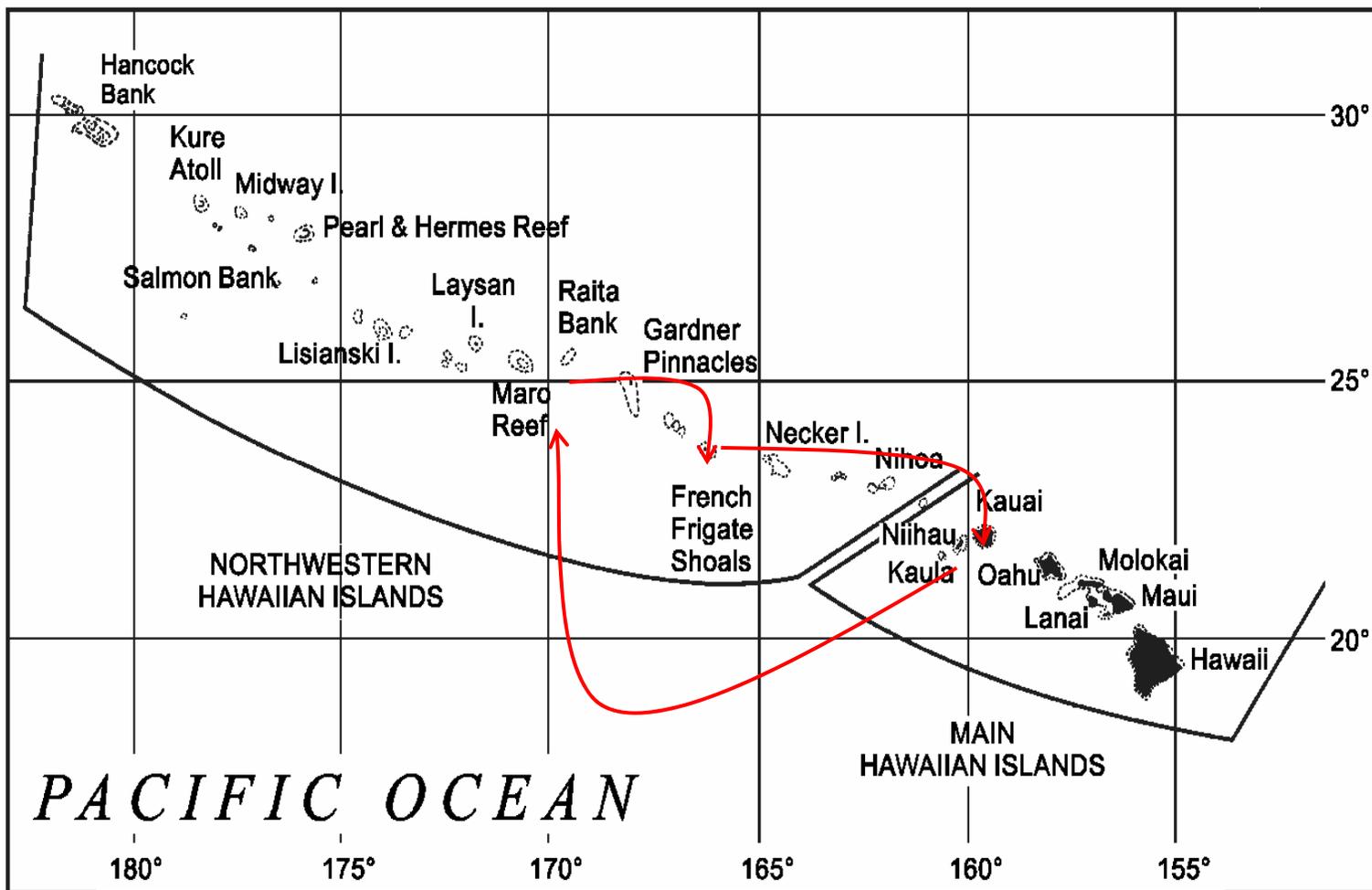


Figure 1.—Track of the *Marie M*, NOAA Charter Cruise NC-07-01, June 16 to July 14, 2007.