



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 *Katy Mary*, Cruise NC-08-01

CRUISE PERIOD: 5 August–8 September 2008

AREA OF OPERATION: Necker Island, Gardner Pinnacles, Maro Reef and Laysan Island, Northwestern Hawaiian Islands (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, Gardner Pinnacles, Maro Reef and Laysan Island, NWHI from August 5 to September 8, 2008.

ITINERARY:

- 5 August Start of cruise. Embarked scientists Michael Clarke, John Wickstrom and Joseph O'Malley. Departed Honolulu, Oahu; transited to Laysan Island.
- 10 August Arrived Laysan Island. Commenced lobster trapping and tagging operations.
- 16 August Hauled lobster traps. Departed Laysan Island and transited to Maro Reef.
- 17 August Arrived Maro Reef. Commenced lobster trapping and tagging operations.
- 23 August Hauled lobster traps. Departed Maro Reef and transited to Gardner Pinnacles.
- 24 August Arrived Gardner Pinnacles. Commenced lobster trapping and tagging operations.

¹ PIFSC Cruise Report CR-08-012
Issued 16 September 2008



- 30 August Hauled lobster traps. Departed Gardner Pinnacles and transited to Necker Island.
- 31 August Arrived Necker Island. Commenced lobster trapping and tagging operations.
- 6 September Hauled lobster traps. Departed Necker Island and transited to Honolulu, Oahu.
- 8 September Arrived Honolulu, Oahu. Disembarked scientists Michael Clarke, John Wickstrom, and Joseph O'Malley.

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, Gardner Pinnacles, Maro Reef and Laysan Island, NWHI lobster stock.

A total of 360 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, Gardner Pinnacles, Maro Reef and Laysan Island, NWHI.

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

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0930 and 2200 hours, were baited with mackerel and allowed to soak overnight. A total of 300 traps were set each night. All captured lobsters were recorded by species and sex and measured.

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

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

- E. Collect lobster samples for researchers at HIMB.

Fifty spiny and slipper lobsters, were collected each from Necker Island, Gardner Pinnacles, Maro Reef and Laysan Island, NWHI.

**SCIENTIFIC
PERSONNEL:**

Joseph O'Malley, Chief Scientist, Joint Institute for Marine and Atmospheric
Research, University of Hawaii
Michael Clarke, Cooperating Scientist, MRAG
John Wickstrom, Cooperating Scientist, MRAG

(/s/ Joseph M. O'Malley)

Submitted by: _____
Joseph M. O'Malley
Chief Scientist

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

Attachments

Figure 1, Vessel track for NC-08-01
Appendix, NC-08-01 Summary of Principle Data Collected

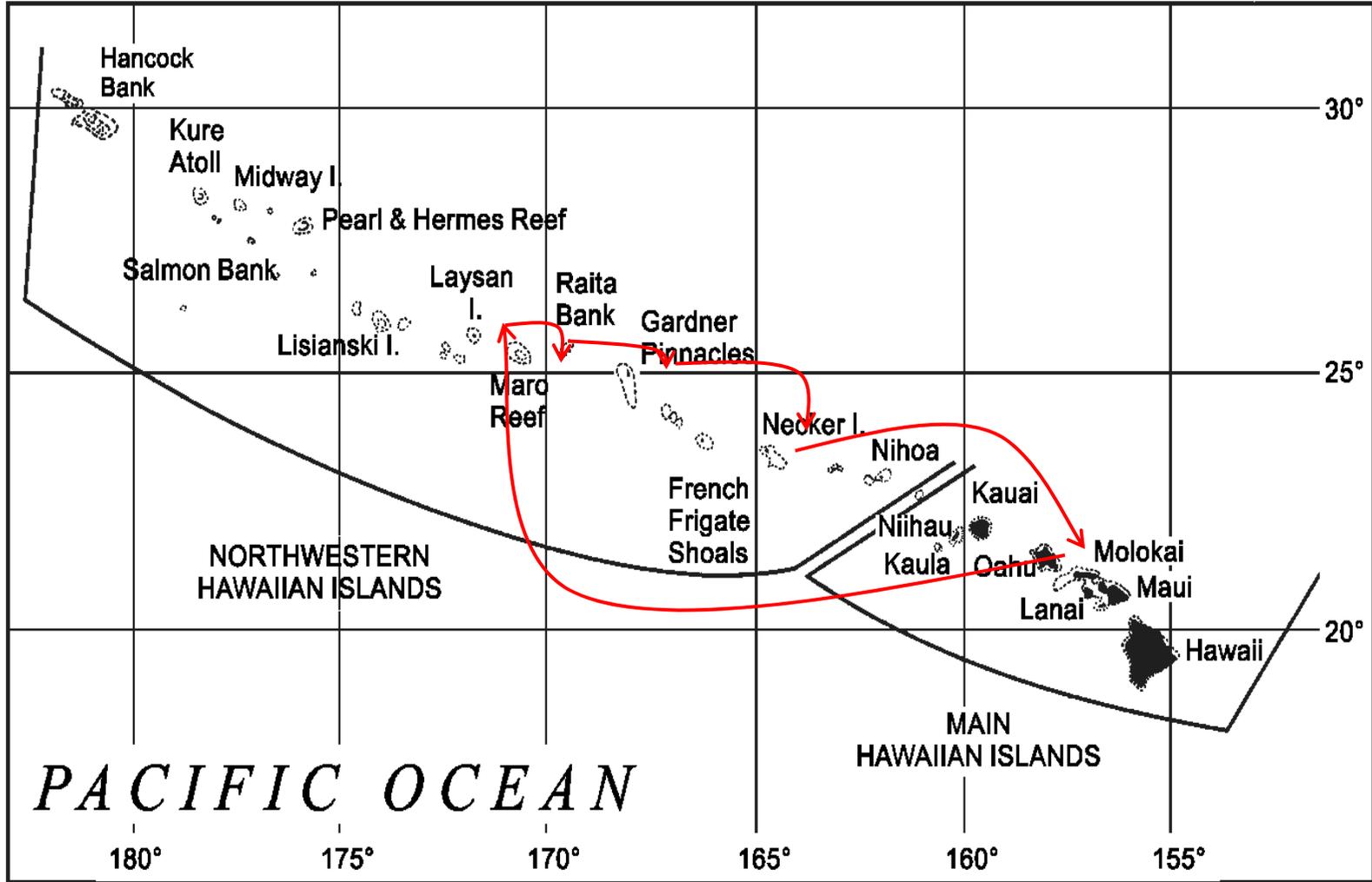


Figure 1.—Track of the NOAA Charter Ship *Katy Mary*, 5 August to 8 September 2008.