

## U.S. DEPARTMENT OF COMMERCE

# National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE/NOAA FISHERIES

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#### CRUISE REPORT<sup>1</sup>

**VESSEL:** Oscar Elton Sette, Cruise SE-13-08

**CRUISE** 

**PERIOD:** The NOAA Ship *Oscar Elton Sette* was engaged as support for a Pacific

Islands Fisheries Science Center (PIFSC) National Marine Fisheries Service (NMFS) project from September 11 through September 29, 2013, for a total of 19 sea days in the Papahānaumokuākea Marine National

Monument (PMNM).

AREA OF OPERATION:

The operating area included transit northwest along the main Hawaiian

Islands and PMNM from Ford Island, Pearl Harbor, to Kure with

Protected Species Division (PSD) field camp deployments and/or surveys at Ni'ihau Island, Nihoa Island, Necker Island, French Frigate Shoals (FFS), Laysan Island, Lisianski Island, Pearl and Hermes Reef (PHR),

Midway Atoll, and Kure Atoll.

# TYPE OF OPERATION:

- 1.) De-mobilized Hawaiian monk seal research program field camps including personnel, equipment, and supplies at three sites: FFS, Laysan Island, and PHR.
- 2.) Translocated six weaned Hawaiian monk seal pups from FFS to Laysan Island.
- 3.) Deployed and recovered a 6-day NMFS monk seal field camp at Lisianski Island.
- 4.) Deployed monk seal personnel for day surveys of Ni'ihau Island, Necker Island, Nihoa Island, Midway Atoll, and Kure Atoll.
- 5.) Transferred personnel and supplies to Kure Atoll for the State of Hawaii Department of Land and Natural Resources (DLNR), Department of Forestry and Wildlife (DOFAW).
- 6.) Conducted conductivity-temperature-depth (CTD) casts opportunistically.

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<sup>&</sup>lt;sup>1</sup> PIFSC Cruise Report CR-14-002 Issued 05 June 2014

#### **ITINERARY:**

11 September

**Pearl Harbor**: Embarked J. Lopez, C. Littnan, M. Barbieri, R. Eitelberg, A. Eitelberg, T. Johanos, M. Sullivan, J. Henderson, B. Casler, A. N. Mihnovets, P. Thomas, and L. White. Departed Ford Island, Pearl Harbor at 1100 to FFS.

12 September

Transit.

13 September

#### **French Frigate Shoals:**

0900: Arrived at FFS. Deployed SE-04 and SE-02 to offload equipment and supplies and deploy monk seal team for health assessment and translocation of weaned seals.

1300: Deployed SE-04 and began transporting seals back to *Sette* in three groups of two. Transferred seals in stretcher nets to SE-04 then to cages on deck.

1500: Recovered remaining personnel from FFS. Embarked S. Farry and B. Cook. Disembarked M. Sullivan and B. Casler.

1530: Departed FFS en route to Laysan Island.

14 September

#### **Transit**

Monk seal personnel provided 24-hour watch for seals on deck.

15 September

#### **Lavsan Island**:

0800: Arrived at Laysan Island. Deployed SE-04 with monk seal team and transported seals to island in groups of two. Conducted release of translocated seals and conducted survey for specimen collection and retagging of seals.

1500: Recovered monk seal team. Embarked S. Martin and disembarked A.N. Mihnovets.

1530: Departed Laysan en route to Lisianski Island.

16 September

#### Lisianski Island:

0800: Arrived at Lisianski Island. Deployed SE-04 and SE-02 and offloaded equipment and supplies for short-term field camp. Deployed shore team to assist with camp set up and seal survey. Disembarked T. Johanos and S. Martin.

1500: Recovered shore team.

1530: Departed Lisianski Island en route to Midway.

### 17 September Midway Atoll:

1500: Arrived Midway Atoll. Deployed SE-04 and seal team to conduct monk seal survey of Eastern Island, Spit Island, and Sand Island.

1830: Seal team returned to ship. Oscar Sette overnighted at Cargo pier.

### 18 September Midway Atoll:

0900: Deployed SE-04 and conducted monk seal survey of Eastern Island, Spit Island, and Sand Island. Disembarked S. Farry, B.

Cook, and M. Barbieri.

1500: Departed Midway en route to Kure Atoll.

#### 19 September Kure Atoll:

0800: Arrived at Kure Atoll. Deployed SE-04 and SE-02 and offloaded

DLNR supplies. Disembarked P. Thomas, and L. White.

1000: Deployed monk seal personnel to conduct survey.

1500: Recovered monk seal personnel.

### 20 September Kure Atoll:

0800: Deployed SE-02 and monk seal personnel to conduct survey.

1500: Recovered monk seal personnel and embarked C. Vanderlip.

1530: Departed Kure Atoll en route to PHR.

#### 21 September Pearl and Hermes Reef:

0800: Arrived PHR. Deployed SE-04 and SE-02 with personnel to assist in camp breakdown and loading. Deployed debris investigation team in PHR boat *Pisces* to investigate large net reported by *Hi'ialakai* on north side of atoll. Loaded equipment and supplies, including one 5-m inflatable boat, and 5.5-m rigid hull inflatable boat

1400: Completed camp break down and recovered shore team. Embarked J. Farrer, J. Morioka, and F. Schoebel.

1500: Recovered debris investigation team.

1600: Departed en route to Lisianski Island.

#### 22 September Lisianski Island:

0800: Arrived at Lisianski Island. Deployed personnel to assist in demobilizing camp and conducting monk seal survey.

1500: Embarked shore team, T. Johanos, and S. Martin.

1530: Departed Lisianski en route to Laysan Island.

#### 23 September **Laysan Island:**

0800: Arrived at Laysan Island and deployed personnel to assist in demobilizing camp.

1500: Completed camp break down and recovered shore team. Embarked W. Taylor, A.N. Mihnovets, and R. Tabata.

1530: Departed Laysan Island en route to FFS.

#### 24 September Transit

#### 25 September **French Frigate Shoals:**

0800: Arrived at FFS and deployed personnel to assist in demobilizing camp. Loaded supplies including two 17-ft Boston Whalers.

1500: Recovered shore personnel and embarked C. McAtee, J. Kelly, M. Sullivan, and B. Casler. 1530: Departed FFS en route to Necker Island.

### 26 September Necker Island:

0800: Arrived at Necker Island. Launched SE-02 to deploy shore team to conduct first monk seal survey.

0900: Deployed boat team and circumnavigated Necker Island on SE-02.

1030: SE-02 returned boat team to Sette and recovered shore team from island.

1330: Deployed shore team to Necker island on SE-02 to conduct second monk seal survey.

1500: Departed Necker en route to Nihoa Island.

#### 27 September Nihoa Island:

0800: Arrived at Nihoa Island.

0900: Launched SE-02 to deploy shore team to conduct monk seal survey and install two remote digital SLR cameras on shore.

1500: recovered shore team and departed en route to Ni'ihau Island.

### 28 September Ni'ihau Island:

0800: Arrived at Ni'ihau Island. Launched SE-02 to deploy shore team conduct monk seal survey.

0900: SE-02 returned to *Sette* and deployed boat team to conduct survey of Lehua Rock.

1100: SE-02 returned to *Sette* and deployed SE-04 and second boat team to conduct boat-based survey of east side of Ni'ihau Island.

1600: Recovered SE-04 and transited to shore team recovery point.

1730: Launched SE-02 and recovered shore team.

1800: Departed Ni'ihau en route to Pearl Harbor.

### 29 September Pearl Harbor

1100: Arrived Pearl Harbor. Disembarked J. Lopez, C. Littnan, R. Eitelberg, A. Eitelberg, C. McAtee, J. Kelly, W. Taylor, S. Martin, R. Tabata, J. Farrer, F. Schobel, J. Morioka, T. Johanos, J. Henderson, M. Sullivan, C. Vanderlip, A.N. Mihnovets, and B. Casler. End of project.

#### **MISSIONS AND RESULTS:**

- 1.) The ship successfully and safely recovered personnel, equipment, and supplies from three field camps at FFS, Laysan Island, and PHR.
- 2.) Six weaned Hawaiian monk seal pups were safely and successfully translocated between FFS and Laysan Island. All seals' health assessments showed no health concerns prior to translocation. Seals were outfitted with satellite transmitters to keep track of individuals after translocation. As of October 15, 2013 all six tags are still transmitting and seals are showing normal movement patterns (Fig. 2).
- 3.) A 6-day NMFS monk seal field camp was successfully deployed and recovered at Lisianski Island. Field staff conducted monk seal surveys while deployed and tagged two weaned pups.
- 4.) Day surveys were conducted during the project at Midway Atoll, Kure Atoll, Necker Island, Nihoa Island, and Ni'ihau Island. Two surveys were completed at both Midway and Kure while one survey was conducted at Necker, Nihoa, and Ni'ihau Islands. Additionally, two digital SLR cameras were deployed at Nihoa Island to document monk seal presence and identification throughout the year.
- 5.) Personnel and supplies were successfully transferred to and from Kure Atoll for the State of Hawaii Department of Land and Natural Resources (DLNR), Department of Forestry and Wildlife (DOFAW).
- 6.) Nine conductivity-temperature- depth (CTD) casts were successfully completed at Necker Island, FFS, Gardener Pinnacles, Maro Reef, Laysan Island, Lisianski Island, PHR, Midway Atoll, Kure Atoll. The CTD at Nihoa could not be completed due to time constraints.
- 7.) Additionally, a large debris aggregation was investigated at PHR, which had been earlier reported by the NOAA Ship *Hi'ialakai*. The aggregation was documented and it was determined that due to time, equipment, and personnel limitations, it was too large to be collected during the current project. A satellite tag was attached to a float in the aggregation to determine its location for future collection.

# SCIENTIFIC PERSONNEL:

Jessica Lopez, Field Research Supervisor and Chief Scientist, Joint Institute for Marine and Atmospheric Research (JIMAR), University of Hawaii (UH)

Charles Littnan, Supervisory Research Biologist, Pacific Islands Fisheries Science Center (PIFSC), National Marine Fisheries Service (NMFS)

Thea Johanos, Wildlife Biologist, PIFSC, NMFS

John Henderson, Wildlife Biologist, PIFSC, NMFS

Michelle Barbieri, Veterinarian, PIFSC, NMFS

A. Nicole Mihnovets, Cooperating Scientist, Columbia University

Robin Eitelberg, Cinematographer, Skysail Films

Andrew Eitelberg, Cinematographer, Skysail Films

Shawn Farry, Biological Research Technician, JIMAR, UH

Benjamin Cook, Biological Research Technician, JIMAR, UH

Carrie McAtee, Biological Research Technician, JIMAR, UH

Jeffrev Kelly, JIMAR Volunteer, JIMAR, UH

Mark Sullivan, Emergency Response Associate, JIMAR, UH

Bruce Casler, JIMAR volunteer, JIMAR, UH

Whitney Taylor, Biological Research Technician, JIMAR, UH

Summer Martin, JIMAR volunteer, JIMAR, UH

Ryan Tabata, JIMAR volunteer, JIMAR, UH

Jessica Farrer, Biological Research Technician, JIMAR, UH

James Morioka, Biological Research Technician, JIMAR, UH

Cynthia Vanderlip, Kure Refuge Manager, Department of Land and Natural Resources (DLNR),

Division of Forestry and Wildlife (DOFAW)

Laura White, DLNR volunteer, DLNR, DOFAW

Patrick Thomas, DLNR volunteer, DLNR, DOFAW

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Submitted by: Z. Date: 2020.01.08 09:19:23 -10'00'

Jessica Lopez Chief Scientist

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Approved by: YUKIO.

for Samuel G. Pooley Science Director

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Pacific Islands Fisheries Science Center

## **ATTACHMENTS:**

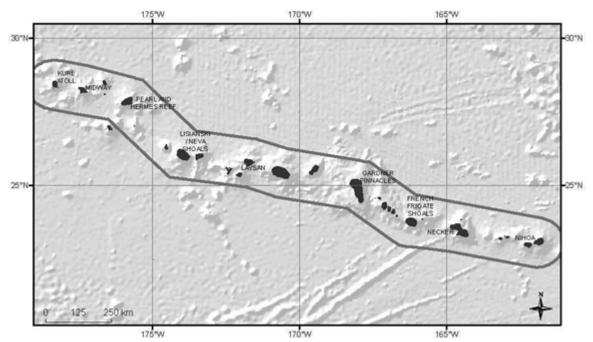


Figure 1. Project operational area for the NOAA Ship Oscar Elton Sette cruise SE-13-08.



Figure 2. Current satellite locations (as of October 17, 2013) of six translocated seals on Laysan Island.