

July 25, 2003

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CR0301-1.RBM

### CRUISE REPORT

**VESSEL:** *Oscar Elton Sette*, Cruise OES-03-01 (OES-02)

**CRUISE PERIOD:** February 4-18, 2003

**AREA OF OPERATION:** Waters off the main Hawaiian Islands (Fig. 1)

**TYPE OF OPERATION:** Trawl and trap collection of specimens for monk seal prey fatty acid analysis.

**ITINERARY:**

4 February Embark Robert Marshall and Robert Moffitt. Depart Honolulu and head to Cross Seamount.

5-17 February Set gear and collect fatty acid analysis specimens at Cross Seamount and various main Hawaiian Island locations including Penguin Banks and Haleiwa.

18 February Arrive Honolulu. End of cruise.

**MISSIONS AND RESULTS:**

A. Collect fish specimens for monk seal forage base collections using traps and other gear used both day and night.

1. Trawling Operations. A total of 20 shrimp trawl sets were conducted at locations and depths listed in Table 1. Of these, 15 towed successfully. Tows were of a 1-hour duration over previously surveyed flat bottoms at formerly selected depths.

2. Panel Trapping Operations. Panel traps were deployed at nine locations and depths listed in Table 2. Eight panel traps of mesh sizes varying from 2 in to 6 in stretched mesh were set on a main line at each location. Traps were normally baited and left to soak for 1-2 hours. On one occasion traps were left soaking overnight.

3. Eel Pot Operations. Eel pots were deployed at two locations on Cross Seamount as listed in Table 3. Eight baited eel pots were set on a main line and soaked for approximately 2 hours.
  4. Lobster Trapping Operations. Lobster traps were deployed at three locations and depths (Table 4). Eight baited traps were soaked overnight at each location.
  5. Fatty Acid Specimens. Specimens of a total of 55 potential monk seal prey taxa were collected for fatty acid analysis. In most cases the total number of specimens required were obtained. For other species future collections will be required to fulfill needs.
- B. Set and retrieve camera-equipped lobster traps to test a habitat impact assessment gear.

Camera-equipped lobster traps were deployed on two occasions (Table 5). The camera-equipped trap was placed in the center of a normal string of eight lobster traps with an additional (ninth) trap situated about 10 ft. directly in front. Good video of the leading trap dragging over the bottom during retrieval was obtained at each location.

**SCIENTIFIC  
PERSONNEL:**

Robert Moffitt, Chief Scientist, National Marine Fisheries  
Service (NMFS), Southwest Fisheries Science Center (SWFSC),  
Honolulu Laboratory (HL)  
Robert Marshall, Research Assistant, Aquatic Farms

Submitted by:

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Attachments

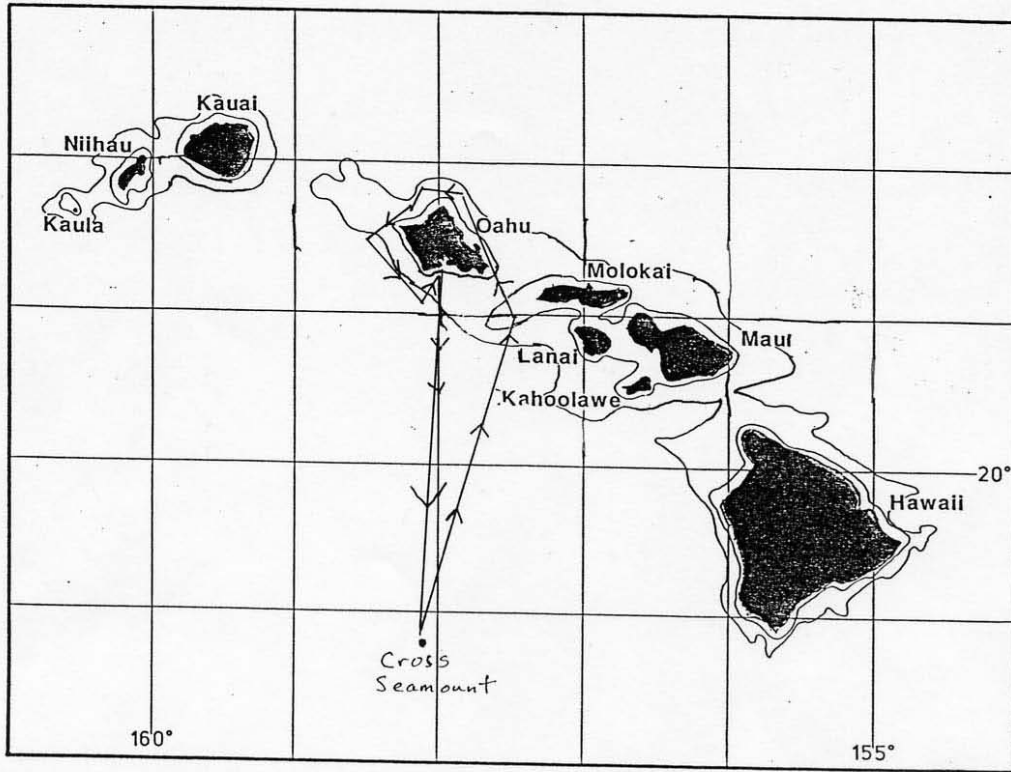


Figure 1.--Track of OES 03-01, February 4-19, 2003

Table 1. Trawling Stations

Station #	Date 2003	Latitude °N	Longitude °W	Depth (fathoms)
5	6 Feb	18° 43.854'	158° 16.740'	246
14	9 Feb	21° 38.014'	158° 07.923'	54-66
15-1	10 Feb	21° 38.102'	158° 10.104'	138-151
15-2	10 Feb	21° 38.157'	158° 10.064'	138-150
16	11 Feb	21° 09.965'	157° 18.746'	37-45
17-1	11 Feb	21° 09.718'	157° 24.774'	107-122
17-2	11 Feb	21° 10.189'	157° 23.361'	99-118
19	12 Feb	21° 14.373'	157° 08.766'	58-62
20	12 Feb	21° 14.990'	157° 07.954'	124-131
22	13 Feb	21° 15.305'	157° 08.031'	149-159
23	13 Feb	21° 14.579'	157° 08.102'	71-77
24	14 Feb	20° 33.721'	156° 46.887'	183-195
25	15 Feb	21° 01.993'	156° 58.556'	34-45
26	15 Feb	21° 03.624'	157° 07.708'	75-92
27-1	16 Feb	20° 59.458'	157° 25.809'	84
27-2	16 Feb	20° 59.595'	157° 24.360'	136-150
28	16 Feb	21° 02.513'	157° 17.594'	36-48
30	16 Feb	21° 02.525'	157° 17.604'	36-48
31-1	17 Feb	20° 57.624'	157° 04.897'	155-170
31-2	17 Feb	20° 57.548'	157° 05.005'	155-173

Table 2. List of Panel Trap Stations

Station #	Date 2003	Latitude °N	Longitude °W	Depth (fathoms)
1	5 Feb	18° 44.198'	158° 15.717'	247
4	6 Feb	18° 41.279'	158° 17.965'	261
6	6 Feb	18° 41.577'	158° 17.815'	239
8	7 Feb	18° 42.521'	158° 14.936'	203
9	7 Feb	18° 43.917'	158° 17.173'	250
10	8 Feb	21° 35.839'	158° 19.683'	42
11	9 Feb	21° 34.761'	158° 22.351'	182
32	15 Feb	21° 00.400'	156° 55.938'	45
29	16 Feb	20° 58.139'	157° 23.410'	128

Table 3. List of Eel Pot Stations

Station #	Date 2003	Latitude °N	Longitude °W	Depth (fathoms)
2	5 Feb	18° 44.254'	158° 15.404'	246
3	5 Feb	18° 44.167'	158° 15.431'	240

Table 4. List of Lobster Trap Stations

Station #	Date 2003	Latitude °N	Longitude °W	Depth (fathoms)
7	6 Feb	18° 41.210'	158° 17.596'	239
18	11 Feb	21° 10.457'	157° 18.878'	52
21	12 Feb	21° 12.255'	157° 21.240'	165

Table 5. List of Camera Trap Stations

Station #	Date 2003	Latitude °N	Longitude °W	Depth (fathoms)
12	9 Feb	21° 33.435'	158° 16.524'	19
13	9 Feb	21° 33.435'	158° 16.360'	18