U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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CRUISE REPORT[1]

VESSEL: *Oscar Elton Sette*, Cruise 09-03 (SE-71)

CRUISE PERIOD: April 19–30, 2009

AREA OF OPERATION: Main Hawaiian Islands, Kohala-Kona Coast of Big Island

TYPE OF OPERATION: National Marine Fisheries Service (NMFS), NOAA conducted trawling and handline fishing operations for juvenile bottomfish and larval billfish in the waters along portions of the Kohala, Kona and Kau Coasts off the Island of Hawaii (Fig. 1). Daytime operations included surface net tows using a 1.8-m Isaacs-Kidd (IK) trawl and small boat operations including handline bottomfishing and dip netting in surface slicks. Night operations consisted of Cobb midwater trawl for epipelagic and pelagic juvenile reef and bottomfish species and conductivity-temperature-depth (CTD) casts at predetermined locations.

ITINERARY:

17 April	Departure postponed due to mechanical problems. At 0800, trailer of SAFEboats were taken to Keehi Lagoon for pre-cruise shakedown of sampling equipment. Conducted fishing and dipnetting operations, not included in Marine Operations Log (MOL).
18 April	Departure postponed due to mechanical problems. At 0630, trailer of SAFEboats were taken to Hawaii Kai Boat ramp for bottomfishing/dipnetting shakedown of equipment, operations not included in MOL.

[1] PIFSC Cruise Report CR-09-015
Issued 28 September 2009

19 April	Embarked scientific personnel: Aimee Hoover, Robert Humphreys, Don Kobayashi, Bruce Mundy, Ryan Nichols, Taylor Parker, Meagan Sundberg and Karen Underkoffler. Departed Pearl Harbor, Oahu at 1000; began transit to Kohala and Kona Coast, Big Island of Hawai'i.
20 April	Arrived Kohala Coast, Hawai'i at 0600. At 0630, deployed two SAFEboats for handline fishing/dipnetting at Kawaihae location at lat. 20 01.959'N, long. 155 56.300'W (Station 1-2, Table 1). Conducted handline fishing for juvenile snappers and groupers from small boats at depths of 35-70 fm. At 0800, initiated IK trawl surveys (Station 3-7, Table 2); a series of five nets were deployed for 60-min tows until approximately 1500. Concluded handline fishing operations and retrieved small boats at 1512. At 1630, disembarked Scientist Aimee Hoover and embarked Scientist Noriko Shioji. At 2000, arrived on station for Cobb trawl (Station 8, Table 3). Net was deployed to target depths of 50 m and 25 m with 1-hour tows at each depth. Retrieval was delayed for 2 hours due to trawl drum overheating caused by a closed heat valve. Cobb trawl retrieved on deck at midnight.
21 April	Commenced small boat operations at 0630; deployed two small boats for handline fishing/dipnetting off of Keahole Pt. at lat. 19 46.577'N, long. 156 07.622'W (Station 9-10). At 0652, commenced a series of six, 60-min IK trawls (Station 11-16). Concluded IK trawls at 1449 and handline fishing operations at 1541. At 1940, arrived at Cobb trawl location (Station 17); the tow was for 1 hour at the two targeted depths. At 2317, arrived on station for CTD operations; casts were deployed to 150 m (Station 18-20, Table 4). Three consecutive CTD casts were run at separate locations, and operations concluded at 0140, the following morning.
22 April	Commenced small boat operations at 0600; deployed two SAFEboats for handline fishing/dipnetting off Kailua-Kona location (Station 21-22). At 0645, deployed first of seven IK trawls, each for 60-min tows (Station 23-29). At 1745, commenced two CTD casts at 150 m (Station 30-31). Deployed Cobb trawl at 1940 to targeted depths of 25 and 50 m (Station 32).
23 April	Commenced small boat operations at 0700; deployed two boats for handline fishing/dipnetting off Keahou location

	(Station 33-34). At 0850, deployed first of six IK trawls, each for 60-min tows (Station 35-40). At 1633, commenced two CTD casts at 150 m (Station 41-42). Deployed Cobb trawl at 1947 to targeted depths of 100 and 25 m, for 1 hour (Station 43).
24 April	Commenced small boat operations at 0640; deployed two boats for handline fishing/dipnetting off South Point location (Station 44-45). At 0700, deployed first of five IK trawls, each for 60-min tows (Station 46-50). At 1719, commenced three CTD casts at 150 m (Station 51-53). Deployed Cobb trawl at 1938 to targeted depths of 100 and 25 m, for 1 and 1.5 hours, respectively (Station 54). An extra 0.5 hour was necessary for cool-down of hydraulics prior to retrieval of wire and net.
25 April	Commenced small boat operations at 0700; deployed two boats for handline fishing/dipnetting off Kailua-Kona location (Station 55-56). At 0858, deployed first of five IK trawls, each for 60-min tows (Station 57-61). At 1744, commenced two CTD casts at 150 m (Station 62-63). Deployed Cobb trawl at 1940 to targeted depths of 25-50 m (Station 64). No winch/hydraulic problems encountered. At 2241, commenced dipnetting off long line pit (Station 65).
26 April	Commenced small boat operations at 0650; deployed two boats for handline fishing/dipnetting off Kealakekua location (Station 66-67). At 0710, deployed first of seven IK trawls, each for 60-min tows (Station 68-73B). At 1630, disembarked scientist Noriko Shioji for Kona Airport. At 1827, commenced one CTD cast at 150 m (Station 74). Deployed Cobb trawl at 1945 to targeted depths of 50 m for 2 hours (Station 75).
27 April	Commenced small boat operations at 0645; deployed two boats for handline fishing/dipnetting off Kealakekua location (Station 76-77). At 0700, deployed first of eight IK trawls, each for 60-min tows (Station 78-85). At 1905, commenced one CTD cast at 150 m (Station 86). Deployed Cobb trawl at 1939 to targeted depths of 100, 50 and 25 m at 40 min at each depth (Station 87).
28 April	Commenced small boat operations at 0648; deployed two boats for handline fishing/dipnetting off South Point location (Station 88-89). At 0823, deployed first of three

IK trawls, each for 60-min tows (Station 90-92). At 1200, interrupted IK trawls in order to transit to retrieve disabled SAFEboat with engine/battery issues. Deployed Cobb trawl at 1907 to targeted depths of 500-600 m in 1.45 hours (Station 93).

29 April — Commenced small boat operations at 0800; deployed two boats for handline fishing/dipnetting off Kawaihae location (Station 94-95). At 0835, deployed first of six IK trawls, each for 60-min tows (Station 96-101). At 1530, departed Kawaihae for Pearl Harbor.

30 April — Arrived at Pearl Harbor. End of cruise. Disembarked all scientists.

MISSIONS AND RESULTS:

A. Conduct bottom handline operations (Fig. 1) and dip-netting from small boats and the ship to obtain juvenile specimens of snapper/grouper species from nursery ground sites along portions of the Kohala, Kona and Kau Coasts. For handline fishing, four Henry Ching electric reels were spooled with 200-lb test Dacron backing and 180-lb test Power-pro® mainline. Terminal gear consisted of a 3-m long dropper with 6 branch lines of 50-lb monofilament test attached to 2-3 lb lead weight. Four to six H&K barbed hooks ranging in sizes from 14 to 22 were baited with strips of squid.

1. A total of 20 bottomfish handline operations (Table 1) took place during this cruise. Operations focused primarily along depth contours ranging from 50 to 150 fathoms all within the proximity of the starting locations. The average number of drifts per station was 11 and drift time varied from 1 to 96 min for a total of 53.6 line hours between the two small boats.

2. A total of 187 subadult-adult fish were caught during handline operations (Table 4). Approximately 75% were eteline snapper/grouper species, 53 (28%) ehu, *Etilis carbunculus*; 43 (23%) gindai, *Pristopomoides zonatus*; 32 (17%) kalekale, *Pristopomoides seiboldi*; 6 (3%) opakapaka, *Pristopomoides filamentosus*; 4 (2%) Hawaiian grouper, *Epinephelus quernus*; 3 (1.5%) lehi, *Aphareus rutilans* ; 1 (0.5%) yellow-tail kalekale, *Pristopomoides auricilla*. The 45 individuals comprising the remaining 25% of the handline catch appear in Table 4.

3. All permitted eteline/gouper species fork/total lengths were taken and gonads removed and immediately stored in 10% histological grade formalin. Heads were also removed and frozen for later extraction of otoliths.

4. The marked decrease in effort of both sampling days and line hours can be attributed directly to generator repair and limited small boat availability, respectively. Prior cruises were both of longer duration and possessed a greater resource of small boats for sampling effort.

5. A total of 927 pelagic and insular fish were dip-netted from surface slicks (Table 5). These samples comprised of 20 different families and five unidentified species. The families collected were as follows: 28% Pomacentridae; 27% Exocoetidae; 10% Nomeidae; 9% Belonidae; 9% Kyphosidae; 7% Carangidae; the remaining 14 families consisted of less than 1% of the total catch and appear in Table 5.

B. Conduct daytime surface net tows targeting billfish larvae from surface waters along portions of the Kohala and Kona Coasts (Fig. 1.).

1. A total of fifty-seven 1.8 meter IK trawls were conducted during daylight hours with 10-m length net with 5-mm mesh. All tows were along a predetermined course or when present, along visible surface slicks. Only 15 of the total tows were able to directly target surface slicks. A total of 12 swordfish larvae and 38 istiophorid larvae were captured during the IK trawl operations.

C. Conduct Cobb trawls in the vicinity of juvenile bottomfish nursery grounds along the Kohala and Kona coastline (Fig. 1.).

1. A total of 9 Cobb trawls were conducted during this cruise. Initially, the targeted depths were 50 m and 25 m and the Cobb trawls planned to be conducted at the 100-fm contour. In an effort to not sample the mesopelagic boundary layer community and instead attempt to target ocean-related epipelagic and pelagic juvenile reef species, tows were commenced further offshore and depths varied from 25 to 100 m. The final tow was targeted at the 500-600-m depths with intentions of collecting exotic mesopelagic fish species for public outreach.

2. Each tow was sorted in the wetlab and any reef associated larvae, suspected lutjanids or species of interest were selectively removed and stored in 95% ethanol. From every tow, a random subsample of mesopelagics was preserved in 10% formalin.

3. The first tow was delayed due to a hydraulic fuel leak and later by a heat exchanger valve not being open. Other than one later instance of an over heating, no major mechanical or engineering related problems occurred.

D. Conduct shipboard CTDs in the vicinity of juvenile bottomfish nursery grounds along the Kohala and Kona coastline (Fig. 1.).

1. A total of 14 CTD stations were performed during the cruise to obtain information on salinity, temperature and dissolved oxygen. The CTD casts were preformed along previously established Fishery Biology and Stock Assessment Division larval billfish sites. The CTD casts depths were to 150 m.

2. A total of 196 PCTD stations were performed from small boats within surface slicks using an SBE-19 SEACAT Profiler. This data will be incorporated into a Hollings Undergraduates 2009 Summer Internship project on the physical and biological characterization of surface slicks in the vicinity of Hawaii.

E. Conduct tag-and-release on species of jacks and adult eteline snappers/groupers that are incidentally captured during bottom handline and fish trapping operations.

Due to an amendment to our sampling permit, which allowed the collection of adult target species, only 5 adult fish were tagged and released with Division of Aquatic Resources bottomfish/Ulua tags. The released fish consisted of 2 lehi, *Aphareus rutilans*; 2 kahala, *Seriola rivoliana* and 1 gindai, *Pristipomoides zonatus*. Location and length measurements were taken for all released fish.

SCIENTIFIC PERSONNEL:

Ryan Nichols, Chief Scientist, Pacific Islands Fisheries Science Center (PIFSC), National Marine Fisheries Service (NMFS)
Meagan Sundburg, Fisheries Technician, Joint Institute of Marine and Atmospheric Research (JIMAR), University of Hawaii (UH)
Aimee Hoover, Research Assistant, PIFSC, NMFS
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Submitted by: _____

Ryan S. Nichols
Chief Scientist

Approved by: _____

Samuel G. Pooley
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Pacific Islands Fisheries Science Center

Attachments

Table 1.--Handline-dipnet fishing stations conducted on *Oscar Elton Sette* Cruise SE-09-03. Positions are in decimal degrees. Double dash indicates disabled depth finder.

Station #	Date	Latitude ºN	Longitude ºW	No. drifts	Median drift (min)	Depth range (fm)
1	04/20/2008	20° 02.853	155° 52.9	12	20	54 - 174
2	04/20/2008	20° 02.853	155° 52.9	?	?	Surface dipnet
9	04/21/2008	19° 46.577	156° 07.622	14	16	63 - 133
10	04/21/2008	19° 46.577	156° 07.622	?	?	Surface dipnet
21	04/22/2008	19° 37.593	156° 01.484	15	12	75 - 134
22	04/22/2008	19° 37.593	156° 01.484	?	?	Surface dipnet
33	04/23/2008	19° 32.264	155° 59.982	20	12	75 - 127
34	04/23/2008	19° 32.264	155° 59.982	2	40	50 - 82
44	04/24/2008	18° 56.650	155° 35.001	16	10	98 - 143
45	04/24/2008	18° 56.650	155° 35.001	12	26	85 -120
55	04/25/2008	19° 40.205	156° 03.465	12	14	50 - 117
56	04/25/2008	19° 40.205	156° 03.465	5	25	60 - 124
66	04/26/2008	19° 30.351	155° 58.998	17	15	67 - 130
67	04/26/2008	19° 30.351	155° 58.998	7	15	56 - 149
76	04/27/2008	19° 26.274	155° 59.715	17	14	68 - 131
77	04/27/2008	19° 26.274	155° 59.715	3	16	63 - 138
88	04/28/2008	18° 56.789	155° 34.884	21	15	65 - 143
89	04/28/2008	18° 56.789	155° 34.884	10	24	84 - 121
94	04/29/2008	20° 02.894	155° 53.479	11	15	-
95	04/29/2008	20° 02.894	155° 53.479	4	15	91 – 121

Table 2.—Isaacs-Kidd trawl stations conducted on *Oscar Elton Sette* Cruise SE-09-03. Positions are in decimal degrees. Dash indicates when surface slick was targeted.

Station #	Date	Latitude ºN	Longitude ºW	Soak time	Vessel course	Targeted slick
3	04/20/2009	19° 56.969	155° 57.222	60min	270°	NO
4	04/20/2009	19° 56.631	156° 01.426	63min	030°	NO
5	04/20/2009	19° 56.760	155° 59.680	62min	270°	NO
6	04/20/2009	20° 02.969	155° 57.229	60min	-	YES
7	04/20/2009	20° 04.356	155° 56.906	50min	-	YES
11	04/21/2009	19° 46.0	156° 07.953	60min	180°	NO
12	04/21/2009	19° 42.042	156° 07.800	60min	135°	NO
13	04/21/2009	19° 39.648	156° 05.393	61min	170°	NO
14	04/21/2009	19° 37.846	156° 05.281	63min	135°	NO
15	04/21/2009	19° 35.275	156° 03.130	62min	270°	NO
16	04/21/2009	19° 35.410	156° 06.222	61min	135°	NO
23	04/22/2009	19° 37.201	156° 02.069	62min	270°	NO
24	04/22/2009	19° 34.547	156° 04.532	60min	100°	NO
25	04/22/2009	19° 34.203	156° 01.591	60min	315°	NO
26	04/22/2009	19° 36.583	156° 04.902	64min	345°	NO
27	04/22/2009	19° 39.020	156° 06.182	60min	045°	NO
28	04/22/2009	19° 41.461	156° 04.043	66min	195°	NO
29	04/22/2009	19° 37.707	156° 04.888	61min	146°	NO
35	04/23/2009	19° 32.923	156° 00.242	61min	-	YES
36	04/23/2009	19° 35.91	156° 02.922	60min	-	YES
37	04/23/2009	19° 39.700	156° 04.797	62min	-	YES
38	04/23/2009	19° 37.955	156° 02.398	60min	-	YES
39	04/23/2009	19° 36.131	156° 00.652	60min	175°	NO
40	04/23/2009	19° 34.443	156° 00.277	60min	257°	NO
46	04/24/2009	18° 56.466	155° 35.031	60min		YES
47	04/24/2009	18° 59.182	155° 33.511	60min	-	NO
48	04/24/2009	18° 58.88	155° 33.611	60min	-	YES
49	04/24/2009	18° 59.469	155° 32.323	60min	175°	NO
50	04/24/2009	18° 55.327	155° 33.194	60min	-	NO
57	04/25/2009	19° 39.414	156° 03.242	64min	-	NO
58	04/25/2009	19° 36.391	156° 01.850	63min	-	NO
59	04/25/2009	19° 36.570	156° 05.396	66min	-	NO
60	04/25/2009	19° 37.037	156° 00.402	62min	-	NO
61	04/25/2009	19° 33.836	155° 59.446	63min	-	NO
68	04/26/2009	19° 30.723	155° 59.651	60min	270°	NO
69	04/26/2009	19° 31.224	156° 03.273	60min	90°	NO
70	04/26/2009	19° 31.657	155° 59.694	70min	270°	NO
71	04/26/2009	19° 31.628	156° 03.196	60min	135°	NO
72	04/26/2009	19° 28.834	155° 59.902	60min	135°	NO
73a	04/26/2009	19° 26.602	155° 57.542	60min	330°	NO
73b	04/26/2009	19° 30.314	155° 58.890	60min	225°	NO
78	04/27/2009	19° 26.010	156° 00.300	63min	-	YES
79	04/27/2009	19° 23.263	155° 58.162	63min	-	YES
80	04/27/2009	19° 22.904	155° 58.107	65min	-	YES
81	04/27/2009	19° 20.368	155° 59.042	60min	03°	NO
82	04/27/2009	19° 24.499	155° 58.826	61min	-	YES
83	04/27/2009	19° 26.888	155° 58.877	62min	-	YES

Station #	Date	Latitude ºN	Longitude ºW	Soak time	Vessel course	Targeted slick
84	04/27/2009	19° 24.834	155° 56.540	62min	-	YES
85	04/27/2009	19° 29.875	155° 58.222	61min	334°	NO
90	04/28/2009	18° 46.827	155° 42.346	60min	0°	NO
91	04/28/2009	18° 50.569	155° 42.133	60min	0°	NO
92	04/28/2009	18° 53.838	155° 42.939	60min	-	YES
96	04/29/2009	20° 02.932	155° 53.716	63min	-	YES
97	04/29/2009	20° 03.238	155° 54.032	60min	-	YES
98	04/29/2009	20° 01.999	155° 52.071	62min	-	YES
99	04/29/2009	19° 59.892	155° 53.626	61min	315°	NO
100	04/29/2009	20° 02.088	155° 55.962	60min	118°	NO
101	04/29/2009	20° 00.765	155° 52.390	63min	344°	NO

Table 3.--Cobb trawl stations conducted on *Oscar Elton Sette* Cruise SE-09-03. Positions are in decimal degrees.

Station #	Date	Latitude ºN	Longitude ºW	Target depths (m)	TDR depth (m)	Wire out (m)	Time at Depth (min)	Total Time (min)
8	11/20/2008	19º 52.998’	156º 03.104’	25, 50	41-46, 57-60	120, 150	54, 45	224
17	11/21/2008	19º 38.616’	156º 13.808‘	50, 25	54-68, 35-42	130, 95	65, 60	144
32	11/22/2008	19º 33.486’	156º 11.584‘	50, 25	45-50, 25-30	125, 75	67, 60	153
43	11/23/2008	19º 35.000’	156º 16.153‘	100, 25	100-104, 23-26	250, 75	60, 60	153
54	11/24/2008	19º 13.187’	156º 09.942’	100, 25	90-98, 18.5-23	250, 75	60, 92	182
64	11/25/2008	19º 23.416’	156º 04.796’	25	19.5-24.5	75	120	137
75	11/26/2008	19º 24.115’	156º 09.280’	50	47-61.5	125	120	142
87	11/27/2008	19º 23.169’	156º 14.732‘	100, 50, 25	100-111, 47.5-51.5, 24-27.5	250, 125, 75	40	150
93	11/28/2008	18º 46.578’	155º 39.353‘	500-600	498-546	1200	90	181

Table 4.--Fish species captured during handline fishing stations. Double dash lines indicate a fish that was released or lost overboard without a length taken.

Species	Count	Percentage of catch (%)	Size range (cm)	Mean size (cm)
Etelis carbunculus	53	28.34	25.0- 52.3	35.2
Pristipomoides zonatus	43	23.00	22.7 – 42.5	33.3
Pristipomoides sieboldii	32	17.11	23.5 – 36.0	31.4
Lutjanus kasmira	8	4.2	25.5 – 29.5	26.8
Odontanthias fuscipinnis	7	3.74	16.0 – 23.0	17.9
Pristipomoides filamentosus	6	3.20	21.0 – 50.0	39.9
Xanthichthys caeruleolineatus	5	2.67	31.5 – 32.5	32.0
Epinephelus quernus	4	2.14	47.0 – 63.5	55.6
Naso maculatus	4	2.14	26.5	26.5
Seriola rivolaiana	4	2.14	77.0	77.0
Pontinus macrocephalus	3	1.60	44.0 – 56.4	50.2
Aphareus rutilans	2	1.06	--	60.0
Erythrocles scintillans	2	1.06	31.5 - 37.8	34.6
Labridae sp.	2	1.06	31.6 – 36.5	34.5
Parupeneus multifasciatus	2	1.06	--	37.5
Bodianus bilunulatus	1	0.53	47.2	47.2
Carangoides orthogrammus	1	0.53	53.0	53.0
Gymnothorax elegans	1	0.53	70.5	70.5
Liopropoma aurora	1	0.53	18.5	18.5
Polymixia berndti	1	0.53	--	--
Priasanthus alalau	1	0.53	28.5	28.5
Pristipomoides auricilla	1	0.53	43.50	43.5
Squalus mitsukurii	1	0.53	--	--
Xanthichthys mento	1	0.53	--	--

Table 5.--Fish species captured during small-boat dipnet operations, with a tabulation of pelagic versus insular species or higher taxonomic level occurrences.

Fish	Count	Percentage of catch (%)	Pelagic	Insular
Belonidae	**90**	9.7		
Ablennes hians	78		**X**	
Tylosurus acus (melanotus)	8		**X**	
Tylosurus crocodilus	3		**X**	
Unident. belonids	1		**X**	
Exocoetidae	**316**	27.6		
Cheilopogon sp.	3		**X**	
Parexocectus brachypterus	5		**X**	
Exocoetus volitans	33		**X**	
Exocetus monocirrhus	64		**X**	
Hirundichthys albimaculatus	1		**X**	
Hirundichthys	9		**X**	
Unident exoceoetids	141		**X**	
Mullidae	**4**	0.43		**X**
Xiphiidae	**1**	0.10		
Xiphias gladius	1		**X**	
Mugilidae	**10**	1.2		**X**
Mugil cephalus	2			**X**
Nomeidae	**101**	10.8		
Psenes cyanophrys	47		**X**	
Psenes arafurensis			**X**	
Nomeus gronovii	5		**X**	
Unident. Psenes	49		**X**	
Kyphosidae	**88**	9.4		
Kyphosus sp.	88			**X**
Carangidae	**73**	7.8		
Seriola sp.	73			**X**
Pomacentridae	**259**	28.2		
Abudefduf abdominalis	195			**X**
Abudefduf sp.	64			**X**
Plectroglyphidodon johnstonianus	1			**X**
Unident. pomacentrids	2			**X**
Coryphaenidae	**9**	0.97		
Coryphaena hippurus	6		**X**	
Coryphaena equiselis	3		**X**	
Blenniidae	**3**	0.32		
Enchelyurus brunneolus	3			**X**
Scomberesocidae	**3**	0.32		
Cololabis adocetus	2		**X**	
unident. Cololabis	1		**X**	

Fish	Count	Percentage of catch (%)	Pelagic	Insular
Gonostomatidae	**1**	0.10		
Cyclothone sp.	1		**X**	
Ipnopidae	**1**	0.10		
Bathypterois sp.	1		**X**	
Istiophoridae	**1**	0.10	**X**	
Myctophidae	**1**	0.10		
Diaphus sp.	1		**X**	
Phosichthyidae	**1**	0.10		
Vinciguerria nimbaria	1		**X**	
Apongonidae	**1**	0.10		
Apogonichthys perdix	1			**X**
Atherinidae	**1**	0.32		
Atherinomorus insularum	3			**X**
Antennariidae	**8**	0.86		
Histrio histrio	8			**X**
Kuhliidae	**3**	0.32		
Kuhlia sandvicensis	3			**X**
Unidentified	**5**	0.53		
TOTAL	**927**	**100**	**25**	**14**

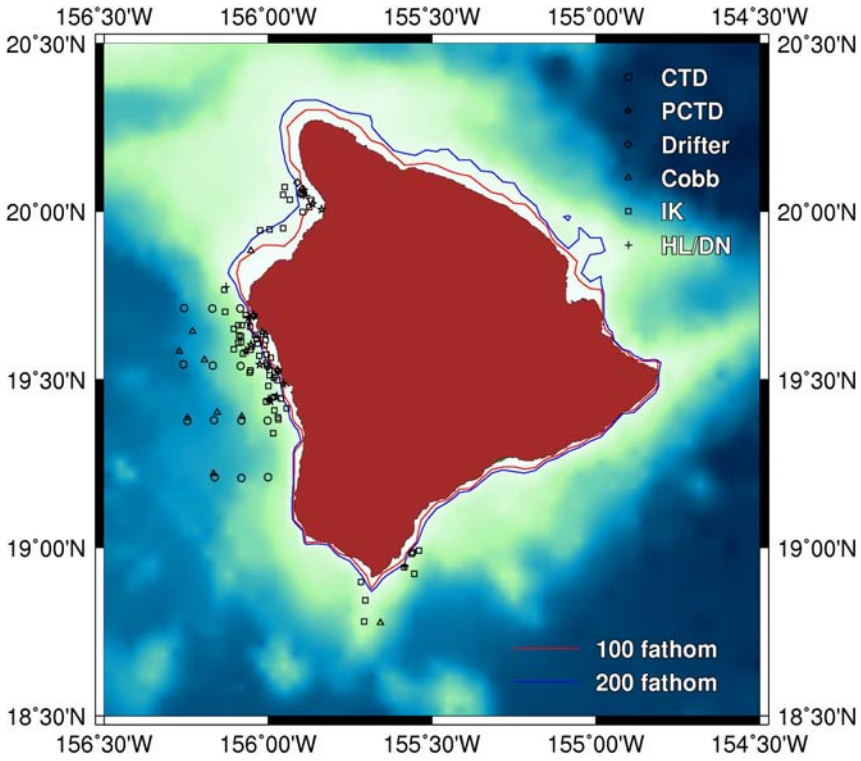

Figure 1.--Marine operation locations for *Oscar Elton Sette* Cruise SE-09-03 along the coastline of the Big Island of Hawai'i.