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SOUTHWEST FISHERIES CENTER
HONOLULU LABORATORY
P.O. BOX 3830
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NATIONAL MARINE FISHERIES SERVICE

August 1984

INVENTORY OF U. S. VESSELS IN THE CENTRAL AND WESTERN PACIFIC. PHASE 2—VERIFICATION AND CLASSIFICATION OF HAWAIIAN VESSELS

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Not for Publication

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INVENTORY OF U.S. VESSELS IN THE CENTRAL AND WESTERN PACIFIC. PHASE 2--VERIFICATION AND CLASSIFICATION OF HAWAIIAN VESSELS

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INTRODUCTION

A knowledge of the fishing fleets in American Samoa, Guam, Hawaii, and Northern Mariana Islands is an essential and basic element for an understanding of the fishery situation in these areas. For development and management purposes, the fishery agencies in each of these island areas, the Western Pacific Regional Fishery Management Council (Council), and the Southwest Fisheries Center (SWFC) Honolulu Laboratory of the National Marine Fisheries Service voiced a need for an inventory of fishing vessels in the area. With Council funding, the SWFC assembled the public record of vessels from agencies in each island government and the U.S. Coast Guard. The results of this first phase of the study are described in a report (H-84-8) prepared by the SWFC.

As pointed out in that report, the assembled public record of vessels in the central and western Pacific U.S. islands was found to be incomplete, out-of-date in some areas, and insufficient with respect to the use of boats for fishing. Thus, a second phase was initiated in Hawaii cooperatively by the Council, the Division of Aquatic Resources of the Hawaii Department of Land and Natural Resources, and the SWFC. This report provides a summary of the responses received from a questionnaire sent out to vessel owners in Hawaii.

METHODS

It was decided that the best way to separate boats used for fishing from those used for general pleasure, to verify that the boats in the public record were in fact still in use, and to classify the boats by various factors related to fishing, was to mail a questionnaire to individuals who owned vessels registered with the Hawaii Department of Transportation and documented with the U.S. Coast Guard who would potentially use their boats for fishing. Questionnaires were not sent to owners who indicated the following factors on their registration or documentations forms: pleasure-sail, sail and motor, or manual powered; livery; dealer; fee exempt youth group; fee exempt government; passenger carrying; freight only; towing (tug); tanker, oil exploration; passenger-towing; passenger-freight; passenger-towing-freight; and hull material of rubber or fabric.

Following the initial distribution of the questionnaire, one or two reminders were to be sent depending on the response rate. Because of the excellent response rate, only one reminder was mailed.

The questionnaire was developed jointly by the participants in the study and is illustrated in Figure 1. Every attempt was made to include only absolutely essential questions; suggestions to include questions to obtain "nice to know" information were rejected. Also, every attempt was made to make the questionnaire easy to complete by the respondent.

QUESTIONNAIRE - PART 1

HAWAII VESSEL CLASSIFICATION

I. Preliminary information.

1. Is this boat used for fishing? Yes___ No___

IF YOUR ANSWER IS "NO" STOP HERE AND PLEASE RETURN THE FORM IN THE ENCLOSED ENVELOPE. THANK YOU.

If your answer is "YES" please continue.

2. Would you like to receive a report on the results of this project? Yes ___ No ___

3. Name of boat?_____

4. Where is your boat kept?

a. Moored at_____(harbor name)

b. Trailered and stored at _____ (Town and Island)

The following questions will allow us to determine how your boat is used (recreationally, commercially, or something in between) as well as how much it is used.

1. Do you carry fishing passengers for charter? Yes___ No___

2. Do you sell ANY of your catch? Yes___ No___

3. Do you sell more than half of your catch? Yes___ No___

4. Is more than half of your gross income from fishing? Yes___ No___

5. Do you belong to any recreational fishing clubs? Yes_____ No___ (names)

6. On the average, how many days do you fish in a month? Please check only ONE for the Summer Months and only ONE for the Other Months' category:

Summer Months	Other Months
____less than 1 day	____less than 1 day
____1 to 5 days	____1 to 5 days
____6 to 10 days	____6 to 10 days
____more than 10 days	____more than 10 days

III. The following questions will allow us to classify boats according to the fishery in which they are used.

1. Fishing takes place more than 3 miles from land? Yes___ No___

2. Please check the fishing method(s) used on this boat.

a. ___ Troll
b. ___ Rod and reel (casting and spinning)
c. ___ Deep-sea handline (opakapaka, ehu, etc.)
d. ___ Middepth handline (weke-ula, papio, etc.)
e. ___ Shallow handline (omaka, menpachi, akule, etc.)
f. ___ Ika-shibi (night tuna handline)
g. ___ Palu ahi (day tuna handline)
h. ___ Pole-and-line (aku fishing)
i. ___ Tuna longline (shibi-nawa)
j. ___ Lobster traps
k. ___ Shrimp traps
l. ___ Fish traps
m. ___ Crab traps (kona, white, etc.)
n. ___ Crab nets
o. ___ Gill nets (surround, laynet, hukilau)
p. ___ Lobster nets
q. ___ Opelu nets
r. ___ Spear
s. ___ Other (please list)_____

3. If you checked more than one method above, indicate here the most important fishing methods (use the letters from above).
Most important ____ Second most important ___
Third most important ____ Fourth most important ___

IV. To determine the amount of use made of the fish aggregating devices, which the Division has recently deployed, we ask the following.

1. Do you fish around the fish aggregating devices? Yes___ No___

2. List buoy number(s): _____

3. How often do you fish the buoys per month? Check only one in each column:

Summer Months	Other Months
___ less than 1 day	___ less than 1 day
___ 1 to 5 times	___ 1 to 5 times
___ 6 to 10 times	___ 6 to 10 times
___ more than 10 times	___ more than 10 times

4. In general, how much time do you spend fishing a buoy on one visit?_____(hours/minutes)

THANK YOU VERY MUCH FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE. PLEASE PLACE IT IN THE ENCLOSED POSTAGE PAID ENVELOPE AND RETURN TO US.

Figure 1.--The Hawaii Vessel Classification Questionnaire.

RESPONSE RATE

Although a large number of vessels were eliminated from the survey since they would not be used for fishing at all or to any significant degree, over 12,000 questionnaires were mailed (Table 1). On the first mailing, 4,705 completed questionnaires were received, and, in addition, 81 respondents indicated that their boats were not in use, not seaworthy, no longer in Hawaii, or undergoing prolonged repair, 36 indicated that their boat had sunk, was stolen, or destroyed, and 203 said they had sold their boat. Thus, the total effective rate was 40.0%.

The response rate on the second mailing was about the same (38.2%). Again, most of the respondents completed the questionnaire, but a higher proportion indicated that the boat was no longer in use for various reasons.

Overall, the response rate was 60.6%, 7,042 completed the questionnaire, 145 indicating the boat was no longer in use, 62 indicating that the boat was not usable, and 379 saying that they sold their boat. A response rate of 60.6% is extremely high for such a mail survey. The cooperation of the public in making this survey a success is greatfully acknowledged by the Council, the Hawaii Division of Aquatic Resources, and the National Marine Fisheries Service.

Table 1.--Results on the vessel inventory study.

Category	First mailing	Second mailing	Total
Number mailed	12,578	6,846	12,578
Completed questionnaire	4,705	2,337	7,042
Boat not in use	81	64	145
Sunk, stolen, destroyed	36	26	62
Boat sold, no data	203	176	379
Response rate	40.0%	38.2%	60.6%
Second page only	320	--	320
Not deliverable	928	0	928
Blank questionnaire	14	6	20

SUMMARY OF RESPONSES

The responses to the questionnaire are summarized below by entering the results directly on a facsimile of the questionnaire.

HAWAII VESSEL CLASSIFICATION

I. Preliminary information.

1. Is this boat used for fishing? Yes 5,084 No 1,958

2. Would you like to receive a report on the results of this project? Yes 4,028 No 647 No Response 409

3. Name of boat? Not summarized.

4. Where is your boat kept?[1]

   a. Moored at _____(harbor name)

[1]The place names reported in this question were as indicated on the survey questionnaire. Ambiguities as to location may exist due to alternative spellings of the same moorages. Also, some respondents indicated storage sites on islands different from their mailing addresses.

HARBOR	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
SOUTH POINT	1	1	0.180	0.180
MILOLII	1	2	0.180	0.360
HOOKENA	1	3	0.180	0.541
HONAUNAU	4	7	0.721	1.261
KEALAKEKU, NAPOOPOO, KEEI	4	11	0.721	1.982
KEAHOU, KAHALUU	2	13	0.360	2.342
KAILUA, HONOKAHAU	31	44	5.586	7.928
KAWAIHAE, KAHAKULOA, KOHALA	10	54	1.802	9.730
MAHUKONA	1	55	0.180	9.910
HILO, PAPAIKOU	4	59	0.721	10.631
UNKNOWN	1	60	0.180	10.811
KIHEI	1	61	0.180	10.991
MAALAEA	21	82	3.784	14.775
LAHAINA	10	92	1.802	16.577
MALA WHARD, OLD WHARF, KAHANA	4	96	0.721	17.297
KAHULUI	2	98	0.360	17.658
KAUMALAPAU	4	102	0.721	18.378
MANELE HARBOR	15	117	2.703	21.081
HONOULIWAI	1	118	0.180	21.261
PUKOO HARBOR	2	120	0.360	21.622
KAWELA	1	121	0.180	21.802
KAUNAKAKAI	13	134	2.342	24.144
KOKO HD, MAUNALOA BAY	2	136	0.360	24.505
DIAMOND HD, WAIKIKI, KAHALA	4	140	0.721	25.225
KEWALO BASIN	6	146	1.081	26.306
HONOLULU HARBOR, SAND ISLAND	12	158	2.162	28.468
AIEA	1	159	0.180	28.649
WAIANAE, POKAI BAY	29	188	5.225	33.874
WAILUA	1	189	0.180	34.054
HALEIWA	19	208	3.423	37.477
KANEOHE	36	244	6.486	43.964
HEEIA	20	264	3.604	47.568
KANEOHE	36	300	6.486	54.054
KAHALUU	9	309	1.622	55.676
KAILUA BAY	1	310	0.180	55.856
PORT ALLEN	1	311	0.180	56.036
HANALEI, WAINIHA	3	314	0.541	56.577
KAPAA, WAILUA	2	316	0.360	56.937
NAWILIWILI	6	322	1.081	58.018
KOKO MARINA	7	329	1.261	59.279
HAWAII KAI	49	378	8.829	68.108
ALA WAI	85	463	15.315	83.423
HICKAM	4	467	0.721	84.144
KEEHI LAGOON	68	535	12.252	96.396
PEARL HARBOR	12	547	2.162	98.559
WAHIAWA RESERVE	8	555	1.441	100.000

b. Trailered and stored at [by island of postal residence]

ISLAND

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	812	.	.	.
HAWAII	757	757	17.720	17.720
MAUI	314	1071	7.350	25.070
LANAI	20	1091	0.468	25.538
MOLOKAI	102	1193	2.388	27.926
OAHU	2734	3927	63.998	91.924
KAUAI	343	4270	8.029	99.953
NIIHAU	2	4272	0.047	100.000

HAWAII

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	2	.	.	.
CAPTAIN COOK	35	35	4.636	4.636
HAINA	1	36	0.132	4.768
HAKALAU	1	37	0.132	4.901
HALAULA	2	39	0.265	5.166
HALAWA	1	40	0.132	5.298
HAWI	10	50	1.325	6.623
HILO	223	273	29.536	36.159
HOLUALOA	14	287	1.854	38.013
HONALO	2	289	0.265	38.278
HONAUNAU	27	316	3.576	41.854
HONOKAA	25	341	3.311	45.166
HONOKAHAU	1	342	0.132	45.298
HONOKAHOU	1	343	0.132	45.430
HONOKUA	1	344	0.132	45.563
HONOMU	1	345	0.132	45.695
HOOKENA	2	347	0.265	45.960
HOOMALINO	2	349	0.265	46.225
KAHALUU	5	354	0.662	46.887
KAILUA KONA	178	532	23.576	70.464
KAINALIU	4	536	0.530	70.993
KALAMA LANI	2	538	0.265	71.258
KALAOA	6	544	0.795	72.053
KALOPA	2	546	0.265	72.318
KAMUELA	36	582	4.768	77.086
KAPAAU	3	585	0.397	77.483
KAU	2	587	0.265	77.748
KAWAIHAE	7	594	0.927	78.675
KAWANUI	1	595	0.132	78.808
KEAAU	3	598	0.397	79.205
KEAHOU	7	605	0.927	80.132
KEALAKEHE	1	606	0.132	80.265

HAWAII

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
KEALAKEKUA	24	630	3.179	83.444
KEALIA	1	631	0.132	83.576
KEAUHOU	6	637	0.795	84.371
KEAUKAHA	1	638	0.132	84.503
KEEI KONA	1	639	0.132	84.636
KEOKEA	2	641	0.265	84.901
KEOPUKA	1	642	0.132	85.033
KIHOLO	1	643	0.132	85.166
KOHALA	16	659	2.119	87.285
KOKOIKI	1	660	0.132	87.417
KONALO	1	661	0.132	87.550
KUALAPUU	1	662	0.132	87.682
KUKUIHAELE	1	663	0.132	87.815
KURTISTOWN	1	664	0.132	87.947
LANIHAU	1	665	0.132	88.079
LAUPAHOEHOE	4	669	0.530	88.609
LAWAI	1	670	0.132	88.742
MAHU KONA	1	671	0.132	88.874
MAUNALOA	1	672	0.132	89.007
MILOLII	4	676	0.530	89.536
MOUNTAIN VIEW	1	677	0.132	89.669
NAALEHU	3	680	0.397	90.066
NAPOOPOO	4	684	0.530	90.596
NIULII	1	685	0.132	90.728
OOKALA	2	687	0.265	90.993
OPIHIHALE	1	688	0.132	91.126
PAAUILO	9	697	1.192	92.318
PAAWILA	1	698	0.132	92.450
PAHALA	6	704	0.795	93.245
PAHOA	13	717	1.722	94.967
PAIA	1	718	0.132	95.099
PAPAIKOU	12	730	1.589	96.689
PEPEEKEO	2	732	0.265	96.954
PUAKO	6	738	0.795	97.748
WAIKEA UKA	2	740	0.265	98.013
WAIKOLOA	6	746	0.795	98.808
WAIMEA	7	753	0.927	99.735
WAIOHINA	1	754	0.132	99.868
WAIPIO	1	755	0.132	100.000

MAUI

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	2	.	.	.
HAIKU	15	15	4.808	4.808
HALIIMAILE	1	16	0.321	5.128

MAUI

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
HANA	13	29	4.167	9.295
HANAPEPE	1	30	0.321	9.615
KAHANA	1	31	0.321	9.936
KAHULUI	80	111	25.641	35.577
KEANAE	1	112	0.321	35.897
KEAUKAHA	1	113	0.321	36.218
KIHEI	42	155	13.462	49.679
KOKOMO	1	156	0.321	50.000
KULA	6	162	1.923	51.923
LA PEROUSE	2	164	0.641	52.564
LAHAINA	67	231	21.474	74.038
MAKAWAO	10	241	3.205	77.244
MAKENA	2	243	0.641	77.885
NAPILI	2	245	0.641	78.526
OLOWALU	1	246	0.321	78.846
OMOAPIO	1	247	0.321	79.167
PAIA	6	253	1.923	81.090
PAUKUKALO	1	254	0.321	81.410
PUKALANI	15	269	4.808	86.218
PUNA	1	270	0.321	86.538
PUUNENE	3	273	0.962	87.500
WAIKAPU	2	275	0.641	88.141
WAILEA	1	276	0.321	88.462
WAILUKU	36	312	11.538	100.000

LANAI

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	3	.	.	.
LANAI CITY	17	17	100.000	100.000

MOLOKAI

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	1	.	.	.
HALAWA	1	1	0.990	0.990
HOOLEHUA	6	7	5.941	6.931
KAHUAAHA	1	8	0.990	7.921
KAIAALU	1	9	0.990	8.911
KAINALU	3	12	2.970	11.881
KALAE	1	13	0.990	12.871
KALAUPAPA	2	15	1.980	14.851
KALOE	1	16	0.990	15.842
KAMALO	2	18	1.980	17.822

MOLOKAI

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
KAMILOLOA	9	27	8.911	26.733
KAUNAKAKAI	55	82	54.455	81.188
KAWELA	2	84	1.980	83.168
KIPU	1	85	0.990	84.158
KUALAPUU	7	92	6.931	91.089
MAUNALOA	2	94	1.980	93.069
MOLOKAI	1	95	0.990	94.059
PUKOO	3	98	2.970	97.030
WAIALUA	3	101	2.970	100.000

OAHU

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	7	.	.	.
AIEA	132	132	4.840	4.840
AINA HAINA	8	140	0.293	5.134
AINA KOA	1	141	0.037	5.171
CAMP SMITH	9	150	0.330	5.501
CAMPBELL	1	151	0.037	5.537
CRESTVIEW	1	152	0.037	5.574
EWA	9	161	0.330	5.904
EWA BEACH	72	233	2.640	8.544
FORT SHAFTER	1	234	0.037	8.581
HAIEMALOO	2	236	0.073	8.654
HALEIWA	39	275	1.430	10.084
HAUULA	18	293	0.660	10.744
HAWAII KAI	47	340	1.724	12.468
HEEIA	1	341	0.037	12.505
HICKAM AFB	10	351	0.367	12.871
HONOLULU	789	1140	28.933	41.804
KAAAWA	8	1148	0.293	42.098
KAALAEA	1	1149	0.037	42.134
KAAWA	2	1151	0.073	42.208
KAHALUU	35	1186	1.283	43.491
KAHUKU	2	1188	0.073	43.564
KAHULUI	1	1189	0.037	43.601
KAILUA	219	1408	8.031	51.632
KAIMUKI	24	1432	0.880	52.512
KAINALIU BC	1	1433	0.037	52.549
KALIHI	17	1450	0.623	53.172
KANEOHE	456	1906	16.722	69.894
KAPAHULU	5	1911	0.183	70.077
KAPALAMA	1	1912	0.037	70.114
KEAAU	1	1913	0.037	70.150
KEAUHOU	1	1914	0.037	70.187
KMCAS	2	1916	0.073	70.260

OAHU

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
KUALOA	1	1917	0.037	70.297
KULIOUOU	3	1920	0.110	70.407
KUNIA	1	1921	0.037	70.444
LAIE	1	1922	0.037	70.480
LANIKAI	1	1923	0.037	70.517
MAILI	11	1934	0.403	70.920
MAKAHA	13	1947	0.477	71.397
MAKAKILO	22	1969	0.807	72.204
MAKIKI	1	1970	0.037	72.241
MANOA	7	1977	0.257	72.497
MCCULLY	1	1978	0.037	72.534
MILILANI	54	2032	1.980	74.514
MOANALUA	7	2039	0.257	74.771
NANAKULI	28	2067	1.027	75.798
NEWTOWN	1	2068	0.037	75.834
NIU VALLEY	1	2069	0.037	75.871
PAAKO	1	2070	0.037	75.908
PALOLO	2	2072	0.073	75.981
PARADISE PARK	1	2073	0.037	76.018
PAUOA	1	2074	0.037	76.054
PEARL CITY	171	2245	6.271	82.325
PEARL HARBOR	7	2252	0.257	82.582
PEARL RIDGE	2	2254	0.073	82.655
PUNALUU	12	2266	0.440	83.095
RAINBOW BAY	1	2267	0.037	83.132
SALT LAKE	3	2270	0.110	83.242
SAND ISLAND	2	2272	0.073	83.315
SCHOFIELD	2	2274	0.073	83.388
ST LOUIS HT	1	2275	0.037	83.425
SUNSET BEACH	8	2283	0.293	83.718
WAHIAWA	90	2373	3.300	87.019
WAIALUA	33	2406	1.210	88.229
WAIANAE	140	2546	5.134	93.363
WAIKANE	4	2550	0.147	93.509
WAILUA	1	2551	0.037	93.546
WAIMALU	3	2554	0.110	93.656
WAIMANALO	46	2600	1.687	95.343
WAIMEA	4	2604	0.147	95.490
WAIPAHU	114	2718	4.180	99.670
WAIPIO	8	2726	0.293	99.963
WHITMORE	1	2727	0.037	100.000

KAUAI

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
ANAHILA	1	1	0.292	0.292
ANAHOLA	10	11	2.915	3.207

KAUAI

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
BARKING SANDS	1	12	0.292	3.499
ELEELE	4	16	1.166	4.665
HAENA	1	17	0.292	4.956
HAMAMOULU	1	18	0.292	5.248
HANALEI	23	41	6.706	11.953
HANAMAHI	1	42	0.292	12.245
HANAMAULU	15	57	4.373	16.618
HANAPEPE	8	65	2.332	18.950
KALAHEO	20	85	5.831	24.781
KAPAA	59	144	17.201	41.983
KAPAHI	2	146	0.583	42.566
KAUMAKANI	4	150	1.166	43.732
KEALIA	3	153	0.875	44.606
KEKAHA	19	172	5.539	50.146
KILAUEA	14	186	4.082	54.227
KOLOA	14	200	4.082	58.309
LAWAI	15	215	4.373	62.682
LIHUE	70	285	20.408	83.090
MAKAWELI	4	289	1.166	84.257
NUIMALU	4	293	1.166	85.423
OMAO	2	295	0.583	86.006
PMRF KEKAHA	1	296	0.292	86.297
POIPU	2	298	0.583	86.880
PRINCEVILLE	1	299	0.292	87.172
PUHI	8	307	2.332	89.504
WAHIAWA CAMP	1	308	0.292	89.796
WAILUA	13	321	3.790	93.586
WAIMEA	22	343	6.414	100.000

NIIHAU

NAME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
MAKAWELI	1	1	50.000	50.000
PUUWAI	1	2	50.000	100.000

II. The following questions will allow us to determine how your boat is used (recreationally, commercially, or something in between) as well as how much it is used.

1. Do you carry fishing passengers for charter?

CHARTER	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	190	.	.	.
NO	4827	4827	98.631	98.631
YES	67	4894	1.369	100.000

2. Do you sell ANY of your catch?

SELL	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	187	.	.	.
NO	3568	3568	72.861	72.861
YES	1329	4897	27.139	100.000

3. Do you sell more than half of your catch?

SELL HALF	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	366	.	.	.
NO	3900	3900	82.662	82.662
YES	818	4718	17.338	100.000

4. Is more than half of your gross income from fishing?

INCOME	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	344	.	.	.
NO	4589	4589	96.814	96.814
YES	151	4740	3.186	100.000

5. Do you belong to any recreational fishing clubs?

CLUBS	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	187	.	.	.
NO	4337	4337	88.564	88.564
YES	560	4897	11.436	100.000

6. On the average, how many days do you fish in a month?

SUMMER

DAYS	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	265	.	.	.
LESS THAN 1 DAY	631	631	13.094	13.094
1 TO 5 DAYS	2651	3282	55.011	68.105
6 TO 10 DAYS	914	4196	18.967	87.072
MORE THAN 10 DAY	623	4819	12.928	100.000

WINTER

DAYS	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	425	.	.	.
LESS THAN 1 DAY	1085	1085	23.288	23.288
1 TO 5 DAYS	2625	3710	56.343	79.631
6 TO 10 DAYS	555	4265	11.912	91.543
MORE THAN 10 DAY	394	4659	8.457	100.000

III. The following questions will allow us to classify boats according to the fishery in which they are used.

1. Fishing takes place more than 3 miles from land?

3 MILES	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	428	.	.	.
NO	2476	2476	53.179	53.179
YES	2180	4656	46.821	100.000

2. Please check the fishing method(s) used on this boat.

METHOD	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
TROLL	3400	3400	18.768	18.768
ROD AND REEL	2415	5815	13.331	32.099
DEEP SEA HANDLINE	1585	7400	8.749	40.848
MIDDEPTH HANDLINE	2018	9418	11.139	51.987
SHALLOW HANDLINE	2462	11880	13.590	65.577
NIGHT TUNA HANDLINE	251	12131	1.386	66.963
DAY TUNA HANDLINE	466	12597	2.572	69.535
POLE AND LINE	409	13006	2.258	71.793
TUNA LONGLINE	71	13077	0.392	72.185
LOBSTER TRAPS	63	13140	0.348	72.533
SHRIMP TRAPS	12	13152	0.066	72.599
FISH TRAPS	142	13294	0.784	73.383
CRAB TRAPS	327	13621	1.805	75.188
CRAB NETS	1182	14803	6.525	81.712
GILL NETS	942	15745	5.200	86.912
LOBSTER NETS	294	16039	1.623	88.535
OPELU NETS	84	16123	0.464	88.999
SPEAR	1652	17775	9.119	98.118
OTHER	341	18116	1.882	100.000

3. If you checked more than one method above, indicate here the most important fishing method (use the letters from above).

MOST IMPORTANT FISHING METHOD

METHOD	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	319	.	.	.
TROLL	1595	1595	33.473	33.473
ROD AND REEL	575	2170	12.067	45.540
DEEP SEA HANDLINE	405	2575	8.499	54.040
MIDDEPTH HANDLINE	342	2917	7.177	61.217
SHALLOW HANDLINE	541	3458	11.354	72.571

MOST IMPORTANT FISHING METHOD

METHOD	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NIGHT TUNA HANDLINE	43	3501	0.902	73.473
DAY TUNA HANDLINE	79	3580	1.658	75.131
POLE AND LINE	15	3595	0.315	75.446
LOBSTER TRAPS	5	3600	0.105	75.551
FISH TRAPS	8	3608	0.168	75.719
CRAB TRAPS	10	3618	0.210	75.929
CRAB NETS	168	3786	3.526	79.454
GILL NETS	280	4066	5.876	85.331
LOBSTER NETS	9	4075	0.189	85.519
OPELU NETS	22	4097	0.462	85.981
SPEAR	531	4628	11.144	97.125
OTHER	137	4765	2.875	100.000

SECOND MOST IMPORTANT FISHING METHOD

METHOD	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	1204	.	.	.
TROLL	631	631	16.263	16.263
ROD AND REEL	615	1246	15.851	32.113
DEEP SEA HANDLINE	432	1678	11.134	43.247
MIDDEPTH HANDLINE	484	2162	12.474	55.722
SHALLOW HANDLINE	601	2763	15.490	71.211
NIGHT TUNA HANDLINE	22	2785	0.567	71.778
DAY TUNA HANDLINE	120	2905	3.093	74.871
POLE AND LINE	78	2983	2.010	76.881
TUNA LONGLINE	10	2993	0.258	77.139
LOBSTER TRAPS	3	2996	0.077	77.216
SHRIMP TRAPS	2	2998	0.052	77.268
FISH TRAPS	14	3012	0.361	77.629
CRAB TRAPS	34	3046	0.876	78.505
CRAB NETS	206	3252	5.309	83.814
GILL NETS	214	3466	5.515	89.330
LOBSTER NETS	40	3506	1.031	90.361
OPELU NETS	11	3517	0.284	90.644
SPEAR	303	3820	7.809	98.454
OTHER	60	3880	1.546	100.000

THIRD MOST IMPORTANT FISHING METHOD

METHOD	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	2068	.	.	.
TROLL	443	443	14.688	14.688
ROD AND REEL	385	828	12.765	27.454
DEEP SEA HANDLINE	334	1162	11.074	38.528

MIDDEPTH HANDLINE	450	1612	14.920	53.448
SHALLOW HANDLINE	497	2109	16.479	69.927
NIGHT TUNA HANDLINE	36	2145	1.194	71.121
DAY TUNA HANDLINE	82	2227	2.719	73.840
POLE AND LINE	67	2294	2.221	76.061
TUNA LONGLINE	12	2306	0.398	76.459
LOBSTER TRAPS	7	2313	0.232	76.691
FISH TRAPS	21	2334	0.696	77.387
CRAB TRAPS	39	2373	1.293	78.680
CRAB NETS	176	2549	5.836	84.516
GILL NETS	162	2711	5.371	89.887
LOBSTER NETS	43	2754	1.426	91.313
OPELU NETS	9	2763	0.298	91.611
SPEAR	220	2983	7.294	98.906
OTHER	33	3016	1.094	100.000

FOURTH MOST IMPORTANT FISHING METHOD

METHOD	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	2922	.	.	.
TROLL	337	337	15.587	15.587
ROD AND REEL	239	576	11.055	26.642
DEEP SEA HANDLINE	158	734	7.308	33.950
MIDDEPTH HANDLINE	275	1009	12.720	46.670
SHALLOW HANDLINE	337	1346	15.587	62.257
NIGHT TUNA HANDLINE	34	1380	1.573	63.830
DAY TUNA HANDLINE	47	1427	2.174	66.004
POLE AND LINE	59	1486	2.729	68.733
TUNA LONGLINE	6	1492	0.278	69.010
LOBSTER TRAPS	3	1495	0.139	69.149
FISH TRAPS	20	1515	0.925	70.074
CRAB TRAPS	54	1569	2.498	72.572
CRAB NETS	218	1787	10.083	82.655
GILL NETS	82	1869	3.793	86.448
LOBSTER NETS	43	1912	1.989	88.437
OPELU NETS	5	1917	0.231	88.668
SPEAR	212	2129	9.806	98.474
OTHER	33	2162	1.526	100.000

IV. To determine the amount of use made of the fish aggregating devices, which the Division of Aquatic Resources has recently deployed, we ask the following.

1. Do you fish around the fish aggregating devices?

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	155	.	.	.
NO	3224	3224	65.409	65.409
YES	1705	4929	34.591	100.000

2. List buoy number(s): the summary below is by the order of entry.

FIRST BUOY ENTERED

BUOY NO.	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	3719	.	.	.
A	7	7	0.513	0.513
AA	32	39	2.344	2.857
B	84	123	6.154	9.011
BB	17	140	1.245	10.256
C	2	142	0.147	10.403
D	3	145	0.220	10.623
E	49	194	3.590	14.212
F	120	314	8.791	23.004
G	12	326	0.879	23.883
H	42	368	3.077	26.960
I	23	391	1.685	28.645
J	1	392	0.073	28.718
K	68	460	4.982	33.700
L	10	470	0.733	34.432
M	16	486	1.172	35.604
N	19	505	1.392	36.996
O	4	509	0.293	37.289
OT	53	562	3.883	41.172
P	21	583	1.538	42.711
Q	11	594	0.806	43.516
R	164	758	12.015	55.531
S	226	984	16.557	72.088
T	153	1137	11.209	83.297
U	90	1227	6.593	89.890
UU	1	1228	0.073	89.963
V	57	1285	4.176	94.139
W	47	1332	3.443	97.582
X	23	1355	1.685	99.267
Z	10	1365	0.733	100.000

SECOND BUOY ENTERED

BUOY NO.	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	4180	.	.	.
A	3	3	0.332	0.332
AA	3	6	0.332	0.664
B	38	44	4.204	4.867
BB	3	47	0.332	5.199
C	2	49	0.221	5.420
D	1	50	0.111	5.531
E	13	63	1.438	6.969
F	64	127	7.080	14.049
G	21	148	2.323	16.372

SECOND BUOY ENTERED

BUOY NO.	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
H	19	167	2.102	18.473
I	10	177	1.106	19.580
K	21	198	2.323	21.903
L	6	204	0.664	22.566
M	10	214	1.106	23.673
N	11	225	1.217	24.889
O	7	232	0.774	25.664
OT	27	259	2.987	28.650
P	14	273	1.549	30.199
Q	14	287	1.549	31.748
R	181	468	20.022	51.770
S	127	595	14.049	65.819
T	51	646	5.642	71.460
U	122	768	13.496	84.956
V	82	850	9.071	94.027
W	38	888	4.204	98.230
X	7	895	0.774	99.004
Y	1	896	0.111	99.115
Z	8	904	0.885	100.000

THIRD BUOY ENTERED

BUOY NO.	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	4543	.	.	.
A	1	1	0.185	0.185
AA	1	2	0.185	0.370
B	9	11	1.664	2.033
D	4	15	0.739	2.773
F	7	22	1.294	4.067
G	5	27	0.924	4.991
H	9	36	1.664	6.654
I	3	39	0.555	7.209
J	1	40	0.185	7.394
K	6	46	1.109	8.503
L	5	51	0.924	9.427
M	2	53	0.370	9.797
N	8	61	1.479	11.275
O	7	68	1.294	12.569
OT	34	102	6.285	18.854
P	10	112	1.848	20.702
Q	6	118	1.109	21.811
R	46	164	8.503	30.314
S	44	208	8.133	38.447
T	61	269	11.275	49.723
U	22	291	4.067	53.789

THIRD BUOY ENTERED

BUOY NO.	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
V	166	457	30.684	84.473
W	76	533	14.048	98.521
X	5	538	0.924	99.445
Z	3	541	0.555	100.000

FOURTH BUOY ENTERED

BUOY NO.	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	4953	.	.	.
A	2	2	1.527	1.527
B	2	4	1.527	3.053
D	1	5	0.763	3.817
E	3	8	2.290	6.107
H	1	9	0.763	6.870
I	2	11	1.527	8.397
K	4	15	3.053	11.450
L	4	19	3.053	14.504
M	1	20	0.763	15.267
N	1	21	0.763	16.031
O	4	25	3.053	19.084
OT	1	26	0.763	19.847
P	5	31	3.817	23.664
Q	4	35	3.053	26.718
R	19	54	14.504	41.221
S	21	75	16.031	57.252
T	12	87	9.160	66.412
U	10	97	7.634	74.046
V	7	104	5.344	79.389
W	6	110	4.580	83.969
X	20	130	15.267	99.237
Z	1	131	0.763	100.000

FIFTH BUOY ENTERED

BUOY NO.	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	5010	.	.	.
B	1	1	1.351	1.351
D	1	2	1.351	2.703
F	1	3	1.351	4.054
G	2	5	2.703	6.757
H	1	6	1.351	8.108
K	1	7	1.351	9.459
M	1	8	1.351	10.811
N	2	10	2.703	13.514

FIFTH BUOY ENTERED

BUOY NO.	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
O	3	13	4.054	17.568
P	4	17	5.405	22.973
R	9	26	12.162	35.135
S	7	33	9.459	44.595
T	6	39	8.108	52.703
U	8	47	10.811	63.514
V	12	59	16.216	79.730
W	14	73	18.919	98.649
X	1	74	1.351	100.000

CUMULATIVE COUNT OF BUOYS ENTERED

BUOY NO.	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
A	13	13	0.422	0.422
AA	36	49	1.168	1.590
B	135	184	4.380	5.970
BB	20	204	0.649	6.619
C	4	208	0.130	6.749
D	10	218	0.324	7.073
E	65	283	2.109	9.182
F	193	476	6.262	15.445
G	40	516	1.298	16.742
H	72	588	2.336	19.079
I	39	627	1.265	20.344
J	2	629	0.065	20.409
K	102	731	3.310	23.718
L	29	760	0.941	24.659
M	30	790	0.973	25.633
N	41	831	1.330	26.963
O	26	857	0.844	27.807
OT	116	973	3.764	31.570
P	58	1031	1.882	33.452
Q	40	1071	1.298	34.750
R	422	1493	13.692	48.443
S	433	1926	14.049	62.492
T	290	2216	9.409	71.901
U	259	2475	8.404	80.305
UU	1	2476	0.032	80.337
V	335	2811	10.870	91.207
W	185	2996	6.003	97.210
X	63	3059	2.044	99.254
Y	1	3060	0.032	99.286
Z	22	3082	0.714	100.000

3. How often do you fish the buoys per month?

SUMMER MONTHS

DAYS	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	3399	.	.	.
LESS THAN 1 DAY	242	242	14.362	14.362
1 TO 5 DAYS	1023	1265	60.712	75.074
6 TO 10 DAYS	245	1510	14.540	89.614
MORE THAN 10 DAYS	175	1685	10.386	100.000

OTHER MONTHS

DAYS	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	3539	.	.	.
LESS THAN 1 DAY	405	405	26.214	26.214
1 TO 5 DAYS	903	1308	58.447	84.660
6 TO 10 DAYS	128	1436	8.285	92.945
MORE THAN 10 DAYS	109	1545	7.055	100.000

4. In general, how much time do you spend fishing a buoy on one visit?

MINUTES	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	3413	.	.	.
10	11	11	0.658	0.658
15-20	11	22	0.658	1.317
25	40	62	2.394	3.710
30-35	25	87	1.496	5.206
40-45	5	92	0.299	5.506
50	156	248	9.336	14.841
60-70	11	259	0.658	15.500
75	51	310	3.052	18.552
85	1	311	0.060	18.612
90	1	312	0.060	18.671
100	317	629	18.971	37.642
125	10	639	0.598	38.241
130	1	640	0.060	38.300
140	1	641	0.060	38.360
150	118	759	7.062	45.422
175	4	763	0.239	45.661
200	289	1052	17.295	62.956
250	90	1142	5.386	68.342
275	1	1143	0.060	68.402
300	136	1279	8.139	76.541
350	41	1320	2.454	78.995
400-435	123	1443	7.361	86.355
450	21	1464	1.257	87.612

MINUTES	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
500	52	1516	3.112	90.724
550	6	1522	0.359	91.083
600	58	1580	3.471	94.554
650	4	1584	0.239	94.794
700	17	1601	1.017	95.811
750	2	1603	0.120	95.931
800	31	1634	1.855	97.786
850	1	1635	0.060	97.846
900	15	1650	0.898	98.743
950	1	1651	0.060	98.803
1000	5	1656	0.299	99.102
1100	1	1657	0.060	99.162
1200	7	1664	0.419	99.581
1400	1	1665	0.060	99.641
1600	1	1666	0.060	99.701
2400	4	1670	0.239	99.940
4000	1	1671	0.060	100.000

REMARKS

This report is a simple but detailed compilation of the responses received from the owners of vessels in Hawaii. A report more suitable for distribution to the respondents and the general public will be prepared. In addition, the interrelationships among the answers to the questions and some factors in the original public record will be reported on at a later date.