

CATCH LOCALITY, FISHING EFFORT, AND LENGTH-FREQUENCY DATA
FOR ALBACORE TUNA LANDED IN OREGON, 1951-60

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and

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FOR ALBACORE TUNA LANDED IN OREGON, 1951-60

INTRODUCTION

Major fluctuations in the availability of albacore tuna (Thunnus alalunga) to commercial fishermen operating in the northeastern Pacific Ocean occur annually and seasonally. These fluctuations in availability may possibly be the result of variations in the environment. The scientists of several agencies are examining oceanographic and meteorological data collected from various sources to determine the nature and magnitude of the changes that have taken place in the oceanic environment in the eastern Pacific. By comparing environmental changes with variations in albacore fishing success it may be determined whether these changes are responsible for fluctuations in seasonal appearance, distribution, and relative abundance of albacore. This is a compilation of catch and fishing-effort data for Oregon albacore landings which may be compared with the information compiled on the oceanic environment. The collection of these data was carried out as a routine part of the state research program on marine fisheries. The compilation and publication was accomplished with the financial assistance of the U. S. Bureau of Commercial Fisheries, California area.

SOURCES OF INFORMATION

The catch locality and fishing-effort data presented here were collected by interviewing fishermen engaged in the albacore fishery. Boat logs were copied or standard questions asked concerning the locality of catch and fishing effort during the unloading operation. Samples of the fish were then measured to determine the size composition. Table 1 shows the intensity of sampling for the years 1951-60. The total pounds of fish landed, pounds landed for which interviews were obtained, and the per cent of the total catch for which interviews were obtained are shown for each month. Table 2 gives the annual

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Oregon albacore landings by month and port as compiled from the Oregon Fish Commission IBM poundage records.

METHODS

The statistical areas used in this report are a modification of the system used by the Inter-American Tropical Tuna Commission (Schaefer, 1953) and California Department of Fish and Game (Clemens, 1955). The northeastern Pacific is divided into blocks by one-degree divisions of latitude and longitude. The blocks are designated by the latitude and longitude of the southeast corner of each block.

Due to differences in fishing habits, landings at the various Oregon ports could not be assigned from the results obtained from one or two ports (such as using Astoria and/or Newport information to assign areas of catch to Coos Bay landings). For this reason assignment could not be made for any port during a month when no sampling occurred. This accounts for the differences between the total pounds landed in Table 1 and the totals for Tables 4-13. Table 3 shows the percentage of the total catch that could be assigned to the one-degree blocks.

Catch locality and fishing effort data were taken directly from fisherman interviews. Information collected during the interviews included: date of landing, area fished each day, number of albacore caught each day, number of days fished, and total pounds landed.

The area fished each day was usually in the form of several loran bearings and these bearings were assigned to the one-degree area in which they occurred. The total pounds caught per month were then prorated to one-degree areas from the interview assignments. Total numbers were calculated for one-degree areas by dividing the total pounds assigned by the average weight per fish per month per one-degree area. The average weight figure was achieved by dividing interviewed pounds by interviewed numbers. Days fished per area were calculated in a similar manner using total and sampled pounds and the number of days fished

per area from the interviews.

All figures and tables in this report except those in Table 2 are based on month of catch rather than month of landing.

CATCH LOCALITIES

In Tables 4-13 are listed the calculated total catch of albacore by one-degree blocks by month of catch, port of landing, and method of fishing for the years 1951-60. Five entries are made for each square in which fishing was conducted: the calculated total number of fish caught; the calculated total pounds of fish caught; the calculated total number of days fished; and, in parentheses, the average number and pounds caught per day. Figures 1-34 are pictorial presentations of Tables 4-13 and include only those pounds for which assignment has been made.

The major portion of albacore landed in Oregon are caught by trolling lures at or near the surface (jig boats). However, substantial landings were made by boats using live bait and the pole and line method (bait boats) during the 1952, 1953, and 1958 seasons.

SIZE COMPOSITION

Length-frequency samples to measure the size composition of the catches were usually taken in conjunction with interviewed sampling. Fork length was measured to the nearest lower centimeter with large calipers. Tables 14-78 list the length-frequency data collected by month and port for the years 1939-60. The samples have been assigned to one-degree blocks of catch when this information was known. Other catches have been designated as being caught north or south of Point Delgada, California (40° north latitude) when the exact area of catch was unknown. Tables 52 and 61 contain length frequencies taken at sea on tagging cruises. In most instances the size compositions at all Oregon ports were very similar. Exceptions to this occurred when landings were small and the fish were caught primarily off the central California coast. Table 79 lists

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the length-frequency distributions in per cent by month and year, grouping catches and landings from all areas and ports. Figures 35 through 52 are graphical presentations of these data.

The length-frequency distributions show the annual appearance of 2, 3, or 4 size groups in Oregon landings. The modal lengths for the 10 seasons shown are placed with very nearly the same intervals--at about 55, 65, 76, and 85 cm. The most abundant group taken during the fishing seasons of 1950-52 and 1954-60 was that with the modal length of 65 cm. In 1953, fish of the 55-cm group predominated. Usually two of the size groups are of importance in the landings. This condition tends to contribute to sharp fluctuations in catches, since if either or both of the dominate groups are poorly represented in the catches, no other size groups are abundant enough to maintain a relatively stable catch.

SEASONAL DISTRIBUTION OF CATCHES

The albacore fishery off the Oregon coast normally starts during July and continues through September. During some years good catches are made in October but usually fish landed in October and November are caught off the California coast. The majority of albacore landed in Oregon since 1955 have been caught during August and September between 35 and 48° north latitude and east of 128° west longitude. From 1951 to 1955 catches were made in the same area but occurred during September and October.

During the 1951 season the fishery was centered off the Columbia River during July and August. A second center developed off Cape Mendocino in August. During September both centers moved south about 125 miles. Catches continued off the southern Oregon coast until late October.

Only a few fish were caught off the northern Oregon coast in July 1952. Catches did not improve greatly during August and most of the fish landed were taken between southern Oregon and Cape Mendocino. In September catches improved although the area of catch remained substantially the same as in earlier months.

Virtually no tuna were taken off the Oregon coast during the 1953, 1954, and 1955 seasons. Fish landed in Oregon during these years were taken from San Francisco south to Baja California.

Albacore were again taken off the Oregon coast during the 1956 season. Good catches were made from the Columbia River south to Coos Bay during August and September.

Moderate catches were made in July 1957 and were well distributed from Cape Flattery to just south of Cape Blanco. Fishing improved during August and extended from central Vancouver Island to northern California. A few scattered catches were also made as far south as Baja California. Good fishing continued during September but the center of activity moved steadily southward. Good catches were made off the California-Oregon border during October.

Albacore fishing improved considerably during the 1958 season. A strong fishery developed in July centering off the central Oregon coast and a moderate secondary center developed off the central California coast. During August success in the southern area diminished while the northern center improved and extended north to Destruction Island. The best catches during this period came from Grays Harbor to Coos Bay. Fishing success was reduced during September and moved southward about 75 miles. Catches dropped sharply during October but some fish were taken off Tillamook.

Albacore landings during the 1959 season increased approximately 8% over the excellent 1958 landings. The 1959 total landings were the highest since 1945. A fishery developed rapidly during July with substantial catches made off the Oregon and southern Washington coasts. Smaller catches were made off central California. Fishing continued to improve in August and excellent catches were made in the area from Destruction Island to Cape Mendocino. The catch in September was approximately half of the August catch with no significant change in fishing area. Fishing success dropped sharply in October with only small catches being made in the area from Newport to Tillamook.

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The 1960 season started rather slowly. Some fish were taken off the Columbia River and scattered catches were made south of Cape Mendocino. A good fishery developed during August from Destruction Island to Newport and in the San Francisco-Monterey Bay region. Catches remained steady off Oregon during September but the fishery off central California increased substantially. October catches were confined to the Cape Mendocino-San Francisco area.

LITERATURE CITED

- Clemens, H. B. 1955. Catch localities for Pacific albacore (Thunnus germon) landed in California, 1951 through 1953. Cal. Dept. Fish and Game Fish Bull. 100: 1-28.
- Schaefer, M. B. 1953. Report on the investigations of the Inter-American Tropical Tuna Commission during the year 1952. Inter-Am. Tropical Tuna Comm. Ann. Rept. for 1952: 14-35.

Table 1
Sampling Intensity for the Oregon Albacore Fishery, 1951-60

Assigned Month	Total Catch (Pounds)	Pounds Sampled	Per Cent of Catch Sampled
<u>1951:</u>			
July	163,000	26,474	16.2
August	241,000	17,283	7.2
September	1,678,800	68,482	4.1
October	732,200	0	0
November	<u>101,600</u>	<u>6,610</u>	<u>6.5</u>
TOTAL	2,916,600	118,849	4.1
<u>1952:</u>			
July	14,000	5,114	36.5
August	178,900	45,782	25.6
September	1,264,200	485,097	38.4
October	819,200	117,489	14.3
November	256,500	0	0
December	<u>52,600</u>	<u>0</u>	<u>0</u>
TOTAL	2,585,400	653,482	25.3
<u>1953:</u>			
August	54,300	32,045	59.0
September	624,200	73,749	11.8
October	96,200	21,604	22.5
November	<u>1,000</u>	<u>0</u>	<u>0</u>
TOTAL	775,700	127,398	16.4
<u>1954:</u>			
August	14,300	3,337	23.3
September	274,000	44,591	16.3
October	171,000	25,901	15.1
November	<u>10,200</u>	<u>0</u>	<u>0</u>
TOTAL	469,500	73,829	15.7

Table 1 (Continued)

Assigned Month	Total Catch (Pounds)	Pounds Sampled	Per Cent of Catch Sampled
<u>1955:</u>			
September	217,000	27,498	12.7
October	128,600	12,063	9.4
November	<u>158,200</u>	<u>0</u>	<u>0</u>
TOTAL	503,800	39,561	7.9
<u>1956:</u>			
August	608,600	25,742	4.2
September	2,625,700	172,274	6.6
October	253,200	0	0
November	157,000	0	0
December	<u>8,700</u>	<u>0</u>	<u>0</u>
TOTAL	3,653,200	198,016	5.4
<u>1957:</u>			
July	99,600	47,088	47.3
August	888,300	244,821	27.6
September	991,400	315,263	31.8
October	690,000	425,231	61.6
November	<u>32,200</u>	<u>0</u>	<u>0</u>
TOTAL	2,701,500	1,032,403	38.2
<u>1958:</u>			
July	1,093,300	422,126	38.6
August	5,682,100	1,902,858	33.5
September	2,496,700	1,024,362	41.0
October	480,800	247,964	51.6
November	<u>1,100</u>	<u>0</u>	<u>0</u>
TOTAL	9,754,000	3,597,310	36.9

Table 1 (Continued)

Assigned Month	Total Catch (Pounds)	Pounds Sampled	Per Cent of Catch Sampled
<u>1959:</u>			
July	1,974,100	677,018	34.3
August	5,398,100	1,993,200	36.9
September	2,610,100	1,048,281	40.2
October	479,100	70,496	14.7
November	111,600	0	0
December	<u>1,100</u>	<u>0</u>	<u>0</u>
TOTAL	10,514,100	3,788,995	35.8
<u>1960:</u>			
July	188,500	95,992	50.9
August	1,874,700	664,215	35.4
September	2,007,500	535,460	26.7
October	386,400	133,894	34.7
November	<u>105,400</u>	<u>0</u>	<u>0</u>
TOTAL	4,562,500	1,409,561	30.9

Table 2
Oregon Albacore Landings by Year, Month, and Port
1951

Port	July	August	September	October	November	Total
ASTORIA						
Pounds	25,527	186,450	667,145	1,012,583	90,878	1,982,583
No. of Landings	17	72	53	63	15	220
TILLAMOOK						
Pounds		3,088			9,692	12,780
No. of Landings		2			1	3
DEPOE BAY						
Pounds	273					273
No. of Landings	1					1
NEWPORT						
Pounds	9,686	24,665	633,642	236,100		904,093
No. of Landings	7	15	74	16		112
COOS BAY						
Pounds	5,697	2,583	1,861	3,992	1,034	15,167
No. of Landings	1	4	3	2	1	11
COQUILLE						
Pounds				1,649		1,649
No. of Landings				1		1
TOTAL	41,183	216,786	1,302,648	1,254,324	101,604	2,916,545
	26	93	130	82	17	348

Table 2 (Continued)
1952

Port	July	August	September	October	November	December	Total
ASTORIA							
Pounds	10,050	8,039	284,663	792,615	252,102	52,591	1,400,060
No. of Landings	7	5	25	85	41	6	169
DEPOE BAY							
Pounds			4,265				4,265
No. of Landings			1				1
NEWPORT							
Pounds	3,944	106,223	907,669	47,301			1,065,137
No. of Landings	8	19	93	5			125
GOOS BAY							
Pounds		8,837	102,568	123	4,364		115,892
No. of Landings		5	19	1	1		26
TOTAL	13,994 15	123,099 29	1,299,165 138	840,039 91	256,466 42	52,591 6	2,585,354 321

1953

Port	August	September	October	November	Total
ASTORIA					
Pounds	21,378	60,238	145,289		226,905
No. of Landings	2	10	32		44
NEWPORT					
Pounds		505,950	41,365	1,000	548,315
No. of Landings		39	16	1	56
COOS BAY					
Pounds			547		547
No. of Landings			1		1
TOTAL	21,378	566,188	187,201	1,000	775,767
	2	49	49	1	101

Table 2 (Continued)
1954

14.

Port	September	October	November	Total
ASTORIA				
Pounds	33,054	262,381	8,115	303,550
No. of Landings	4	39	4	47
TILLAMOOK				
Pounds			2,122	2,122
No. of Landings			1	1
NEWPORT				
Pounds	61,562	67,552		129,114
No. of Landings	9	13		1
COOS BAY				
Pounds	4,336	30,318		34,654
No. of Landings	5	4		9
TOTAL	98,952	360,251	10,237	469,440
	18	56	5	79

1955

Port	September	October	November	Total
ASTORIA				
Pounds	7,557	275,041	158,212	440,810
No. of Landings	1	18	17	36
NEWPORT				
Pounds	19,324	37,690		57,014
No. of Landings	3	2		5
COOS BAY				
Pounds		5,480		5,480
No. of Landings		1		1
TOTAL	26,881	318,211	158,212	503,304
	4	21	17	42

Table 2 (Continued)
1956

Port	August	September	October	November	December	Total
ASTORIA						
Pounds	208,832	2,310,558	415,568	156,962	7,594	3,099,514
No. of Landings	32	187	37	13	3	272
TILLAMOOK						
Pounds	4,008	98			1,133	5,239
No. of Landings	3	1			1	5
DEPOE BAY						
Pounds	3,339	8,814				12,153
No. of Landings	2	1				3
NEWPORT						
Pounds	217,130	290,117	9,124			516,371
No. of Landings	82	50	5			137
FLORENCE						
Pounds	6,534	42				6,576
No. of Landings	5	1				6
WINCHESTER						
Pounds	1,814					1,814
No. of Landings	1					1
COOS BAY						
Pounds	5,825	5,608				11,433
No. of Landings	4	2				6
TOTAL	447,482 129	2,615,237 242	424,692 42	156,962 13	8,727 4	3,653,100 430

1957

Port	July	August	September	October	November	Total
ASTORIA						
Pounds	50,232	441,547	466,888	796,109	31,215	1,785,991
No. of Landings	12	130	80	62	5	289
TILLAMOOK						
Pounds	303	20,308	6,177			27,788
No. of Landings	1	22	6			29
DEPOE BAY						
Pounds		994				994
No. of Landings		2				2
NEWPORT						
Pounds	32,079	423,365	131,892	261,341	978	849,655
No. of Landings	6	206	41	42	2	297
FLORENCE						
Pounds		2,159	872	2,281		5,312
No. of Landings		2	1	2		5
WINCHESTER						
Pounds				147		147
No. of Landings				1		1
COOS BAY						
Pounds	45	7,598	20,545	4,340		32,528
No. of Landings	3	1	4	3		11
NESTUCCA						
Pounds		92				92
No. of Landings		2				2
TOTAL	82,659	896,063	626,374	1,064,218	32,193	2,701,507
	22	365	132	110	7	636

Table 2 (Continued)
1958

Port	July	August	September	October	November	Total
ASTORIA						
Pounds	148,051	2,817,481	1,746,260	798,017	1,066	5,510,875
No. of Landings	19	314	192	104	1	630
TILLAMOOK						
Pounds		5,108	5,287	2,657		13,052
No. of Landings		8	3	3		14
DEPOE BAY						
Pounds	86	37,118	3,955	563		41,722
No. of Landings	2	37	7	1		47
NEWPORT						
Pounds	213,664	1,879,634	401,183	91,421		2,585,902
No. of Landings	72	449	112	35		668
FLORENCE						
Pounds		21,001		713		21,714
No. of Landings		11		1		12
WINCHESTER						
Pounds			98			98
No. of Landings			1			1
COOS BAY						
Pounds	31,560	612,176	884,193	51,136		1,579,065
No. of Landings	11	145	121	13		290
BROOKINGS						
Pounds			1,561			1,561
No. of Landings			2			2
TOTAL	393,361 104	5,372,518 964	3,042,537 438	944,507 157	1,066 1	9,753,989 1,664

1959

Port	July	August	September	October	November	December	Total
ASTORIA							
Pounds	364,061	2,409,420	3,096,395	528,062	111,597	1,060	6,510,595
No. of Landings	69	337	440	57	14	1	918
TILLAMOOK							
Pounds	9,912	18,892	381				29,185
No. of Landings	5	11	3				19
DEPOE BAY							
Pounds	4,798	30,496	4,321				39,615
No. of Landings	4	26	6				36
NEWPORT							
Pounds	835,682	1,528,997	524,212	21,206			2,910,097
No. of Landings	190	329	87	6			612
FLORENCE							
Pounds	2,817	1,407	1,112				5,336
No. of Landings	2	1	1				4
WINCHESTER							
Pounds	188	1,441					1,629
No. of Landings	1	1					2
COOS BAY							
Pounds	226,639	90,724	733,267	24,310			1,074,940
No. of Landings	49	14	68	4			135
PACIFIC OCEAN							
Pounds			837				837
No. of Landings			2				2
BROOKINGS							
Pounds		220	1,576				1,796
No. of Landings		1	2				3
TOTAL	1,444,097	4,081,597	4,362,101	573,578	111,597	1,060	10,574,030
	321	721	607	67	14	1	1,731

Table 2 (Continued)
1960

Port	July	August	September	October	November	Total
ASTORIA						
Pounds	3,596	783,913	2,248,998	910,312	105,415	4,052,234
No. of Landings	3	123	240	74	8	448
TILLAMOOK						
Pounds	298	6,981	447			7,726
No. of Landings	1	7	2			10
DEPOE BAY						
Pounds	916	3,203	6,097			10,216
No. of Landings	2	1	6			9
NEWPORT						
Pounds	14,316	97,805	201,850	14,645		328,616
No. of Landings	6	23	69	2		100
WINCHESTER						
Pounds			241			241
No. of Landings			1			1
COOS BAY						
Pounds		8,072	147,605	6,576		162,253
No. of Landings		2	14	1		17
BROOKINGS						
Pounds				1,309		1,309
No. of Landings				1		1
TOTAL	19,126 12	899,974 156	2,605,238 332	932,842 78	105,415 8	4,562,595 586

Table 3
Per Cent of the Total Oregon Albacore Landings
Assigned to One-Degree Blocks, 1951-60

<u>Year</u>	<u>Per Cent Assigned</u>
1951	53.9
1952	84.2
1953	96.9
1954	62.9
1955	56.2
1956	81.7
1957	95.5
1958	78.9
1959	94.7
1960	90.0

Table 4
Albacore Catches--1951

Area of Catch	July			August			September			November		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished

Landed at Astoria
Jig Boats

45-125	6,013 (54)	87,600 (782)	112	586 (45)	8,200 (631)	13						
46-125				376 (29)	5,600 (430)	13						
47-125				764 (29)	11,400 (438)	26						
45-124	1,836 (40)	22,600 (490)	46	4,000 (61)	45,300 (686)	66						
46-124	1,744 (38)	31,200 (677)	46									
43-125							7,872 (55)	96,900 (678)	143			
44-125							28,024 (84)	344,700 (1,038)	332			
38-125							12,500 (133)	154,000 (1,638)	94			
39-125							10,465 (132)	128,400 (1,625)	79			
36-122										2,900 (42)	41,300 (599)	69

37-123								3,493	49,600	83
								(42)	(598)	
38-124				15,648	178,700	79				
				(198)	(2,262)					
39-124				15,665	178,900	80				
				(196)	(2,236)					
TOTAL	141,400		70,500				1,081,600		90,900	

Landed at Newport
Jig Boats

45-125	1,568	20,500	52	7,779	106,800	279				
	(30)	(394)		(28)	(383)					
40-124				3,945	61,900	133				
				(30)	(465)					
TOTAL	20,500			168,700			585,900		0	
GRAND TOTAL	161,900		239,200				1,667,500		90,900	

Table 5
Albacore Catches--1952

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished

Landed at Astoria
Jig Boats

45-125	612 (22)	10,000 (357)	28									
40-125				608 (203)	7,600 (2,533)	3	176 (59)	2,200 (733)	3	3,164 (62)	42,300 (829)	51
41-125				147 (37)	1,800 (450)	4	4,120 (89)	51,000 (1,109)	46			
41-126							4,194 (58)	53,700 (746)	72			
42-125							513 (105)	6,500 (1,300)	5			
42-126							1,139 (95)	14,300 (1,192)	12			
39-125							88 (88)	1,100 (1,100)	1	3,863 (50)	54,900 (713)	77
36-122										529 (88)	7,300 (1,217)	6
37-123				88 (88)	1,100 (1,100)	1				1,278 (67)	18,500 (974)	19
37-124										801 (62)	9,900 (762)	13

38-124		88 (88)	1,100 (1,100)	1	88 (44)	1,100 (550)	2	23,015 (59)	19,000 (818)	390
39-124					88 (88)	1,100 (1,100)	1	4,699 (61)	64,000 (831)	77
Subtotal	10,000		11,600			131,000			515,900	

Bait Boats

41-125					3,323 (256)	43,700 (3,362)	13			
41-126					12,291 (384)	147,500 (4,609)	32			
37-124								368 (61)	4,900 (817)	6
38-124								16,225 (115)	215,800 (1,530)	141
39-124								1,113 (59)	14,800 (779)	19
Subtotal	0		0			191,200			235,500	
TOTAL	10,000		11,600			322,200			751,400	

Landed at Newport
Jig Boats

40-125		3,605 (134)	43,400 (1,607)	27	2,528 (843)	31,500 (1,050)	30			
41-125		7,331 (133)	89,600 (1,629)	55	33,739 (105)	432,200 (1,346)	321			

Table 5 (Continued)

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished
	<u>Landed at Newport</u>											
	<u>Jig Boats</u>											
41-126							21,249 (105)	273,900 (1,349)	203			
42-125							1,826 (114)	22,300 (1,394)	16			
42-124				2,090 (105)	25,200 (1,260)	20						
39-125							3,978 (166)	50,200 (2,092)	24			
35-122							274 (39)	4,700 (671)	7			
36-123							274 (39)	4,700 (671)	7			
37-123							957 (60)	13,800 (863)	16			
38-124							3,023 (98)	36,700 (1,184)	31			
39-124							140 (47)	2,400 (800)	3			
34-122							274 (39)	4,700 (671)	7			
TOTAL		3,900			158,200			877,100			25,900	
GRAND TOTAL		13,900			169,800			1,199,300			777,300	

Table 6
Albacore Catches--1953

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished

Landed at Astoria
Jig Boats

35-124							429 (43)	3,800 (380)	10			
36-123				2,679 (141)	32,900 (1,732)	19	893 (149)	11,000 (1,833)	6			
36-124							5,784 (51)	56,600 (501)	113			
37-124							701 (21)	8,600 (253)	34	106 (8)	1,100 (79)	14
38-124							993 (37)	9,900 (367)	27	1,361 (36)	13,500 (355)	38
31-122				2,436 (162)	21,400 (1,427)	15						
Subtotal		0			54,300			89,900			14,600	

Bait Boats

35-124										2,468 (80)	31,100 (1,003)	31
36-123							738 (74)	9,300 (930)	10			
36-124										1,230 (72)	15,500 (912)	17

Table 6 (Continued)

28.

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished

Landed at Astoria
Bait Boats

34-125										984 (70)	12,400 (886)	14
Subtotal		0			0			9,300			59,000	
TOTAL		0			54,300			99,200			73,600	

Landed at Newport
Jig Boats

40-127							1,033 (86)	11,300 (942)	12			
41-127							1,033 (86)	11,300 (942)	12			
36-125							1,033 (86)	11,300 (942)	12			
37-125							1,033 (86)	11,300 (942)	12			
37-126							1,033 (86)	11,300 (942)	12			
38-126							1,033 (86)	11,300 (942)	12			
38-127							1,033 (86)	11,300 (942)	12			

39-127			1,033 (86)	11,300 (942)	12
35-122			3,837 (80)	40,600 (846)	48
35-124			1,033 (86)	11,300 (942)	12
36-123			23,570 (76)	235,700 (755)	312
37-123			2,883 (80)	30,500 (847)	36
38-124			3,828 (80)	40,500 (844)	48
33-121			1,033 (86)	11,300 (942)	12
33-122			1,033 (86)	11,300 (942)	12
33-123			1,033 (86)	11,300 (942)	12
34-121			2,883 (80)	30,500 (847)	36
34-124			1,033 (86)	11,300 (942)	12
TOTAL	0	0		524,700	22,600
GRAND TOTAL	0	54,300		623,900	96,200

Table 7
Albacore Catches--1954

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished

Landed at Astoria
Jig Boats

40-125							328 (41)	3,800 (475)	8			
39-125							328 (41)	3,800 (475)	8			
35-122							1,778 (66)	14,600 (541)	27	9,800 (110)	79,000 (888)	89
36-123							3,602 (75)	39,500 (823)	48	1,300 (62)	14,300 (681)	21
37-123							328 (41)	3,800 (475)	8			
37-124							246 (18)	2,900 (207)	14			
38-124							328 (41)	3,800 (475)	8			
33-125				288 (17)	3,400 (200)	17	5,601 (122)	61,000 (1,326)	46	1,529 (118)	16,700 (1,285)	13
33-126							1,312 (62)	14,300 (681)	21			
34-126				246 (18)	2,900 (207)	14	2,647 (78)	28,800 (847)	34			

32-119					
	<u> </u>	246	2,900	14	
		(18)	<u>(207)</u>		
TOTAL	0	9,200		176,300	110,000

Table 8
Albacore Catches--1955

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Number of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished
	<u>Landed at Astoria</u>											
	<u>Jig Boats</u>											
35-124							7,509 (78)	81,100 (845)	96			
36-124										9,419 (119)	105,300 (1,332)	79
31-122							8,997 (79)	96,600 (847)	114			
TOTAL		0			0			177,700			105,300	

Table 9
Albacore Catches--1956

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished

Landed at Astoria
Jig Boats

45-125							11,535 (152)	144,300 (1,899)	76			
45-126				16,267 (92)	214,500 (1,212)	177	80,432 (151)	1,079,400 (2,033)	531			
44-125				6,540 (74)	103,600 (1,177)	88						
44-126				4,220 (299)	66,900 (474)	141	84,101 (153)	1,080,700 (1,961)	551			
TOTAL		0			385,000			2,304,400			245,500	

Landed at Newport
Jig Boats

45-125							1,247 (54)	15,500 (674)	23			
45-126							5,671 (135)	68,900 (1,640)	42			
45-127							3,375 (281)	40,400 (3,367)	12			
43-125							6,782 (234)	84,300 (2,907)	29			

Table 9 (Continued)

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished
	<u>Landed at Newport</u> <u>Jig Boats</u>											
44-126							6,351 (108)	85,100 (1,442)	59			
TOTAL		0			217,100			294,200				5,000
GRAND TOTAL		0			602,100			2,598,600				250,500

Table 10
Albacore Catches—1957

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished

Landed at Astoria
Jig Boats

45-126	354 (59)	4,300 (717)	6				458 (115)	5,700 (1,425)	4			
46-125	652 (47)	9,000 (643)	14	1,509 (44)	24,300 (715)	34						
46-126	655 (50)	8,800 (677)	13	68 (14)	1,100 (220)	5						
47-125				10,878 (99)	146,100 (1,328)	110	15,887 (65)	218,600 (900)	243			
47-126	85 (43)	1,300 (650)	2	134 (45)	2,000 (667)	3						
48-126				288 (24)	4,500 (375)	12						
48-128	925 (29)	10,900 (341)	32									
49-126				80 (16)	1,200 (240)	5						
45-124				5,993 (50)	81,200 (677)	120						
46-124				5,484 (64)	73,000 (849)	86						

45-127	116 (58)	1,400 (700)	2							
44-124				2,807 (53)	41,600 (785)	53				
37-125							127 (127)	1,700 (1,700)	1	
38-125							90 (90)	1,200 (1,200)	1	
39-125							591 (148)	7,900 (1,975)	4	310 (303) 4,500 (1,500) 3
39-126							60 (60)	800 (800)	1	
35-122							575 (144)	7,700 (1,925)	4	450 (90) 6,200 (1,240) 5
35-123				160 (40)	2,000 (500)	4	4,619 (154)	59,800 (1,993)	30	831 (139) 11,900 (198) 6
36-123							311 (156)	4,500 (2,250)	2	694 (174) 9,600 (2,400) 4
37-123										311 (311) 4,500 (4,500) 1
38-124				160 (40)	2,000 (500)	4	86 (29)	1,200 (400)	3	307 (307) 4,400 (4,400) 1
32-120				160 (40)	2,000 (500)	4				
34-121							381 (127)	5,100 (1,700)	3	

46-124				1,841 (63)	23,600 (814)	29	256 (85)	3,600 (1,200)	3	1,280 (46)	21,100 (754)	28
40-125				907 (60)	13,500 (900)	15	5,584 (92)	76,900 (1,261)	61	217 (54)	2,600 (650)	4
41-125				1,508 (66)	22,800 (991)	23	11,377 (94)	158,000 (1,306)	121	186 (62)	2,100 (700)	3
41-126				276 (92)	4,300 (1,433)	3						
42-125				2,646 (68)	38,900 (997)	39	10,018 (88)	139,200 (1,221)	114	916 (51)	14,800 (822)	18
42-126				2,097 (150)	31,600 (2,257)	14	4,438 (57)	63,500 (814)	78			
43-125	643 (107)	8,300 (1,383)	6	16,044 (108)	220,100 (1,477)	149	8,115 (88)	114,300 (1,242)	92	216 (36)	2,600 (433)	6
43-126	4,325 (79)	55,900 (1,016)	55	4,121 (108)	48,800 (1,284)	38	4,354 (85)	61,700 (1,210)	51			
44-125	1,242 (56)	17,300 (786)	22	34,629 (926)	484,900 (1,296)	374	9,877 (84)	143,600 (1,217)	118	2,109 (54)	29,600 (759)	39
44-126	6,669 (93)	86,000 (1,194)	72	23,150 (109)	297,000 (1,401)	212	4,714 (87)	66,800 (1,237)	54	68 (23)	1,300 (433)	3
44-127	6,241 (101)	78,400 (1,265)	62	898 (50)	14,200 (789)	18						
44-124				415 (83)	6,100 (1,220)	5						
38-125							635 (79)	9,200 (1,150)	8			
39-125				393 (56)	6,200 (886)	7	4,044 (90)	57,100 (1,269)	45			

Table 11
Albacore Catches--1958

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished
	<u>Landed at Astoria</u>											
	<u>Jig Boats</u>											
45-125	6,629 (71)	92,700 (997)	93	49,368 (85)	720,200 (1,233)	584	39,670 (77)	518,200 (1,004)	516	15,625 (70)	223,300 (997)	224
45-126	5,608 (95)	72,300 (1,225)	59	19,748 (119)	250,800 (1,511)	166	3,829 (85)	53,800 (1,196)	45			
45-127	222 (74)	2,900 (967)	3	183 (46)	3,600 (900)	4						
46-125				8,833 (77)	122,600 (1,075)	114	3,199 (89)	38,100 (1,058)	36	599 (33)	9,800 (544)	18
46-126	223 (74)	2,900 (967)	3	1,618 (162)	20,700 (2,070)	10	1,360 (76)	17,400 (967)	18			
46-127	114 (57)	1,500 (750)	2									
47-125				4,954 (84)	69,900 (1,185)	59				156 (39)	2,500 (625)	4
47-126				2,120 (133)	27,900 (1,744)	16						
48-125										412 (52)	6,600 (825)	8
45-124	94 (47)	1,300 (650)	2	5,376 (88)	77,300 (1,267)	61				1,331 (55)	20,300 (846)	24

45=124	14,039 (54)	206,800 (792)	261						
46=124	165 (24)	1,900 (271)	7						
40=125				5,101 (204)	72,800 (2,912)	25			
41=125				11,570 (161)	161,300 (2,240)	72	1,926 (193)	25,600 (2,560)	10
42=125				433 (87)	11,700 (2,340)	5	1,847 (185)	25,100 (2,510)	10
43=125				433 (87)	11,700 (2,340)	5			
44=125				214 (72)	5,800 (1,933)	3			
44=124	16,703 (59)	221,100 (787)	281	575 (32)	8,500 (472)	18			
35=125				433 (87)	11,700 (2,340)	5			
35=123				433 (87)	11,700 (2,340)	5			
36=123				433 (87)	11,700 (2,340)	5			
37=124				433 (87)	11,700 (2,340)	5			
38=124				433 (87)	11,700 (2,340)	5			
39=122				215 (72)	5,800 (1,933)	3			
TOTAL	32,100	429,800		336,100	50,700				
GRAND TOTAL	97,200	866,500		966,800	672,900				

Table 11 (Continued)

42.

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished
	<u>Landed at Astoria</u>											
	<u>Jig Boats</u>											
35-122	389 (56)	4,000 (571)	7	1,243 (78)	19,400 (1,213)	16						
35-123				98 (49)	1,700 (850)	2						
36-122				206 (41)	2,900 (580)	5						
36-123	291 (58)	4,100 (820)	5	685 (62)	10,000 (909)	11						
36-124				98 (49)	1,700 (850)	2						
37-123	203 (68)	2,800 (933)	3	456 (57)	6,800 (850)	8						
38-124	202 (67)	2,800 (933)	3	556 (56)	8,600 (860)	10						
39-124				746 (68)	10,900 (991)	11	255 (85)	3,600 (1,200)	3			
32-122	127 (64)	1,800 (900)	2									
33-120	160 (40)	2,300 (575)	4	134 (45)	1,900 (633)	3						
33-121				329 (47)	5,000 (714)	7						

33-122				240 (80)	3,700 (1,233)	3			
34-121	599 (86)	8,400 (1,200)	7	187 (62)	2,800 (933)	3			
34-122	2,245 (112)	31,800 (1,590)	20	426 (71)	6,300 (1,050)	6			
33-118	207 (41)	2,900 (580)	5						
33-119	206 (41)	2,900 (580)	5						
Subtotal		483,300			2,586,700		1,525,000		336,600

Bait Boats

45-125				15,875 (160)	229,400 (2,318)	99	10,212 (128)	150,100 (1,876)	80	981 (65)	12,300 (820)	15
46-124				31 (16)	500 (250)	2	787 (72)	11,300 (1,027)	11			
42-126				1,021 (93)	17,600 (1,600)	11	2,393 (104)	41,200 (1,791)	23			
34-122	8,535 (225)	115,900 (3,050)	38									
Subtotal		115,900			247,500		202,600				12,300	

TOTAL		599,200			2,834,200		1,727,600				348,900	
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Landed at Newport
Jig Boats

45-125	3,957 (43)	60,500 (665)	91	23,007 (61)	385,600 (1,017)	379						
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Table 11 (Continued)

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished
	<u>Landed at Newport Jig Boats</u>											
45-124	2,309 (80)	36,700 (1,266)	29	7,043 (40)	131,000 (749)	175						
43-125	5,635 (62)	89,900 (988)	91	4,270 (87)	76,100 (1,553)	49						
43-126				2,276 (1,198)	28,400 (1,495)	19						
44-125				35,142 (106)	459,300 (1,388)	331						
44-126	9,122 (100)	121,400 (1,334)	91	52,536 (126)	665,100 (1,591)	418						
44-124				7,343 (83)	137,100 (1,558)	88						
TOTAL		308,500			1,882,600			344,700			50,000	
GRAND TOTAL		907,700			4,716,800			2,072,300			398,900	

Table 12
Albacore Catches--1959

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished
	<u>Landed at Astoria</u>											
	<u>Jig Boats</u>											
45-125	19,061 (93)	239,500 (1,174)	204	65,782 (112)	856,300 (1,459)	587	32,982 (113)	439,000 (1,498)	293	1,023 (171)	12,900 (2,150)	6
45-126	3,033 (108)	38,600 (1,379)	28	4,029 (68)	52,600 (892)	59						
46-125	4,643 (106)	65,800 (1,495)	44	91,171 (104)	1,189,500 (1,359)	875	49,659 (119)	641,500 (1,542)	416			
46-126	676 (113)	8,500 (1,417)	6	7,777 (110)	98,600 (1,389)	71	5,065 (108)	65,800 (1,400)	47			
47-125	145 (73)	2,000 (1,000)	2	31,421 (104)	413,100 (1,372)	301						
47-126				2,967 (90)	37,900 (1,148)	33						
48-125	468 (117)	6,100 (1,525)	4	118 (59)	1,400 (700)	2						
45-124				475 (48)	7,400 (740)	10	408 (102)	5,300 (1,325)	4			
46-124	252 (126)	3,100 (1,550)	2	422 (42)	6,200 (620)	10	421 (105)	7,900 (1,975)	4			
40-125				4,301 (119)	54,900 (1,525)	36	12,501 (162)	183,900 (2,388)	77	14,501 (175)	191,700 (2,310)	83

Table 12 (Continued)

46.

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished
	<u>Landed at Astoria</u> <u>Jig Boats</u>											
40-126				762 (127)	9,200 (153)	6	7,145 (193)	94,200 (2,546)	37			
41-125				6,200 (122)	106,000 (2,078)	51	2,287 (82)	29,600 (1,057)	28			
41-126				4,223 (162)	53,700 (2,065)	26	334 (167)	4,300 (2,150)	2			
41-127				938 (117)	11,900 (1,488)	8						
42-125				11,224 (163)	143,300 (2,077)	69	2,651 (166)	36,100 (2,256)	16			
42-126				2,060 (172)	25,900 (2,158)	12	254 (127)	3,100 (1,550)	2			
43-125				2,595 (124)	33,500 (1,595)	21	1,655 (150)	21,600 (1,964)	11			
44-125	3,774 (94)	47,500 (1,188)	40	10,619 (128)	142,400 (1,716)	83	2,019 (67)	26,200 (873)	30			
44-126	6,109 (109)	76,300 (1,363)	56	956 (96)	12,200 (1,220)	10						
41-124				3,108 (155)	32,200 (1,610)	20						

44-124	167 (42)	2,500 (625)	4									
36-125				954 (119)	12,300 (1,538)	8						
37-125							1,606 (161)	20,100 (2,010)	10			
38-125				760 (127)	9,200 (1,533)	6						
39-125	328 (164)	3,900 (1,950)	2	3,603 (95)	45,500 (1,197)	38	13,860 (213)	176,900 (2,722)	65	12,144 (158)	159,500 (2,071)	77
39-126							15,384 (195)	205,100 (2,596)	79			
35-122	665 (166)	7,900 (1,975)	4									
36-123	665 (166)	7,900 (1,975)	4	2,755 (138)	34,300 (1,715)	20	226 (113)	2,600 (1,300)	2			
37-123							226 (113)	2,600 (1,300)	2			
37-124	1,666 (76)	20,800 (945)	22	872 (109)	10,600 (1,325)	8						
38-124	665 (166)	7,900 (1,975)	4	1,225 (56)	15,700 (714)	22	223 (112)	2,600 (1,300)	2			
39-124	328 (164)	3,900 (1,950)	2	621 (155)	6,400 (1,600)	4	223 (112)	2,600 (1,300)	2	6,729 (132)	86,600 (1,698)	51
33-121	328 (164)	3,900 (1,950)	2									

43-125				1,200 (52)	13,800 (600)	23	
43-126	1,492 (83)	19,700 (1,094)	18				
43-127	128 (21)	1,700 (283)	6				
44-125	6,998 (113)	88,500 (1,427)	62	11,480 (75)	154,400 (1,003)	154	
44-126	6,430 (75)	77,800 (905)	86	2,845 (124)	38,100 (1,657)	23	
44-124	240 (60)	2,100 (700)	3				
TOTAL		1,165,400		1,327,400	405,800		11,600

Landed at Coos Bay
Jig Boats

45-125	1,854 (66)	23,400 (836)	28	1,003 (91)	12,900 (1,173)	11	
45-126	4,892 (71)	62,200 (901)	69	776 (129)	9,300 (1,550)	6	
46-126				776 (129)	9,300 (1,550)	6	
47-126				384 (128)	4,600 (1,533)	3	
40-125				2,497 (125)	32,200 (1,610)	20	437 (44) 5,700 (570) 10

43-124				292 (97)	3,700 (1,233)	3
38-125	269 (90)	3,500 (1,167)	3			
39-125	1,069 (89)	13,900 (1,158)	12			
39-126	776 (129)	9,300 (1,550)	6			
35-122	625 (69)	8,000 (899)	9			
36-123	625 (69)	8,000 (899)	9			
37-123	70 (23)	1,000 (333)	3			
37-124	562 (94)	7,100 (1,183)	6			
38-124	695 (58)	9,000 (750)	12			
39-124	1,136 (126)	14,400 (1,600)	9	69 (23)	1,000 (333)	3
33-121	276 (92)	3,500 (1,167)	3			
34-121	276 (92)	3,500 (1,167)	3			
34-122	349 (58)	4,500 (750)	6			
TOTAL	239,600	608,000		214,000	13,300	
GRAND TOTAL	1,959,000	5,357,600		2,590,800	475,600	

Table 13
Albacore Catches--1960

Area of Catch	July			August			September			October		
	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished	Numbers of Fish (Nos/Day)	Pounds of Fish (Lbs/Day)	Days Fished

Landed at Astoria
Jig Boats

45-125	5,226 (42)	88,500 (720)	123	24,358 (81)	421,700 (1,410)	299	7,892 (52)	124,100 (811)	153			
45-126				1,381 (99)	26,400 (1,886)	14	1,355 (62)	21,000 (955)	22			
46-125	1,058 (66)	16,800 (1,050)	16	27,603 (130)	463,900 (2,188)	212	14,189 (76)	221,300 (1,183)	187			
46-126				1,837 (87)	32,400 (1,543)	21	1,812 (45)	25,700 (643)	40			
47-125				1,385 (77)	20,900 (1,161)	18						
45-124				17,593 (127)	302,500 (2,176)	139	4,678 (61)	88,200 (1,146)	77			
46-124				5,268 (89)	92,600 (1,569)	59	4,148 (48)	59,100 (679)	87			
40-125							40,126 (144)	544,500 (1,952)	279	2,164 (197)	30,000 (2,727)	11
40-126							6,659 (121)	87,900 (1,598)	55			
44-125	66 (33)	1,100 (550)	2	1,341 (75)	23,200 (1,289)	18						

44-126				4,062 (80)	71,300 (1,398)	51	216 (54)	2,900 (725)	4			
40-124							1,152 (165)	15,800 (2,257)	7			
44-124				2,905 (100)	46,800 (1,614)	29						
35-125							1,645 (118)	20,600 (1,471)	14			
37-125				3,929 (135)	52,500 (1,810)	29	2,791 (254)	38,300 (3,482)	11			
38-125				915 (83)	13,000 (1,182)	11	8,173 (115)	110,600 (1,558)	71	13,328 (159)	179,100 (2,132)	84
38-126							777 (111)	10,100 (1,443)	7			
39-125							10,348 (98)	143,000 (1,349)	106	3,430 (84)	45,800 (1,117)	41
39-126							777 (111)	10,100 (1,443)	7	1,978 (104)	26,500 (1,395)	19
39-127							1,189 (149)	16,700 (2,088)	8	538 (90)	7,500 (1,250)	6
35-122	1,093 (78)	16,400 (1,171)	14	659 (66)	9,700 (970)	10	9,047 (177)	117,300 (2,300)	51			
35-123							1,866 (170)	25,600 (2,327)	11			
36-122				1,789 (81)	23,900 (1,086)	22						

45-127	46 (46)	800 (800)	1			
46-125	1,463 (61)	23,500 (979)	24			
46-126	126 (42)	1,900 (633)	3			
45-124				2,919 (73)	55,900 (1,397)	40
44-125				806 (62)	14,900 (1,146)	13
TOTAL	58,200			103,000		159,200
GRAND TOTAL	181,000			1,798,000		1,925,500
						8,000
						370,400

Table 14
 Albacore Length Frequencies
 Astoria--1939
 (No Area Assignment)

Length (cm)	August	September	October
50			
1			
2			
3			1
4			
5	1	1	
6			1
7	4		2
8	7	2	1
9	7	3	2
60	9	6	4
1	19	11	1
2	58	28	9
3	37	36	8
4	72	43	21
5	16	25	10
6	18	28	23
7	9	12	7
8	7	10	4
9	32	28	3
70	22	27	4
1	115	144	20
2	91	97	15
3	181	263	38
4	163	273	75
5	70	126	43
6	116	224	84
7	38	59	30
8	45	89	54
9	7	18	14
80	11	20	14
1	5	9	10
2	3	1	2
3	5	2	5
4			2
5		3	2
6			3
7			
8		1	
9			
90			
1		1	
2			
3			
4			
5			
TOTAL	1,168	1,590	512

Table 15
 Albacore Length Frequencies
 Astoria--1940
 (No Area Assignment)

Length (cm)	July	August	September	October
50	1			
1	1			
2	4			
3	6	1	1	1
4	4	2	3	
5	9	2		
6	18	3	1	2
7	47	6		1
8	48	10	2	2
9	79	12	1	1
60	93	26	3	1
1	74	20	3	1
2	144	22	2	
3	130	43	3	3
4	153	42	6	1
5	63	52	4	
6	75	47	9	3
7	48	31	5	5
8	23	42	6	2
9	58	47	7	1
70	43	45	4	4
1	68	52	9	3
2	65	90	4	1
3	118	81	16	6
4	93	118	13	4
5	56	88	17	10
6	46	65	27	12
7	23	53	24	13
8	13	30	24	13
9	6	20	19	14
80	3	11	15	10
1		12	9	6
2	1	5	6	5
3	3	6	4	4
4		6	2	3
5	2	5	1	4
6	1	4	1	4
7	1	2		3
8		1	3	
9			1	1
90			1	1
TOTAL	1,620	1,102	256	145
Samples	10	10	3	1

Table 16
 Albacore Length Frequencies
 Astoria--1941
 (No Area Assignment)

Length (cm)	July	August	October
50	2		
1	4	3	
2	2	11	
3	6	19	
4	4	15	
5	3	22	1
6	10	18	1
7	12	18	1
8	9	21	
9	13	25	
60	11	19	1
1	9	19	
2	20	24	2
3	57	42	2
4	69	87	5
5	88	109	4
6	90	113	10
7	59	109	10
8	39	68	13
9	21	50	4
70	12	38	13
1	15	19	7
2	13	19	4
3	14	33	4
4	15	18	6
5	12	17	6
6	17	25	4
7	9	22	9
8	16	19	6
9	8	8	4
80	6	12	8
1	7	7	7
2	3	3	6
3	5	2	12
4	1	3	4
5	2	4	
6	2	2	3
7	1		3
8			1
9			
90			
TOTAL	686	1,043	161
Samples	5	5	2

Table 17
 Albacore Length Frequencies
 Astoria--1942
 (No Area Assignment)

Length (cm)	July	August	September	Shipped from Newport	
				July	August
50		2		1	
1		1			
2	7	3		1	
3	3	8			2
4	5	6			
5	11	11		3	1
6	9	20		1	2
7	9	47		5	5
8	25	69	2	12	8
9	49	115	4	10	10
60	34	189	13	20	21
1	67	233	26	25	34
2	81	370	44	41	39
3	78	460	61	39	50
4	59	467	106	18	46
5	58	329	123	20	43
6	29	233	108	3	26
7	17	126	66	3	14
8	8	44	37	3	8
9	6	27	23	2	
70	5	25	10	2	1
1	5	23	4	1	
2	2	20	3	3	
3	7	42	5	2	
4	6	42	8	1	2
5	6	57	6		
6	9	59	7	1	
7	8	44	4	3	1
8	6	48	6	1	
9	9	34	4		
80	4	41	4		1
1	2	25	5	1	
2	7	17	2	2	
3	1	8	1	4	
4	1	9		1	
5	1	4	1		
6	1	2		2	
7		3			
8		2			
9					
90		1		1	
TOTAL	635	3,266	683	232	314
Samples	2	9	3	1	1

Table 18
 Albacore Length-Frequencies
 Astoria--1947
 (No Area Assignment)

Length (cm)	July	August	September	October
50				
1	1			
2	2		1	
3	1	3	2	1
4	1	2	4	
5	2		1	4
6	5	5	1	5
7	10	4	1	4
8	10	14	1	1
9	23	18	4	5
60	34	34	5	6
1	48	55	8	8
2	94	78	10	8
3	109	188	36	11
4	125	213	37	16
5	111	209	39	19
6	72	163	74	16
7	53	110	60	17
8	26	66	44	11
9	12	37	25	8
70	7	29	21	2
1		20	13	4
2	2	18	10	3
3	1	10	4	
4	3	15	1	
5	2	13	2	
6		8	2	
7	1	16		
8	1	18	1	
9	1	8	3	
80	1	7		
1		8		
2		4		
3	1	4		
4		4	2	
5		6		
6		2		
7		1		
8		1		
9		1		
90		1		
TOTAL	759	1,393	412	149
Samples	9	14	4	1

Table 19
 Albacore Length Frequencies
 Newport--1947
 (No Area Assignment)

Length (cm)	July 1/	August	September	October
50	1			
1			1	
2	1		1	
3		1	4	1
4		5	3	
5	3	4	3	
6	1	3	1	2
7	5	3	5	1
8	12	5	6	
9	10	8	12	6
60	20	4	17	3
1	25	3	20	5
2	41	16	17	16
3	39	9	37	13
4	18	15	61	11
5	20	17	95	30
6	3	22	74	27
7	3	14	84	31
8	3	9	56	35
9	2	6	48	26
70	2	4	20	10
1	1		3	4
2	3		11	4
3	2		3	5
4	1		9	
5			1	
6	1		1	1
7	3			
8	1		2	
9			3	1
80			1	1
1	1			
2	2		1	
3	4		1	
4	1			
5				
6	2			1
7				
8				
9			1	
90	1			
TOTAL	232	148	602	234
Samples	1	1	4	2

1/ Sampled at Astoria.

Table 20
 Albacore Length Frequencies
 Coos Bay--1947
 (No Area Assignment)

Length (cm)	September	October
50		
1		
2		
3		
4	4	
5	2	1
6	3	7
7	4	4
8	2	4
9	7	6
60	8	6
1	13	18
2	19	10
3	22	17
4	32	27
5	55	38
6	68	24
7	54	46
8	62	32
9	41	23
70	16	14
1	8	7
2	7	6
3	5	3
4	5	3
5	3	
6	2	1
7	1	
8	1	
9	1	
80	1	
1	2	1
2		1
3	1	
4		
5		
6		
7		1
8		
9		
90		
TOTAL	449	300
Samples	4	2

Table 21
Albacore Length Frequencies
Astoria--1948
(No Area Assignment)

Length (cm)	July		August		September	
50		<u>1</u> /		2	6	<u>2</u> /
1	2				5	
2					13	
3	1				11	1
4	2	1		2	9	3
5	8	1		6	12	
6	14	6		11	18	5
7	21	5		16	12	8
8	37	10		28	27	13
9	57	11		34	37	9
60	95	18		70	53	12
1	141	32		70	54	21
2	161	36		102	70	23
3	143	24		100	51	28
4	110	29		84	55	29
5	38	9		41	30	15
6	22	1		33	29	1
7	11	5		19	15	7
8	12	2		20	13	2
9	20	3		32	17	2
70	13	1		16	4	1
1	12	3		8	9	1
2	8	4		11	4	
3	18	4		14	6	
4	19	2		15	10	
5	7	6		12	8	
6	16			19	7	
7	15			11	5	1
8	2	2		13	8	
9	2			7	2	2
80	4	1		5	1	
1	1			5		
2				2		
3				2		
4				2		
5		1		1	1	
6					1	
7						
8	1					
9						
90						
TOTAL	1,013	217		813	603	184
Samples	11	3		8	5	1

1/ Shipped from Grays Harbor, Washington area.

2/ Shipped from Eureka, California.

Table 22.
Albacore Length Frequencies
Astoria--July 1949

Length (cm)	Area					Not Assigned	Total
	45-125	46-126	47-126	44-125	44-126		
50							<u>1/</u>
1							
2							
3							
4							
5							
6				1	1		1
7	5	2		1		1	4
8	5	1		2	4	4	1
9	10	1		1	2	5	5
60	1	7	5	9	3	12	9
1	1	8	8	8		7	11
2	3	9	5	10	2	6	6
3	6	4	8	8		5	4
4	3	8	11	2	5	5	4
5	7	7	5	2	6	2	6
6	7	4	5	2	6	9	7
7	9	12	8	4	11	7	16
8	18	12	5	7	18	8	16
9	12	20	12	10	6	5	9
70	9	9	2	6	9	8	12
1	6	10	3	3	6	4	11
2	8	11	4	6	4	6	7
3	2	6	2	2	5	2	6
4	3	3	2	2	1	1	1
5	3		1		4	1	2
6	3		1	4	3	1	12
7	1			1		2	4
8	2	2		1	3		1
9	1	2			1	2	6
80	3						2
1			1	1		1	3
2	1						1
3						1	1
4				2			1
5		1					1
6							
7							
8	1						1
9							
90							
TOTAL	130	139	88	95	100	105	143
Samples	2	2	1	1	1	1	2

1/ Shipped from Westport, Washington (Grays Harbor).

Table 23
Albacore Length Frequencies
Astoria--August 1949

Length (cm)	Area			Not Assigned	Total
	47-126	48-127	50-128		
50					1/
1					
2					
3					
4					
5					
6					
7		2		1	3
8	1	4		2	7
9		15	2	9	28
60	1	18	16	20	61
1	3	31	12	29	94
2	7	20	18	31	85
3	8	21	15	24	79
4	2	25	12	19	67
5	8	22	6	23	70
6	5	22	6	27	64
7	10	28	1	40	84
8	5	30	3	38	78
9	7	27	2	48	86
70	2	33	5	50	95
1	3	24		38	68
2	5	22	1	22	52
3	2	4		14	26
4	1	8		14	26
5		13		4	18
6	1	3		4	8
7	1	1		1	3
8		4		1	5
9		4		2	6
80		5			5
1		2		2	4
2	1	1		2	4
3		1		1	2
4				2	2
5		1		1	2
6		1			1
7					
8					
9					
90					
TOTAL	73	392	99	469	100
Samples	1	4	1	4	1

1/ Shipped from Newport and Coos Bay.

Table 24
 Albacore Length Frequencies
 Astoria--September 1949
 (Shipped from Designated Points,
 No Area Assignment)

Length (cm)	Eureka	Eureka & Newport	Coos Bay	Unknown	Total
45				1	1
6					
7					
8					
9					
50	3				3
1	11			5	16
2	19		10	7	36
3	17		7	6	30
4	18		12	9	39
5	5	1	2	2	10
6	5	2	1	4	12
7	10		1	4	15
8	17	2	2	6	27
9	33	14	5	18	70
60	62	12	6	54	134
1	109	18	26	68	221
2	146	21	31	91	289
3	81	5	20	62	168
4	35	4	21	34	94
5	12	4	7	8	31
6	4	1	6	3	14
7	2		9	2	13
8	3	4	8	1	16
9	1	4	1	3	9
70	2	5	6		13
1	2	1	4	4	11
2	1		5	1	7
3		1	1		2
4	1	1	3	1	6
5			1	2	3
6		1	3		4
7		1			1
8					
9			1	1	2
80					
1	1				1
2					
3					
4				1	1
5			1		1
6					
7					
8	2				2
9					
90					
TOTAL	602	102	200	398	
Samples	6	2	2	3	

Table 25
Albacore Length Frequencies
Astoria--July 1950

Length (cm)	Area						Not Assigned	Total
	45-125	47-125	48-126	45-124	44-125	44-124		
50								
1								
2								
3								
4								
5								
6								
7								
8					2			2
9		1	1	3				5
60	1		1	9		1		12
1		1	1	6				8
2	1		3	12		1		17
3	2	3	5	6	1			17
4	1	1	1	4		1		8
5	3	3		4		2	1	13
6	8	2	1	5				16
7	5	2	3	14		3	3	30
8	5	4	2	17	2	9	5	44
9	9	11	7	23	4	11	14	79
70	19	22	13	27	5	19	14	119
1	26	9	13	45	3	21	21	138
2	34	11	16	23	5	8	8	105
3	26	9	16	25	2	9	12	99
4	18	10	3	15	3	3	7	59
5	11	1	7	14	2	7	2	44
6	8	3	1	5	4	2	2	25
7	6	3		2		1	2	14
8	3		1			1	5	10
9	5			4		1	2	12
80	4	1	4					9
1	3	1	1				1	6
2				4			1	5
3								
4								
5								
6	2	2						4
7								
8								
9								
90								
TOTAL	200	100	100	269	31	100	100	
Samples	2	1	1	3	1	1	1	

Table 26
 Albacore Length Frequencies
 Astoria--July 1950
 (Shipped from Grays Harbor, Washington)

Length (cm)	5° Area 45-49-125-129
60	
1	
2	1
3	
4	
5	1
6	1
7	1
8	5
9	17
70	14
1	12
2	11
3	6
4	3
5	5
6	5
7	2
8	3
9	6
80	2
1	3
2	1
3	
4	1
5	
6	
7	
8	
9	
90	
TOTAL	100
Samples	1

Table 27
Albacore Length Frequencies
Astoria--August 1950

Length (cm)	Area						Total
	45-125	46-125	45-49- 125-129	45-124	41-125	44-125	
50							
1							
2							
3							
4				1			1
5				1			1
6				1	1		2
7	4			2	2		8
8	4			2	2	3	11
9	9	3		1	5	2	20
60	15	1		10	7	7	40
1	17	3	2	15	16	13	66
2	20	4	4	12	19	17	76
3	6	2	5	7	11	11	42
4	3	3	4	12	6	7	35
5		2	6	3	4	5	20
6	4	5	3	1	1	1	15
7		7	2	3	2	3	17
8	2	10	5	1	3	1	22
9	2	5	11	4	2	4	28
70	5	9	9	6	4	6	39
1	4	11	13	5	8	6	47
2		8	12	6	4	7	37
3	2	7	13	2	2	3	29
4	2	6	8	2	1	2	21
5		8		1		1	10
6		1	2	1			4
7		1	1				2
8		2		1			3
9							
80		1					1
1		1				1	2
2							
3							
4							
5							
6	1						1
7							
8							
9							
90							
TOTAL	100	100	100	100	100	100	
Samples	1	1	1	1	1	1	

Table 28
 Albacore Length Frequencies
 Astoria--September 1950

Length (cm)	North of Pt. Delgada		Total
	Shipped from Coos Bay	Shipped from Eureka	
50			
1			
2			
3		1	1
4	1		1
5		1	1
6	1	1	2
7	1		1
8	3		3
9	6	4	10
60	18	3	21
1	19	13	32
2	22	6	28
3	19	7	26
4	18	4	22
5	5	3	8
6	5		5
7	2	1	3
8	5	1	6
9	9	5	14
70	9	3	12
1	18	6	24
2	9	12	21
3	13	5	18
4	7	8	15
5	2	6	8
6	3		3
7	4	2	6
8		5	5
9	1	1	2
80	<u> </u>	<u> </u>	2
TOTAL	200	100	
Samples	2	1	

Table 29
 Albacore Length Frequencies
 Astoria--October 1950

Length (cm)	North of Pt. Delgada	Shipped from Eureka	Total
50			
1			
2	3		3
3	1		1
4			
5	2		2
6	2	1	3
7	2	2	4
8	3	3	6
9	3	2	5
60	8	3	11
1	11	3	14
2	19	11	30
3	18	17	35
4	14	13	27
5	9	10	19
6	2	3	5
7		1	1
8	1	2	3
9	1	1	2
70		5	5
1	1	4	5
2		3	3
3		4	4
4		3	3
5		4	4
6		3	3
7		3	3
8		1	1
9		3	3
80		3	3
1			
2		1	1
3			
4			
5			
6			
7			
8			
9			
90			
TOTAL	100	109	
Samples	1	1	

Table 30
Albacore Length Frequencies
Newport--July 1950

Length (cm)	Area			Not Assigned	Total
	45-125	45-49- 125-129	45-124		
50					
1					
2					
3					
4					
5					
6					
7	1				1
8	2	1			3
9	6	2	1		9
60	9	3		1	13
1	7	1	1		9
2	8	3	4		15
3	3	5	1		9
4	5	4	3		12
5	4	4	2	1	11
6		3	1	1	5
7	1	9	7		17
8	2	12	9	1	24
9	4	22	17	3	46
70	3	35	35	3	76
1	1	27	40	2	70
2	2	15	37	1	55
3	2	20	30	3	55
4	3	16	14		33
5	2	5	8	1	16
6		2	5		7
7		4	4		8
8	2		2		4
9		3	3		6
80		1			1
1		1			1
2		2	1		3
3			3		3
4					
5					
6					
7					
8					
9					
90					
TOTAL	67	200	228	17	
Samples	1	1	1	1	

Table 31
Albacore Length Frequencies
Newport--August 1950

Length (cm)	Area		Not Assigned	Total
	47-125	44-125		
50				
1				
2				
3			1	1
4				
5				
6			1	1
7			3	3
8			1	1
9			9	9
60	2	3	24	29
1	2	1	31	34
2		1	23	24
3	3	3	17	23
4	5	1	11	17
5	1	1	8	10
6			2	2
7	2	3	7	12
8		3	7	10
9	7	9	9	25
70	2	16	10	28
1	6	15	11	32
2	2	12	10	24
3	4	7	8	19
4		5	2	7
5	1	2	3	6
6	1	3		4
7		1	1	2
8		1		1
9			1	1
80				
1		1		1
2				
3				
4				
5				
6				
7				
8				
9				
90				
TOTAL	38	88	200	
Samples	1	1	1	

Table 32
 Albacore Length Frequencies
 Newport--September 1950

Length (cm)	Area 41-126
50	
1	
2	
3	1
4	3
5	3
6	1
7	2
8	11
9	9
60	17
1	28
2	32
3	12
4	10
5	8
6	3
7	6
8	4
9	11
70	9
1	10
2	11
3	7
4	
5	1
6	
7	2
8	1
9	
80	—
TOTAL	202
Samples	1

Table 33
Albacore Length Frequencies
Astoria--July 1951

Length (cm)	Area		Not Assigned <u>1/</u>	Total
	45-125	46-124		
50	1			1
1				
2				
3				
4	1			1
5			3	3
6	2	2	1	5
7	7	1	3	11
8	5	2	9	16
9	14	2	4	20
60	9	6	4	19
1	20	6	11	37
2	15	4	7	26
3	16	5	6	27
4	20	4	5	29
5	15	5	2	22
6	10	1		11
7	8	2	1	11
8	3	2		5
9	2	1	1	4
70	2	1	1	4
1	5	2		7
2	6	1		7
3		1		1
4		1		1
5				
6	2			2
7	5	3		8
8	2			2
9	4	1		5
80	1	4		5
1	3	2		5
2	3	5		8
3	8	2		10
4	2	1		3
5	1	3		4
6	1	1		2
7		2		2
8				
9		1		1
90	—	—	—	
TOTAL	193	74	50	
Samples	3	1	1	

1/ Shipped from Bay Center, Washington.

Table 34
Albacore Length Frequencies
Astoria--August 1951

Length (cm)	5° Area 45-49-125-129	Not Assigned	Total
50			
1			
2		2	2
3		2	2
4	3		3
5		1	1
6	3	6	9
7	5	16	21
8	2	17	19
9	7	27	34
60	9	20	29
1	7	37	44
2	10	35	45
3	5	16	21
4	9	18	27
5	3	19	22
6	1	8	9
7	5	9	14
8		7	7
9	2	3	5
70	1	7	8
1	3	8	11
2	3	7	10
3	3	6	9
4	4	3	7
5	1	4	5
6		1	1
7	1	3	4
8		4	4
9		3	3
80	1	3	4
1	1	3	4
2	3		3
3	1	1	2
4	2	2	4
5	2	1	3
6	3		3
7			
8			
9		1	1
90			
TOTAL	100	300	
Samples	1	3	

Table 35
Albacore Length Frequencies
Astoria--September 1951

Length (cm)	Area			Not Assigned		Total
	43-125	39-125	35-39-120-124			
50					<u>1/</u>	
1						
2						
3				2	1	3
4			1	1		2
5		2			3	5
6				2	2	4
7	1	1	1	7	3	13
8				7	8	15
9	3	2	2	14	13	34
60	2	7		19	8	36
1	3	9	3	10	10	35
2	5	7	10	14	9	45
3	17	8	14	12	14	65
4	7	11	18	18	15	69
5	11	4	16	15	4	50
6	5	3	11	4	3	26
7	4	8	4	10	2	28
8	3	3	5	3	1	15
9	2	2		2		6
70	2	4	4	6		16
1	1	10	2	4	1	18
2	2	5	3	1		11
3	6	4	2	5	1	18
4	2	2		1	1	6
5	3	2		7		12
6	3	1	1	4	1	10
7	3	1	1	1		6
8	1			1		2
9						
80	4	1				5
1						
2	4	1				5
3	1	1				2
4	2		2	1		5
5	2	1		1		4
6	1			1		2
7						
8						
9						
90						
TOTAL	100	100	100	173	100	
Samples	1	1	1	2	1	

1/ Shipped from Bay Center, Washington.

Table 36
Albacore Length Frequencies
Astoria--October 1951

Length (cm)	5 ⁰ Area 40-44-125-129
50	
1	
2	
3	
4	
5	
6	1
7	
8	1
9	2
60	2
1	8
2	13
3	19
4	19
5	14
6	4
7	3
8	3
9	2
70	3
1	2
2	
3	1
4	
5	
6	2
7	
8	
9	
80	
1	
2	
3	
4	
5	1
6	
7	
8	
9	
90	
TOTAL	100
Samples	1

Table 37
 Albacore Length Frequencies
 Newport--August 1951

Length (cm)	Area 45-125
50	
1	
2	
3	
4	1
5	2
6	1
7	1
8	6
9	4
60	6
1	11
2	8
3	10
4	11
5	8
6	3
7	2
8	4
9	2
70	3
1	4
2	
3	4
4	2
5	
6	
7	
8	2
9	1
80	
1	
2	1
3	1
4	1
5	
6	
7	1
8	
9	
90	
TOTAL	100
Samples	1

Table 38
 Albacore Length Frequencies
 Astoria--July 1952

Length (cm)	Area <u>45-125</u>
50	
1	
2	
3	
4	
5	
6	1
7	1
8	1
9	
60	2
1	8
2	5
3	18
4	17
5	22
6	13
7	19
8	19
9	17
70	24
1	22
2	32
3	20
4	20
5	16
6	10
7	7
8	6
9	5
80	2
1	1
2	1
3	3
4	
5	
6	
7	
8	
9	
90	
1	1
2	
3	
4	
5	
TOTAL	313
Samples	2

Table 39
Albacore Length Frequencies
Astoria--August 1952

Length (cm)	Area 41-125	Shipped from		Total
		Designated Points		
		Newport, Oreg.	Eureka Calif.	
50				
1				
2		1		1
3		1		1
4		2		2
5			1	1
6		3	4	7
7			3	3
8	1	7	3	11
9	1	6	9	16
60	1	15	16	32
1		29	29	58
2	2	29	46	77
3	2	53	36	91
4		39	41	80
5	4	37	45	86
6		28	34	62
7	3	26	32	61
8	1	15	13	29
9	1	17	15	33
70	3	12	12	27
1	4	14	14	32
2		12	11	23
3		6	9	15
4		8	2	10
5		4	7	11
6		1	3	4
7		4	2	6
8		1	1	2
9		1	1	2
80			3	3
1				
2		1		1
3				
4		2		2
5		1		1
6				
7				
8				
9				
90				
TOTAL	23	375	392	
Samples	1	3	2	

Table 40
Albacore Length Frequencies
Astoria--September 1952

Length (cm)	Area			Not Assigned	Total
	41-125	41-126	40-44- 125-129		
50					
1	1				1
2	4	3	1		8
3	5	7	2		14
4	5	3	3		11
5	2	4		1	7
6	4	5	1	1	11
7	6	7	3	2	18
8	6	11	1	2	20
9	11	11	4	5	31
60	15	23	2	7	47
1	30	38	5	10	83
2	39	59	8	11	117
3	29	65	13	9	116
4	40	62	9	12	123
5	24	53	12	5	94
6	22	44	10	11	87
7	8	25	3	7	43
8	15	10	4	1	30
9	11	7	3	3	24
70	7	7	3	1	18
1	8	14	2	4	28
2	12	11	2	1	26
3	9	3	2	2	16
4	4	7	2	1	14
5	4	4	1		9
6	1	2	1	1	5
7	1	4		2	7
8		2	1		3
9	1	4			5
80	1				1
1					
2		1		1	2
3					
4		1			1
5		1			1
6			1		1
7		1			1
8		1			1
9			1		1
90					
TOTAL	325	500	100	100	
Samples	2	5	1	1	

Table 41
 Albacore Length Frequencies
 Astoria--September 1952

Length (cm)	Shipped from Designated Points			Total
	Newport Oreg.	Eureka Calif.	Ft. Bragg Calif.	
50				
1		2		2
2	1	5		6
3	3	8	1	12
4	3	7	1	11
5	1	5	2	8
6	1	8	1	10
7	4	7	3	14
8	6	18		24
9	6	29	3	38
60	12	28	6	46
1	14	64	6	84
2	19	60	9	88
3	28	72	12	112
4	29	55	8	92
5	34	55	12	101
6	21	34	7	62
7	11	32	4	47
8	11	24	4	39
9	5	18	1	24
70	7	19	2	28
1	6	18	1	25
2	6	18	4	28
3	6	24	1	31
4	3	12	3	18
5	4	12	1	17
6	1	9	4	14
7	4	4	1	9
8	2	4	2	8
9		5		5
80		5		5
1		2		2
2	1	1		2
3				
4			1	1
5		1		1
6	1			1
7		3		3
8		1		1
9		1		1
90		1		1
1		1		1
2				
3				
4				
5				
TOTAL	250	672	100	
Samples	2	5	1	

Table 42
Albacore Length Frequencies
Astoria--October 1952

Length (cm)	Area		Total
	39-125	38-124	
55	2		2
6	3		3
7	4		4
8	2	1	3
9	3	1	4
60	1	6	7
1	7	8	15
2	6	9	15
3	14	19	33
4	4	21	25
5	7	24	31
6	12	24	36
7	5	20	25
8	8	15	23
9	2	14	16
70	2	10	12
1		13	13
2	3	7	10
3	3	11	14
4	3	4	7
5	2	6	8
6	2	13	15
7	2	7	9
8		5	5
9	1	2	3
80	1	8	9
1		4	4
2		5	5
3		1	1
4			
5		1	1
6			
7	1		1
8			
9		1	1
90			
1			
2			
3			
4			
5		1	1
6			
7			
8			
9			
100	<u> </u>	<u> 1</u>	1
TOTAL	100	262	
Samples	1	3	

Table 43
 Albacore Length Frequencies
 Astoria--August 1953

Length (cm)	Area 36-123
50	
1	
2	
3	3
4	4
5	2
6	3
7	5
8	
9	
60	2
1	2
2	3
3	3
4	18
5	22
6	10
7	9
8	2
9	2
70	
1	1
2	
3	
4	1
5	
6	2
7	2
8	1
9	
80	1
1	
2	
3	2
4	
5	
6	
7	
8	
9	
90	
TOTAL	100
Samples	1

Table 44
Albacore Length Frequencies
Astoria--September 1953

Length (cm)	Area		Not Assigned ^{1/}	Total
	35-124	35-39- 120-124		
50	1			1
1	2			2
2	13	1		14
3	20			20
4	32		1	33
5	39	6	3	48
6	22	4	3	29
7	17	4	4	25
8	12	1	3	16
9	2	2	1	5
60	2	3	1	6
1	2	2	4	8
2		5	3	8
3	3	4	14	21
4	8	16	18	42
5	4	9	10	23
6	5	15	15	35
7	5	8	7	20
8	3	7	7	17
9		3	3	6
70		2		2
1	1	2		3
2	1	1		2
3		2		2
4				
5				
6				
7				
8	1			1
9			1	1
80	1		1	2
1		1		1
2		1		1
3	1	1		2
4			1	1
5				
6				
7				
8	1			1
9	2			2
90				
TOTAL	200	100	100	
Samples	2	1	1	

^{1/} Shipped from Newport.

Table 45
Albacore Length Frequencies
Astoria--October 1953

Length (cm)	Area 34-125	Not Assigned 1/	Total
50			
1		2	2
2		4	4
3		17	17
4		23	23
5		16	16
6		18	18
7		5	5
8		3	3
9	1	1	2
60	2	2	4
1			
2			
3			
4		1	1
5	2	3	5
6	3	1	4
7	4	1	5
8	4	2	6
9	2	1	3
70	2		2
1	3		3
2			
3	2		2
4	4		4
5			
6	3		3
7			
8	3		3
9	4		4
80	2		2
1	2		2
2	2		2
3	5		5
4	2		2
5	2		2
6	2		2
7	3		3
8	1		1
9			
90			
1	1		1
2			
3			
4			
5			
6			
7	1		1
TOTAL	62	100	
Samples	1	1	

1/ Shipped from Newport.

Table 46
Albacore Length Frequencies
Astoria--September 1954

Length (cm)	Area		Total
	33-120	South of Pt. Delgada	
50			
1	8	4	12
2	26	5	31
3	26	4	30
4	26	4	30
5	15	3	18
6	5	3	8
7	7	2	9
8	7	2	9
9	4	2	6
60	2		2
1	6	2	8
2	2		2
3	3	2	5
4	4	5	9
5	8	6	14
6	9	10	19
7	11	5	16
8	11	4	15
9	6	3	9
70	8	4	12
1	1	1	2
2			
3	1		1
4			
5	2		2
6			
7			
8			
9			
80			
1	1	1	2
2			
3			
4			
5			
6			
7	1		1
8			
9			
90			
TOTAL	200	72	
Samples	1	1	

Table 47
 Albacore Length Frequencies
 Astoria--October 1954

Length (cm)	Area
	South of Pt. Delgada
50	1
1	
2	3
3	5
4	4
5	5
6	4
7	3
8	4
9	2
60	1
1	1
2	2
3	2
4	6
5	8
6	16
7	11
8	12
9	6
70	5
1	
2	
3	1
4	
5	
6	
7	
8	1
9	1
80	
1	
2	
3	1
4	1
5	
6	
7	
8	
9	
90	
TOTAL	106
Samples	1

Table 48
Albacore Length Frequencies
Astoria--September 1955

Length (cm)	Area			Total
	36-124	31-122	South of Pt. Delgada	
50				
1		2		2
2		1	3	4
3		2	3	5
4		5	3	8
5		1		1
6	2	2		4
7	1	1		2
8		6	1	7
9	1	16	9	26
60	6	26	5	37
1	14	40	16	70
2	21	45	25	91
3	24	28	10	62
4	15	10	10	35
5	6	7	5	18
6	4	3	4	11
7				
8	1		1	2
9	2		1	3
70	2	1	2	5
1	1			1
2				
3				
4				
5			1	1
6				
7				
8		2	1	3
9				
80		2		2
1				
2				
3				
4				
5				
6				
7				
8				
9				
90				
TOTAL	100	200	100	
Samples	1	2	1	

Table 49
Albacore Length Frequencies
Astoria--September and October 1955

Length (cm)	Not Assigned 1/
50	
1	
2	6
3	14
4	10
5	18
6	7
7	3
8	4
9	20
60	51
1	96
2	110
3	100
4	88
5	24
6	14
7	9
8	3
9	1
70	3
1	1
2	3
3	
4	2
5	1
6	3
7	
8	3
9	1
80	1
1	1
2	1
3	2
4	
5	
6	
7	
8	
9	
90	
TOTAL	600
Samples	6

1/ Shipped from San Francisco.

Table 50
 Albacore Length Frequencies
 Astoria--October 1955

Length (cm)	Area				Total
	36-125	37-125	35-124	36-124	
50					
1					
2					
3	2		6	3	11
4	2	1	2	2	7
5	2		5		7
6	4			1	5
7	1			2	3
8	2		5	2	9
9	2		2	1	5
60	4	3	9	5	21
1	12	9	16	12	49
2	30	20	17	18	85
3	16	22	19	20	77
4	11	14	11	17	53
5	6	16	5	8	35
6	1	10		4	15
7	2	3	1	1	7
8		1		2	3
9		1			1
70	1				1
1					
2					
3					
4					
5					
6					
7				1	1
8	1				1
9			1		1
80	1				1
1			1	1	2
2					
3					
4					
5					
6					
7					
8					
9					
90					
TOTAL	100	100	100	100	
Samples	1	1	1	1	

Table 51
 Albacore Length Frequencies
 Astoria--August 1956

Length (cm)	Area <u>44-126</u>
50	
1	
2	
3	
4	
5	
6	1
7	1
8	
9	
60	1
1	1
2	
3	2
4	1
5	12
6	9
7	8
8	7
9	6
70	4
1	3
2	2
3	7
4	9
5	10
6	8
7	3
8	4
9	
80	<u>1</u>
TOTAL	100
Samples	1

Table 52
 Albacore Length Frequencies
 Tagged & Released at Sea--August 1956

Length (cm)	Area
	North of Pt. Delgada
50	
1	1
2	1
3	1
4	
5	2
6	
7	
8	
9	
60	
1	2
2	1
3	1
4	8
5	11
6	9
7	11
8	7
9	3
70	1
1	1
2	
3	3
4	1
5	5
6	1
7	
8	
9	
80	
TOTAL	70
Samples	2

Table 53
Albacore Length Frequencies
Astoria--September 1956

Length (cm)	Area				Total
	45-126	45-49-125-129	44-126	44-127	
50					
1				2	2
2	2			1	3
3	3	1	2	1	7
4	7	2		2	11
5	3	6	4	3	16
6	4	1	1	1	7
7	7	2	1		10
8		4	1		5
9	1	1	1		3
60	1		2	1	4
1	1		5	1	7
2	10	4	17	6	37
3	15	5	28	5	53
4	26	10	40	13	89
5	44	15	31	18	108
6	51	19	33	15	118
7	50	14	22	14	100
8	32	3	3	6	44
9	19	4	2	4	29
70	8	2			10
1	4	1	1		6
2	2	2	3	1	8
3	2		2		4
4			1	1	2
5	1	1		1	3
6	3			3	6
7	1			1	2
8	1	1			2
9		2			2
80	1				1
1					
2					
3					
4					
5	1				1
6					
7					
8					
9					
90					
TOTAL	300	100	200	100	
Samples	3	1	2	1	

Table 54
 Albacore Length Frequencies
 Newport--August 1956

Length (cm)	5° Area 45-49-125-129
50	
1	
2	
3	
4	2
5	2
6	4
7	2
8	1
9	
60	
1	1
2	
3	3
4	8
5	16
6	24
7	16
8	6
9	5
70	4
1	
2	2
3	1
4	1
5	1
6	
7	1
8	
9	
80	
TOTAL	100
Samples	1

Table 55
Albacore Length Frequencies
Newport--September 1956

Length (cm)	Area			Total
	45-49-125-129	43-125	44-126	
50				
1				
2				
3				
4				
5	1		1	2
6		1		1
7		2		2
8	1	3		4
9				
60			1	1
1		1	1	2
2	2	2	2	6
3	5	2	4	11
4	8	8	10	26
5	18	14	12	44
6	25	16	20	61
7	17	18	23	58
8	13	13	11	37
9	7	8	5	20
70	1	4	5	10
1	1			1
2		1		1
3		1	1	2
4	1	2		3
5			1	1
6		2	2	4
7		1	1	2
8		1		1
9				
80	—	—	—	
TOTAL	100	100	100	
Samples	1	1	1	

Table 56
Albacore Length Frequencies
Astoria--August 1957

Length (cm)	Area							North of Pt. Delgada	Not Assigned	Total
	46-125	47-125	45-49- 125-129	45-124	46-124	45-49- 120-124	40-44- 125-129			
50	1			1						2
1	1			2	2					5
2				9	7	2				18
3	2	2		14	24	1		1		44
4	3			12	23	4		2	1	45
5	1	2		8	33	2				46
6				5	15	3		1		24
7		3	1	3	9	5		1		22
8		3	1	5	8	1	1		1	20
9	2	5		6	18	2	2	1	4	40
60	4	3	1	4	8	7		1	5	33
1	3	7	6	9	21	9	3	6	5	69
2	10	19	6	9	37	9	14	3	6	113
3	23	41	15	15	77	40	12	10	12	245
4	30	66	25	27	128	56	13	17	15	377
5	28	78	36	39	140	63	13	35	17	449
6	24	43	46	23	98	34	10	19	13	310
7	11	30	33	9	37	7	3	11	11	152
8	3	8	10	4	14	6	1	2		48
9	3	7	6	1	4		2		3	26
70	2	2	1	1	1		2	2		11
1	1	2	5	1			1	1		11
2	5	3	7	1		2	2	2	1	23
3	13	2	9	2	1	1	2	2	2	34
4	28	1	17	5	8	2	2	3	1	67
5	30	8	15	6	11	2	2	4		78
6	46	5	25	10	14		3	3		106
7	25	1	16	8	18		5	5	1	79
8	17	2	16	8	9	4	4	6	2	68
9	12	1	6	7	4			5		35
80	7	2	5		5	1	2	3		25
1	5	2		1	2	1	1	3		15
2	1	2	1	3				1		8
3	2			1						3
4					1					1
5				1						1
6										
7										
8										
9										
90										
TOTAL	343	350	309	260	777	264	100	150	100	
Samples	4	3	3	3	6	3	1	2	1	

Table 57
Albacore Length Frequencies
Astoria--September 1957

Length (cm)	Area			Not Assigned	Total
	47-125	40-125	42-125		
50					
1				1	1
2			3	8	11
3	6		6	17	29
4	8		7	14	29
5	4	1	5	9	19
6	4	1	9	8	22
7	8	1	1	3	13
8	13		5	1	19
9	13	3	1	1	18
60	22	2	6	3	33
1	25	2	7	3	37
2	47	10	5	5	67
3	80	19	11	8	118
4	142	46	18	6	212
5	205	76	27	22	330
6	204	74	37	15	330
7	142	39	28	10	219
8	53	14	14	2	83
9	30	10	2	3	45
70	7		2	1	10
1	6	1			2
2	5	2	1	1	9
3	4	1		1	6
4	6	2		1	9
5	14	2	1	3	20
6	17	3		3	23
7	15	3	3	4	25
8	17	3	2	2	24
9	14	5	1	4	24
80	8	3		2	13
1	10	4	1	1	16
2	3				3
3	1			1	2
4				1	1
5	1				1
6					
7					
8					
9					
90					
TOTAL	1,134	327	203	164	
Samples	6	1	1	1	

Table 58
 Albacore Length Frequencies
 Astoria--October 1957

Length (cm)	Area			Total
	41-125	42-125	40-44-125-129	
50				
1				
2				
3				
4				
5				
6			1	1
7				
8			1	1
9			2	2
60			7	7
1	1	2	11	14
2	1	2	14	17
3	5	3	10	18
4	10	5	20	35
5	11	11	28	50
6	16	19	35	70
7	8	21	18	47
8	10	7	9	26
9	6	8	8	22
70	1	2	2	5
1		1		1
2	1			1
3				
4	1			1
5				
6	1			1
7	2			2
8	1	1		2
9	3			3
80			1	1
1		2		2
2	2			2
3				
4				
5				
6				
7				
8				
9				
90				
TOTAL	80	84	167	
Samples	1	1	1	

Table 59
Albacore Length Frequencies
Newport--July and August 1957

Length (cm)	July	August		Total
	Area	Area		
	47-126	45-124	44-124	
50				
1	1			1
2				
3		7	1	8
4		2	1	3
5		2		2
6		1	1	2
7		3		3
8	1		2	3
9	1	3	1	5
60		7	5	12
1	3	6	5	14
2	8	26	4	38
3	8	47	21	76
4	24	57	26	107
5	26	57	39	122
6	18	63	36	117
7	6	30	26	62
8		19	7	26
9	1	9	2	12
70		2	1	3
1		3	2	5
2	1	5		6
3	1	7	1	9
4	1	18	8	27
5		20	3	23
6		25	9	34
7		37	13	50
8		35	11	46
9		17	6	23
80		8	10	18
1		9	2	11
2		3	2	5
3		2		2
4				
5				
6				
7				
8				
9				
90				
TOTAL	100	530	245	
Samples	1	6	3	

Table 60
Albacore Length Frequencies
Newport--September 1957

Length (cm)	Area		Total
	40-125	41-125	
50			
1			
2			
3			
4			
5		1	1
6	1		1
7			
8	1	1	2
9	1	3	4
60	2	2	4
1	3	4	7
2	9	5	14
3	10	11	21
4	11	13	24
5	25	20	45
6	26	15	41
7	11	8	19
8	1	4	5
9	1	4	5
70		1	1
1		1	1
2			
3			
4		1	1
5			
6	1	2	3
7	1		1
8			
9		3	3
80		1	1
1			
2			
3			
4			
5			
6			
7			
8			
9			
90			
TOTAL	104	100	
Samples	1	1	

Table 61
 Albacore Length Frequencies
 Tagged & Released at Sea--July 1957

Length (cm)	Area		Total
	40-44- 125-129	40-44- 130-134	
50			
1			
2	1		1
3			
4	4	7	11
5	4	1	5
6	1	1	2
7	2		2
8			
9	1		1
60	1		1
1	3		3
2	1		1
3	6		6
4	18	1	19
5	19		19
6	15		15
7	4		4
8	3		3
9	2		2
70			
1	1		1
2			
3			
4	1		1
5	1		1
6		1	1
7			
8	2		2
9	1		1
80			
TOTAL	91	11	
Samples	1	1	

Table 62
Albacore Length Frequencies
Astoria--July 1958

Length (cm)	Area					Total
	45-125	43-126	44-127	40-44-125-129	34-122	
50				1		1
1						
2			4	4		8
3			2	1		3
4			1	1		2
5			1	1	1	3
6						
7						
8			1			1
9			3	1	1	5
60		3	2	1	4	10
1		3	5	6	1	15
2	3	3	7	6	3	22
3	4	8	8	10	4	34
4	2	13	13	18	4	50
5	8	25	42	19	3	97
6	11	25	33	28	10	107
7	6	24	37	20	7	94
8	7	16	19	13	8	63
9	6	12	10	10	1	39
70	2	9	6	11		28
1		4	1	3	3	11
2		1	2			3
3		1	1			2
4						
5			1			1
6						
7		1	1	1		3
8				1		1
9	1					1
80				1		1
1		1				1
2						
3						
4						
5						
6						
7						
8						
9						
90						
TOTAL	50	149	200	157	50	
Samples	1	2	3	2	1	

Table 63
Albacore Length Frequencies
Astoria--August 1958

Length (cm)	Area							North of Pt. Delgada	Total
	45-125	45-126	46-125	47-125	47-126	40-124	44-126		
50									
1				1					1
2				2				5	7
3			1	4	1			2	8
4			1				1	1	3
5				2				1	3
6								1	1
7								1	1
8								1	1
9			1	2			1	2	6
60		4			1		6	1	12
1		6	1	1			1	4	13
2		3		6	1		2	7	19
3	5	8	3	10	5		8	11	50
4	7	20	6	3	8		7	12	63
5	7	26	7	15	6		13	17	91
6	21	21	5	17	5	1	17	14	101
7	9	22	8	26	7	2	16	20	110
8	8	19	8	19	7	1	13	10	85
9	13	12	3	7	4	5	6	15	65
70	6	6	4	10	1	7	6	10	50
1	4	4		5	1	3	1	6	24
2	3			3				1	7
3	2		1	3		2			8
4	1		1			1			3
5	1	1							2
6	6					1		1	8
7	8			1	1	1			11
8	6			5		6			17
9	9	1		2	1	7		1	21
80	9			1		6	2	1	19
1	6			3		2		1	12
2	6	1		3	1	4		2	17
3	7							1	8
4	4							1	5
5	2					1			3
6									
7									
8									
9									
90									
TOTAL	150	154	50	151	50	50	100	150	
Samples	3	3	1	3	1	1	2	3	

Table 64
Albacore Length Frequencies
Astoria--September 1958

Length (cm)	Area				Total
	45-125	41-125	42-126	44-125	
50					
1	1				1
2	2				2
3	12	1			13
4	36	3	2		41
5	51	3	10		64
6	37	1	9		47
7	22				22
8	8		1		9
9	2				2
60	1		1		2
1	2				2
2	7		1		8
3	11	1	7		19
4	16	2	8	5	31
5	24	7	16	1	48
6	36	5	13	4	58
7	49	5	27	6	87
8	42	5	16	8	71
9	55	6	11	10	82
70	31	3	7	2	43
1	24	2	8	3	37
2	8	2	3	7	20
3	6		2	1	9
4	1				1
5					
6	2				2
7	1	1			2
8			1		1
9	5				5
80	7		1		8
1	7	1		1	9
2	3	1	2	1	7
3	3	1	1		5
4	4		2	1	7
5	4				4
6			1		1
7	1				1
8					
9					
90					
TOTAL	521	50	150	50	
Samples	9	1	3	1	

Table 65
Albacore Length Frequencies
Astoria--October 1958

Length (cm)	Area			Total
	45-125	48-125	46-124	
50				
1				
2	1			1
3	2	2		4
4	2	3		5
5	7		1	8
6	2			2
7	2	2		4
8	2			2
9				
60				
1			1	1
2	1			1
3		1		1
4	1	2	2	5
5	5	2	2	9
6	7	3	6	16
7	10	3	5	18
8	11	5	10	26
9	8	9	3	20
70				
1	8	7	7	22
2	5	3	4	12
3	5	2	1	8
4	1			1
5	3			3
6			1	1
7		1		1
8	1			1
9	4	2	1	7
80				
1	2			2
2	1	1	2	4
3	2	1		4
4	3			4
5	2		2	4
6	1			1
7				
8				
9				
90	1			1
TOTAL	100	50	50	
Samples	2	1	1	

Table 66
 Albacore Length Frequencies
 Newport--August 1958

Length (cm)	Area <u>44-126</u>
60	
1	1
2	3
3	3
4	3
5	4
6	12
7	12
8	4
9	5
70	1
1	
2	1
3	
4	
5	
6	
7	
8	
9	
80	
1	
2	1
3	
4	
5	
6	
7	
8	
9	
90	
TOTAL	50
Samples	1

Table 67
 Albacore Length Frequencies
 Astoria--July 1959

Length (cm)	Area		Total
	45-125	North of Pt. Delgada	
60			
1		1	1
2	1	1	2
3	7	5	12
4	21	23	44
5	35	19	54
6	26	22	48
7	18	14	32
8	13	8	21
9	3	3	6
70	1		1
1	3		3
2			
3	1		1
4			
5	3		3
6			
7	6		6
8	5		5
9	1	1	2
80	2		2
1		2	2
2		1	1
3	2		2
4	1		1
5	1		1
6			
7			
8			
9			
90			
TOTAL	150	100	
Samples	3	2	

Table 68
Albacore Length Frequencies
Astoria--August 1959

Length (cm)	Area								Total
	45-125	45-126	46-125	47-125	45-49- 125-129	41-125	44-126	40-44- 125-129	
50									
1									
2									
3		1							1
4			1						1
5			3						3
6	1							1	2
7									
8							1		1
9		1	1			1		2	5
60									
1			1		2				3
2		3	6	2	2	1	2	1	17
3		3	12	4	16	2	3	1	41
4	6	8	36	10	31	5	6	8	110
5	16	7	67	21	58	3	8	10	190
6	11	11	94	21	56	12	18	13	236
7	9	7	65	26	32	14	7	7	167
8	2	7	31	8	20	6	1	5	80
9	3		13	4	12	3		2	37
70	1		10		3	2	1		17
1			1		2		1		4
2			1						1
3			1						1
4					1				1
5				1	1				2
6					2				2
7				1	2	1	1		5
8				1	2		1		4
9			1		3				4
80			2		2				4
1			1		3				4
2	1	1	1						3
3			2	1					3
4		1							1
5									
6									
7									
8									
9									
90									
TOTAL	50	50	350	100	250	50	50	50	
Samples	1	1	7	2	5	1	1	1	

Table 69
Albacore Length Frequencies
Astoria--September 1959

Length (cm)	Area				Total
	45-125	46-125	45-49-125-129	44-125	
55	1	1			2
6	1	1	1		3
7	1		1		2
8		3	1		4
9		2	1		3
60			2		2
1		5	4	1	10
2		1	1		2
3		11	1		12
4	7	8	7	1	23
5	12	13	7	3	35
6	18	15	7	8	48
7	26	16	7	4	53
8	16	10	3	4	33
9	10	10	3	4	27
70	1	4	3		8
1	3		1	1	5
2				2	2
3				1	1
4				1	1
5					
6					
7					
8	1				1
9				3	3
80	1			3	4
1				2	2
2	1			3	4
3				4	4
4				2	2
5	1			1	2
6				1	1
7					
8					
9					
90					
1					
2				1	1
3					
4					
5					
TOTAL	100	100	50	50	
Samples	2	2	1	1	

Table 70
Albacore Length Frequencies
Newport--July 1959

Length (cm)	Area				Total
	45-125	45-49- 125-129	44-125	North of Pt. Delgada	
50					
1					
2					
3					
4					
5					
6					
7					
8	1		1		2
9			1		1
60	1				1
1	1	1			2
2	2	6	1	4	13
3	19	17	3	3	42
4	17	25	8	17	67
5	29	47	10	31	117
6	30	39	10	16	95
7	22	27	5	9	63
8	8	19	2	7	36
9	3	6	1	5	15
70	1	2		1	4
1	1	1			2
2				1	1
3	1	1		1	3
4			2		2
5			2		2
6			1		1
7	2	1	1	1	5
8	1	1			2
9	2	6	2	1	11
80	3	1			4
1	2			1	3
2	3			1	4
3					
4	1				1
5				1	1
6					
7					
8					
9					
90					
TOTAL	150	200	50	100	
Samples	3	4	1	2	

Table 71
Albacore Length Frequencies
Newport--August 1959

Length (cm)	Area 45-125
50	
1	
2	
3	
4	
5	
6	
7	
8	
9	1
60	1
1	4
2	2
3	9
4	15
5	17
6	19
7	12
8	10
9	4
70	
1	1
2	
3	
4	
5	1
6	
7	
8	1
9	1
80	1
1	
2	1
3	
4	
5	
6	
7	
8	
9	
90	
TOTAL	100
Samples	2

Table 72
 Albacore Length Frequencies
 Coos Bay--July 1959

Length (cm)	Area			Total
	45-126	44-126	North of Pt. Delgada	
50				
1				
2				
3				
4				
5				
6				
7				
8				
9		1		1
60				
1				
2	2			2
3	6	4	3	13
4	14	6	9	29
5	11	5	20	36
6	9	12	7	28
7	6	6	2	14
8	2	3	4	9
9		1	1	2
70				
1				
2				
3		1		1
4		1		1
5		1	1	2
6		2	1	3
7		1		1
8		1		1
9		1	1	2
80			1	1
1		2		2
2				
3				
4		1		1
5		1		1
6				
7				
8				
9				
90				
TOTAL	50	50	50	
Samples	1	1	1	

Table 73
 Albacore Length Frequencies
 Astoria--July 1960

Length (cm)	Area		Total
	45-125	36-125	
60			
1			
2	5		5
3	7	3	10
4	20	6	26
5	24	9	33
6	19	7	26
7	13	2	15
8	5		5
9	3		3
70	5	1	6
1	6		6
2	7	1	8
3	18	1	19
4	22	7	29
5	25	3	28
6	46	5	51
7	27		27
8	28	2	30
9	27	1	28
80	7	2	9
1	5		5
2	3		3
3	1		1
4			
5			
6			
7			
8			
9			
90			
TOTAL	323	50	
Samples	7	1	

Table 74
Albacore Length Frequencies
Astoria--August 1960

Length (cm)	Area						Total
	45-125	45-126	46-125	47-125	45-124	44-126	
60							
1							
2	3						1
3	7	1		2	1		11
4	20		2		13	1	1
5	38	1	8	4	16	2	6
6	42		4	5	33	2	
7	35	4	8	7	26	4	4
8	19		9	9	16	3	2
9	21	2	5	5	9	2	
70	16		4	2	4	1	1
1	11		2	2	5		
2	24	1	5		3		
3	39		7	1	5	1	1
4	66	3	14	1	13	1	3
5	76	5	11	1	19	3	2
6	98	5	19	4	15	5	4
7	96	8	15	1	25	10	3
8	64	10	15	2	15	7	9
9	50	4	7	1	12	4	6
80	33	4	11	1	11	1	5
1	28	1	2	1	7	1	
2	8	1	2	1	2	2	
3	3						2
4							
5	2						
6	1						
7							
8							
9							
90							
TOTAL	800	50	150	50	250	50	50
Samples	12	1	3	1	5	1	1

Table 75
Albacore Length Frequencies
Astoria--September 1960

Length (cm)	Area					Total
	45-125	46-125	45-124	40-125	39-125	
60						
1						
2				5		5
3	1			14	1	16
4			1	20	1	22
5	3	4	3	50	5	65
6	9	7	10	68	11	105
7	15	8	6	63	5	97
8	11	7	19	27	5	69
9	11	2	4	17	6	40
70	8	2		6		16
1	3	2		3	2	10
2	2	1	1	5		9
3			2	3	1	6
4	1	1		1	3	6
5	2	2		1	2	7
6	4	3	1	4	2	14
7	9	2	1	2	1	15
8	7	4	1	2	1	15
9	3	3	1	3		10
80	6	2		2	1	11
1	2			1	1	4
2	2			2	1	5
3	1			1		2
4					1	1
5						
6						
7						
8						
9						
90						
TOTAL	100	50	50	300	50	
Samples	2	1	1	6	1	

Table 76
 Albacore Length Frequencies
 Astoria--October 1960

Length (cm)	Area 38-125
60	
1	
2	
3	
4	4
5	9
6	10
7	12
8	7
9	3
70	2
1	
2	1
3	
4	
5	1
6	
7	
8	
9	
80	<u>1</u>
TOTAL	50
Samples	1

Table 77
 Albacore Length Frequencies
 Newport--August 1960

Length (cm)	Area 45-124
60	
1	
2	
3	
4	
5	
6	1
7	
8	4
9	
70	
1	1
2	1
3	2
4	1
5	1
6	2
7	9
8	5
9	1
80	10
1	2
2	
3	
4	
5	
6	
7	
8	
9	1
90	
TOTAL	41
Samples	1

Table 78
 Albacore Length Frequencies
 Coos Bay--September 1960

Length (cm)	Area Unknown
60	
1	
2	
3	
4	4
5	7
6	14
7	17
8	10
9	8
70	2
1	3
2	1
3	1
4	2
5	5
6	8
7	6
8	3
9	1
80	6
1	
2	1
3	1
4	
5	
6	
7	
8	
9	
90	
TOTAL	100
Samples	2

Table 79
Albacore Length-Frequency Distributions
in Per Cent by Month and Year

Length (cm)	1939			1940				1941		
	Aug.	Sept.	Oct.	July	Aug.	Sept.	Oct.	July	Aug.	Sept.
49				0.0				0.0		
50				0.1				0.3	0.0	
1				0.1				0.6	0.3	
2			0.0	0.2	0.0	0.0	0.0	0.3	1.1	
3			0.2	0.4	0.1	0.4	0.7	0.9	1.8	
4	0.0	0.0	0.0	0.2	0.2	1.2	0.0	0.6	1.4	0.0
5	0.1	0.1	0.0	0.6	0.2	0.0	0.0	0.4	2.1	0.6
6	0.0	0.0	0.2	1.1	0.3	0.4	1.4	1.5	1.7	0.6
7	0.3	0.0	0.4	2.9	0.5	0.0	0.7	1.7	1.7	0.6
8	0.6	0.1	0.2	3.0	0.9	0.8	1.4	1.3	2.0	0.0
9	0.6	0.2	0.4	4.9	1.1	0.4	0.7	1.9	2.4	0.0
60	0.8	0.4	0.8	5.7	2.4	1.2	0.7	1.6	1.8	0.6
1	1.6	0.7	0.2	4.6	1.8	1.2	0.7	1.3	1.8	0.0
2	5.0	1.8	1.8	8.9	2.0	0.8	0.0	2.9	2.3	1.2
3	3.2	2.3	1.6	8.0	3.9	1.2	2.1	8.3	4.0	1.2
4	6.2	2.7	4.1	9.4	3.8	2.3	0.7	10.1	8.3	3.1
5	1.4	1.6	2.0	3.9	4.7	1.6	0.0	12.8	10.5	2.5
6	1.5	1.8	4.5	4.6	4.3	3.5	2.1	13.1	10.8	6.2
7	0.8	0.8	1.4	3.0	2.8	2.0	3.4	8.6	10.5	6.2
8	0.6	0.6	0.8	1.4	3.8	2.3	1.4	5.7	6.5	8.1
9	2.7	1.8	0.6	3.6	4.3	2.7	0.7	3.1	4.8	2.5
70	1.9	1.7	0.8	2.7	4.1	1.6	2.8	1.7	3.6	8.1
1	9.8	9.1	3.9	4.2	4.7	3.5	2.1	2.2	1.8	4.3
2	7.8	6.1	2.9	4.0	8.2	1.6	0.7	1.9	1.8	2.5
3	15.5	16.5	7.4	7.3	7.4	6.3	4.1	2.0	3.2	2.5
4	14.0	17.2	14.6	5.7	10.7	5.1	2.8	2.2	1.7	3.7
5	6.0	7.9	8.4	3.5	8.0	6.6	6.9	1.7	1.6	3.7
6	9.9	14.1	16.4	2.8	5.9	10.5	8.3	2.5	2.4	2.5
7	3.3	3.7	5.9	1.4	4.8	9.4	9.0	1.3	2.1	5.6
8	3.9	5.6	10.5	0.8	2.7	9.4	9.0	2.3	1.7	3.7
9	0.6	1.1	2.7	0.4	1.8	7.4	9.7	1.2	0.8	2.5
80	0.9	1.3	2.7	0.2	1.0	5.9	6.9	0.9	1.2	5.0
1	0.4	0.6	2.0	0.0	1.1	3.5	4.1	1.0	0.7	4.3
2	0.3	0.1	0.4	0.1	0.5	2.3	3.4	0.4	0.3	3.7
3	0.4	0.1	1.0	0.2	0.5	1.6	2.8	0.7	0.2	7.5
4	0.0	0.0	0.4	0.0	0.5	0.8	2.1	0.1	0.3	2.5
5		0.2	0.4	0.1	0.5	0.4	2.8	0.3	0.4	0.0
6		0.0	0.6	0.1	0.4	0.4	2.8	0.3	0.2	1.9
7		0.0	0.0	0.1	0.2	0.0	2.1	0.1	0.0	1.9
8		0.1		0.0	0.1	1.2	0.0	0.0		0.6
9		0.0			0.0	0.4	0.7			0.0
90		0.0				0.4	0.7			
1		0.1				0.0	0.0			
2		0.0								
3										
4										
5										
No. of Fish Sampled:	1,168	1,590	572	1,620	1,102	256	145	686	1,043	161

Table 79 (Continued)

Length (cm)	1942			1947				1948		
	July	Aug.	Sept.	July	Aug.	Sept.	Oct.	July	Aug.	Sept.
49	0.0	0.0		0.0					0.0	0.0
50	0.1	0.1		0.1		0.0		0.0	0.2	0.8
1	0.0	T		0.1		0.1		0.2	0.0	0.6
2	0.9	0.1		0.3	0.0	0.1	0.0	0.0	0.0	1.7
3	0.3	0.3		0.1	0.3	0.4	0.3	0.1	0.0	1.5
4	0.6	0.2		0.1	0.5	0.8	0.0	0.2	0.2	1.5
5	1.6	0.3		0.5	0.3	0.4	0.7	0.7	0.7	1.5
6	1.2	0.6		0.6	0.5	0.3	2.0	1.6	1.4	2.9
7	1.6	1.5	0.0	1.5	0.5	0.7	1.3	2.1	2.0	2.5
8	4.3	2.2	0.3	2.2	1.2	0.6	0.7	3.8	3.4	5.1
9	6.8	3.5	0.6	3.3	1.7	1.6	2.5	5.5	4.2	5.8
60	6.2	5.9	1.9	5.4	2.5	2.1	2.2	9.2	8.6	8.3
1	10.6	7.5	3.8	7.4	3.8	2.8	4.5	14.1	8.6	9.5
2	14.1	11.4	6.4	13.6	6.1	3.1	5.0	16.0	12.5	11.8
3	13.5	14.2	8.9	14.9	12.8	6.5	6.0	13.6	12.3	10.0
4	8.9	14.3	15.5	14.4	14.8	8.9	7.9	11.3	10.3	10.7
5	9.0	10.4	18.0	13.2	14.7	12.9	12.7	3.8	5.0	5.7
6	3.7	7.2	15.8	7.6	12.0	14.8	9.8	1.9	4.1	3.8
7	2.3	3.9	9.7	5.7	8.0	13.5	13.8	1.3	2.3	2.8
8	1.3	1.5	5.4	2.9	4.9	11.1	11.4	1.1	2.5	1.9
9	0.9	0.8	3.4	1.4	2.8	7.8	8.3	1.9	3.9	2.4
70	0.8	0.7	1.5	0.9	2.1	3.9	3.8	1.1	2.0	0.6
1	0.7	0.6	0.6	0.1	1.3	1.6	2.2	1.2	1.0	1.3
2	0.6	0.6	0.4	0.5	1.2	1.9	1.9	1.0	1.4	0.5
3	1.0	1.2	0.7	0.3	0.6	0.8	1.2	1.8	1.7	0.8
4	0.9	1.2	1.2	0.4	1.0	1.0	0.4	1.7	1.8	1.3
5	0.7	1.6	0.9	0.2	0.8	0.4	0.0	1.1	1.5	1.0
6	1.2	1.6	1.0	0.1	0.5	0.3	0.3	1.3	2.3	0.9
7	1.3	1.3	0.6	0.4	1.0	0.1	0.0	1.2	1.4	0.8
8	0.8	1.3	0.9	0.2	1.2	0.3	0.0	0.3	1.6	1.0
9	1.0	0.9	0.6	0.1	0.5	0.5	0.1	0.2	0.9	0.5
80	0.5	1.2	0.6	0.1	0.5	0.1	0.1	0.4	0.6	0.1
1	0.3	0.7	0.7	0.1	0.5	0.1	0.1	0.1	0.6	0.0
2	1.0	0.5	0.3	0.2	0.3	0.1	0.1	0.0	0.2	0.0
3	0.6	0.2	0.1	0.5	0.3	0.1	0.0	0.0	0.2	0.0
4	0.2	0.3	0.0	0.1	0.3	0.1	0.0	0.0	0.2	0.0
5	0.1	0.1	0.1	0.0	0.4	0.0	0.0	0.1	0.1	0.1
6	0.3	0.1	0.0	0.2	0.1	0.0	0.1	0.0	0.0	0.1
7	0.0	0.1		0.0	0.1	0.0	0.1	0.0		0.0
8	0.0	0.1		0.0	0.1	0.0	0.0	0.1		
9	0.0	0.0		0.0	0.1	0.1		0.0		
90	0.1	T		0.1	0.1	0.0				
1	0.0	0.0		0.0	0.0					
2										
3										
4										
5										
No. of Fish Sampled:	867	3,580	683	991	1,541	1,463	683	1,230	813	787

Table 79 (Continued)

Length (cm)	1949			1950				1951			
	July	Aug.	Sept.	July	Aug.	Sept.	Oct.	July	Aug.	Sept.	Oct.
44			0.0								
5			0.1								
6			0.0								
7			0.0								
8			0.0								
9			0.0					0.0			
50			0.2					0.3			
1			1.2				0.0	0.0	0.0		
2			2.8		0.0	0.0	1.4	0.0	0.4	0.0	
3			2.3		0.1	0.4	0.5	0.0	0.4	0.5	
4			3.0		0.1	0.8	0.0	0.3	0.8	0.3	
5	0.0		0.8		0.1	0.8	1.0	0.9	0.6	0.9	0.0
6	0.4	0.0	0.9	0.0	0.3	0.6	1.4	1.6	2.0	0.7	1.0
7	1.6	0.3	1.2	0.1	1.2	0.6	1.9	3.5	4.4	2.3	0.0
8	2.1	0.6	2.1	0.3	1.3	2.8	2.9	2.5	5.0	2.6	1.0
9	3.0	2.5	5.4	0.9	3.1	3.8	2.4	6.3	7.6	5.9	2.0
60	5.8	5.4	10.3	1.7	7.5	7.6	5.3	6.0	7.0	6.3	2.0
1	5.4	8.3	17.0	1.1	10.8	12.0	6.7	11.7	11.0	6.1	8.0
2	5.1	7.5	22.2	2.2	10.8	12.0	14.4	8.2	10.6	7.9	13.0
3	4.4	7.0	12.9	1.7	7.0	7.6	16.7	8.5	6.2	11.3	19.0
4	4.8	5.9	7.2	1.3	5.6	6.4	12.9	9.1	7.6	12.0	19.0
5	4.4	6.2	2.4	1.7	3.2	3.2	9.1	6.9	6.0	8.7	14.0
6	5.0	5.6	1.1	1.5	1.8	1.6	2.4	3.5	2.4	4.5	4.0
7	8.4	7.4	1.0	3.2	3.1	1.8	0.5	3.5	3.2	4.9	3.0
8	10.5	6.9	1.2	4.8	3.5	2.0	1.4	1.6	2.2	2.6	3.0
9	9.3	7.6	0.7	9.4	5.7	5.0	1.0	1.3	1.4	1.0	2.0
70	6.9	8.4	1.0	13.8	7.2	4.2	2.4	1.3	2.2	2.8	3.0
1	5.4	6.0	0.8	14.6	8.5	6.8	2.4	2.2	3.0	3.1	2.0
2	5.8	4.6	0.5	11.3	6.6	6.4	1.4	2.2	2.0	1.9	0.0
3	3.1	2.3	0.2	10.6	5.2	5.0	1.9	0.3	2.6	3.1	1.0
4	1.6	2.3	0.5	6.3	3.0	3.0	1.4	0.3	1.8	1.0	0.0
5	1.4	1.6	0.2	4.3	1.7	1.8	1.9	0.0	1.0	2.1	0.0
6	1.5	0.7	0.3	2.4	0.9	0.6	1.4	0.6	0.2	1.7	2.0
7	0.5	0.3	0.1	1.6	0.4	1.6	1.4	2.5	0.8	1.0	0.0
8	1.1	0.4	0.0	1.1	0.4	1.2	0.5	0.6	1.2	0.3	0.0
9	0.8	0.5	0.2	1.6	0.1	0.4	1.4	1.6	0.8	0.0	0.0
80	0.6	0.4	0.0	0.8	0.1	0.4	1.4	1.6	0.8	0.9	0.0
1	0.4	0.4	0.1	0.7	0.3	0.0	0.0	1.6	0.8	0.0	0.0
2	0.1	0.4	0.0	0.6	0.0		0.5	2.5	0.8	0.9	0.0
3	0.3	0.2	0.0	0.2	0.0		0.0	3.2	0.6	0.3	0.0
4	0.4	0.2	0.1	0.1	0.0			0.9	1.0	0.9	0.0
5	0.1	0.2	0.1	0.0	0.1			1.3	0.6	0.7	1.0
6	0.0	0.1	0.0	0.4	0.0			0.6	0.6	0.3	0.0
7	0.0	0.0	0.0	0.0				0.6	0.2	0.0	
8	0.1		0.2					0.0	0.0		
9	0.0		0.0					0.3	0.2		
90								0.0	0.0		
No. of Fish											
Sampled:	800	1,133	1,302	1,512	926	502	209	317	500	573	100

Table 79 (Continued)

Length (cm)	1952				1953				1954	
	July	Aug.	Sept.	Oct.	Aug.	Sept.	Oct.1/Oct.2/	Sept.	Oct.	
49						0.0			0.0	
50			0.0			0.3		0.0	0.0	
1		0.0	0.1			0.5		2.0	4.4	
2		0.1	0.7		0.0	3.5		4.0	11.4	
3		0.1	1.3		3.0	5.0		17.0	11.0	
4		0.3	1.1	0.0	4.0	8.3		23.0	11.0	
5	0.0	0.1	0.7	0.6	2.0	12.0		16.0	6.6	
6	0.3	0.9	1.0	0.8	3.0	7.3		18.0	2.9	
7	0.3	0.4	1.6	1.1	5.0	6.3		5.0	3.3	
8	0.3	1.4	2.1	0.8	0.0	4.0	0.0	3.0	3.3	
9	0.0	2.0	3.4	1.1	0.0	1.3	1.6	1.0	2.2	
60	0.6	4.1	4.5	1.9	2.0	1.5	3.2	2.0	0.7	
1	2.6	7.3	8.2	4.1	2.0	2.0	0.0	0.0	2.9	
2	1.6	9.7	10.0	4.1	3.0	2.0	0.0	0.0	0.7	
3	5.8	11.5	11.1	9.1	3.0	5.3	0.0	0.0	1.8	
4	5.4	10.1	10.5	6.9	18.0	10.5	0.0	1.0	3.3	
5	7.0	10.9	9.5	8.6	22.0	5.8	3.2	3.0	5.1	
6	4.2	7.8	7.3	9.9	10.0	8.8	4.8	1.0	7.0	
7	6.1	7.7	4.4	6.9	9.0	5.0	6.5	1.0	15.1	
8	6.1	3.7	3.4	6.4	2.0	4.3	6.5	2.0	5.9	
9	5.4	4.2	2.3	4.4	2.0	1.5	3.2	1.0	5.7	
70	7.7	3.4	2.2	3.3	0.0	0.5	3.2	0.0	4.4	
1	7.0	4.1	2.6	3.6	1.0	0.8	4.8		0.7	
2	10.2	2.9	2.6	2.8	0.0	0.5	0.0		0.0	
3	6.4	1.9	2.3	3.9	0.0	0.5	3.2		0.4	
4	6.4	1.3	1.6	1.9	1.0	0.0	6.5		0.0	
5	5.1	1.4	1.3	2.2	0.0	0.0	0.0		0.7	
6	3.2	0.5	0.9	4.1	2.0	0.0	4.8		0.0	
7	2.2	0.8	0.8	2.5	2.0	0.0	0.0		0.0	
8	1.9	0.3	0.5	1.4	1.0	0.3	4.8		0.0	
9	1.6	0.3	0.5	0.8	0.0	0.3	6.5		0.0	
80	0.6	0.4	0.3	2.5	1.0	0.5	3.2		0.0	
1	0.3	0.0	0.1	1.1	0.0	0.3	3.2		0.7	
2	0.3	0.1	0.2	1.4	0.0	0.3	3.2		0.0	
3	1.0	0.0	0.0	0.3	2.0	0.5	8.1		0.0	
4	0.0	0.3	0.1	0.0	0.0	0.3	3.2		0.0	
5	0.0	0.1	0.1	0.3		0.0	3.2		0.0	
6	0.0	0.0	0.1	0.0		0.0	3.2		0.0	
7	0.0		0.2	0.3		0.0	4.8		0.4	
8	0.0		0.1	0.0		0.3	1.6		0.0	
9	0.0		0.1	0.3		0.5	0.0			
90	0.0		T	0.0		0.0	0.0			
1	0.3		T	0.0			1.6			
2	0.0		0.0	0.0			0.0			
3			0.0	0.0			0.0			
4			0.0	0.0			0.0			
5			0.3	0.0			0.0			
6			0.0	0.0			0.0			
7			0.0	0.0			1.6			
8			0.0	0.0			0.0			
9			0.0	0.0			0.0			
100			0.3	0.0			0.0			
1			0.0	0.0			0.0			
No. of Fish Sampled:	313	790	2,047	362	100	400	62	100	272	106

1/ Astoria
2/ Newport

Table 79 (Continued)

Length (cm)	1955		1956		1957			
	Sept.	Oct.	Aug.	Sept.	July	Aug.	Sept.	Oct.
49						0.0		
50	0.0			0.0	0.0	0.1	0.0	
1	0.5			0.2	1.0	0.1	T	
2	1.0	0.0		0.3	0.0	0.5	0.5	
3	1.3	2.8	0.0	0.7	0.0	1.5	1.4	
4	2.0	1.8	1.0	1.1	0.0	1.4	1.4	
5	0.3	1.8	1.0	1.8	0.0	1.4	1.0	0.0
6	1.0	1.3	2.5	0.8	0.0	0.8	1.1	0.3
7	0.5	0.8	1.5	1.2	0.0	0.7	0.6	0.0
8	1.8	2.3	0.5	0.9	1.0	0.6	1.0	0.3
9	6.5	1.3	0.0	0.3	1.0	1.3	1.1	0.6
60	9.3	5.3	0.5	0.5	0.0	1.3	1.8	2.1
1	17.5	12.3	1.0	0.9	3.0	2.3	2.2	4.2
2	22.8	21.3	0.0	4.3	8.0	4.2	4.0	5.1
3	15.5	19.3	2.5	6.4	8.0	9.1	6.8	5.4
4	8.8	13.3	4.5	11.5	24.0	13.4	11.6	10.6
5	4.5	8.8	14.0	15.2	26.0	15.9	18.5	15.1
6	2.8	3.8	16.5	17.9	18.0	11.9	18.3	21.1
7	0.0	1.8	12.0	15.8	6.0	6.1	11.7	14.2
8	0.5	0.8	6.5	8.1	0.0	2.2	4.3	7.9
9	0.8	0.3	5.5	4.9	1.0	1.1	2.5	6.6
70	1.3	0.3	4.0	2.0	0.0	0.4	0.5	1.5
1	0.3	0.0	1.5	0.7	0.0	0.5	0.4	0.3
2	0.0	0.0	2.0	0.9	1.0	0.8	0.4	0.3
3	0.0	0.0	4.0	0.6	1.0	1.2	0.3	0.0
4	0.0	0.0	5.0	0.5	1.0	2.7	0.5	0.3
5	0.3	0.0	5.5	0.4	0.0	2.9	1.0	0.0
6	0.0	0.0	4.0	1.0		4.1	1.3	0.3
7	0.0	0.3	2.0	0.4		3.8	1.3	0.6
8	0.8	0.3	2.0	0.3		3.3	1.2	0.6
9	0.0	0.3	0.0	0.2		1.7	1.3	0.9
80	0.5	0.3	0.5	0.1		1.3	0.7	0.3
1	0.0	0.5	0.0	0.0		0.8	0.8	0.6
2		0.0		0.0		0.4	0.1	0.6
3				0.0		0.1	0.1	0.0
4				0.0		T	T	
5				0.1		T	T	
6				0.0		0.0	0.0	
7								
8								
9								
90								
No. of Fish Sampled:	400	400	200	1,000	100	3,428	2,032	331

Table 79 (Continued)

Length (cm)	1958				1959			1960			
	July	Aug.	Sept.	Oct.	July	Aug.	Sept.	July	Aug.	Sept.	Oct.
49	0.0										
50	0.2	0.0	0.0								
1	0.0	0.1	0.1	0.0							
2	1.3	0.8	0.3	0.5		0.0					
3	0.5	0.9	1.7	2.0		0.1					
4	0.3	0.3	5.3	2.5		0.1	0.0				
5	0.5	0.3	8.3	4.0		0.3	0.7				
6	0.0	0.1	6.1	1.0		0.2	1.0				
7	0.0	0.1	2.9	2.0	0.0	0.0	0.7				
8	0.2	0.1	1.2	1.0	0.2	0.1	1.3				
9	0.8	0.7	0.3	0.0	0.1	0.6	1.0				
60	1.7	1.3	0.3	0.0	0.1	0.1	0.7				
1	2.5	1.5	0.3	0.5	0.3	0.7	3.3	0.0	0.0	0.0	
2	3.6	2.4	1.0	0.5	1.9	1.8	0.7	1.3	0.3	0.8	
3	5.6	5.9	2.3	0.5	7.4	4.8	4.0	2.7	0.8	2.5	0.0
4	8.3	7.3	4.0	2.5	15.6	11.9	7.7	7.0	2.6	4.0	8.0
5	16.0	10.5	6.2	4.5	23.0	19.7	11.7	8.8	5.2	11.2	18.0
6	17.7	12.5	7.5	8.0	19.0	24.3	16.0	7.0	6.0	18.3	20.0
7	15.5	13.5	11.3	9.0	12.1	17.0	17.7	4.0	6.1	17.5	24.0
8	10.4	9.8	9.2	13.0	7.3	8.6	11.0	1.3	4.3	12.2	14.0
9	6.4	7.7	10.6	10.0	2.6	3.9	9.0	0.8	3.1	7.4	6.0
70	4.6	5.6	5.6	11.0	0.6	1.6	2.7	1.6	1.9	2.8	4.0
1	1.8	2.7	4.8	6.0	0.6	0.5	1.7	1.6	1.5	2.0	0.0
2	0.5	0.9	2.6	4.0	0.1	0.1	0.7	2.1	2.4	1.5	2.0
3	0.3	0.9	1.2	0.5	0.6	0.1	0.3	5.1	3.9	1.1	0.0
4	0.0	0.3	0.1	1.5	0.3	0.1	0.3	7.8	7.1	1.2	0.0
5	0.2	0.2	0.0	0.5	0.8	0.3	0.0	7.5	8.2	1.8	2.0
6	0.0	0.9	0.3	0.5	0.4	0.2	0.0	13.7	10.5	3.4	0.0
7	0.5	1.2	0.3	0.5	1.3	0.5	0.0	7.2	11.6	3.2	0.0
8	0.2	1.9	0.1	3.5	0.9	0.5	0.3	8.0	8.8	2.8	0.0
9	0.2	2.3	0.6	1.0	1.7	0.5	1.0	7.5	5.9	1.7	0.0
80	0.2	2.1	1.0	1.5	0.8	0.5	1.3	2.4	5.3	2.6	2.0
1	0.2	1.3	1.2	1.0	0.8	0.4	0.7	1.3	2.6	0.6	0.0
2	0.0	2.0	0.9	2.0	0.6	0.4	1.3	0.8	1.1	0.9	
3		0.9	0.6	2.0	0.2	0.3	1.3	0.3	0.3	0.5	
4		0.6	0.9	2.0	0.3	0.1	0.7	0.0	0.0	0.2	
5		0.3	0.5	0.5	0.3	0.0	0.7		0.1	0.0	
6		0.0	0.1	0.0	0.0		0.3		0.1		
7			0.1	0.0			0.0		0.0		
8			0.0	0.0					0.0		
9				0.0					0.1		
90				0.5					0.0		
1				0.0							
No. of Fish Sampled:	606	905	771	200	900	1,050	300	373	1,441	650	50

Figure 1
 Catch Localities for Pacific Albacore
 July 1951

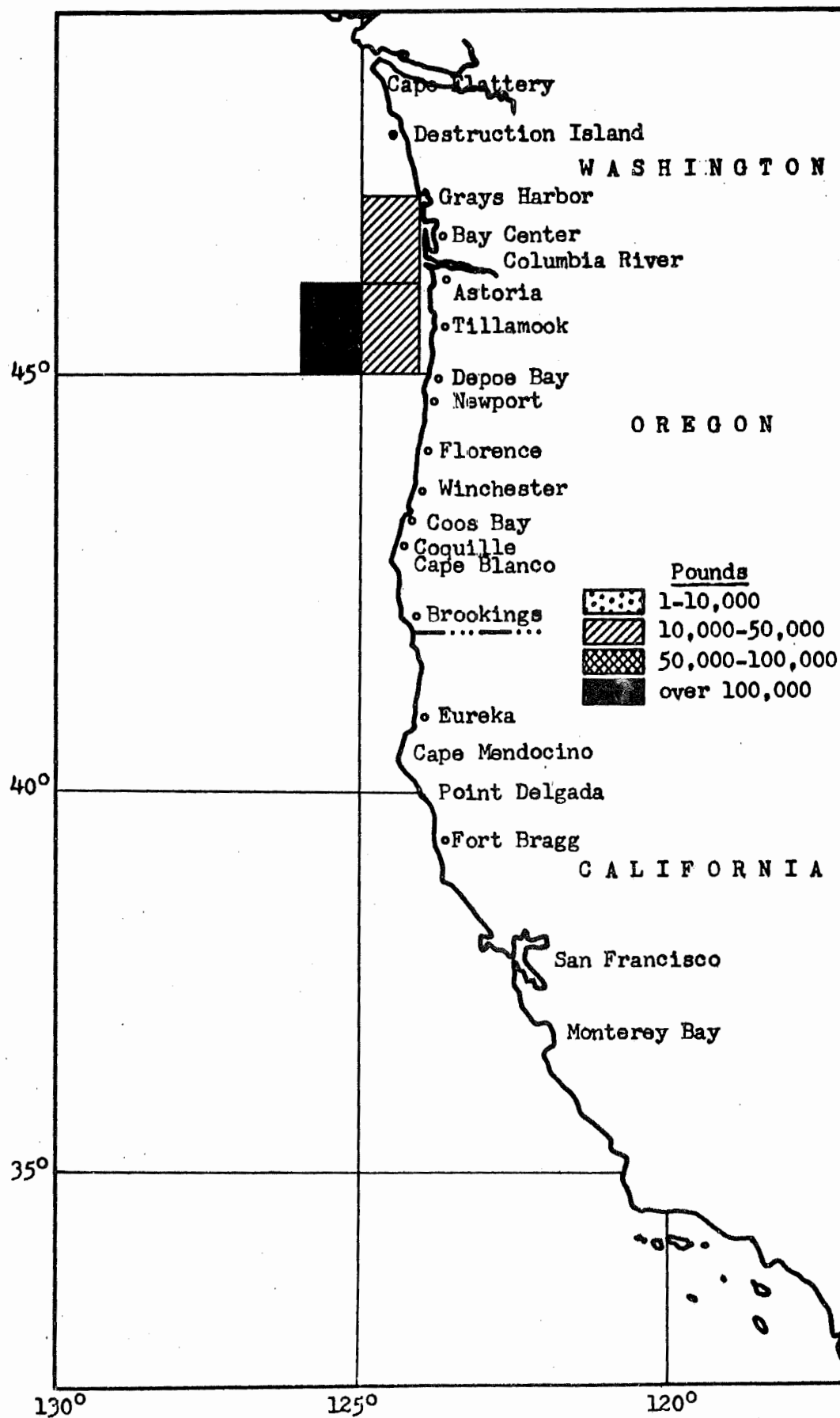


Figure 2
 Catch Localities for Pacific Albacore
 August 1951

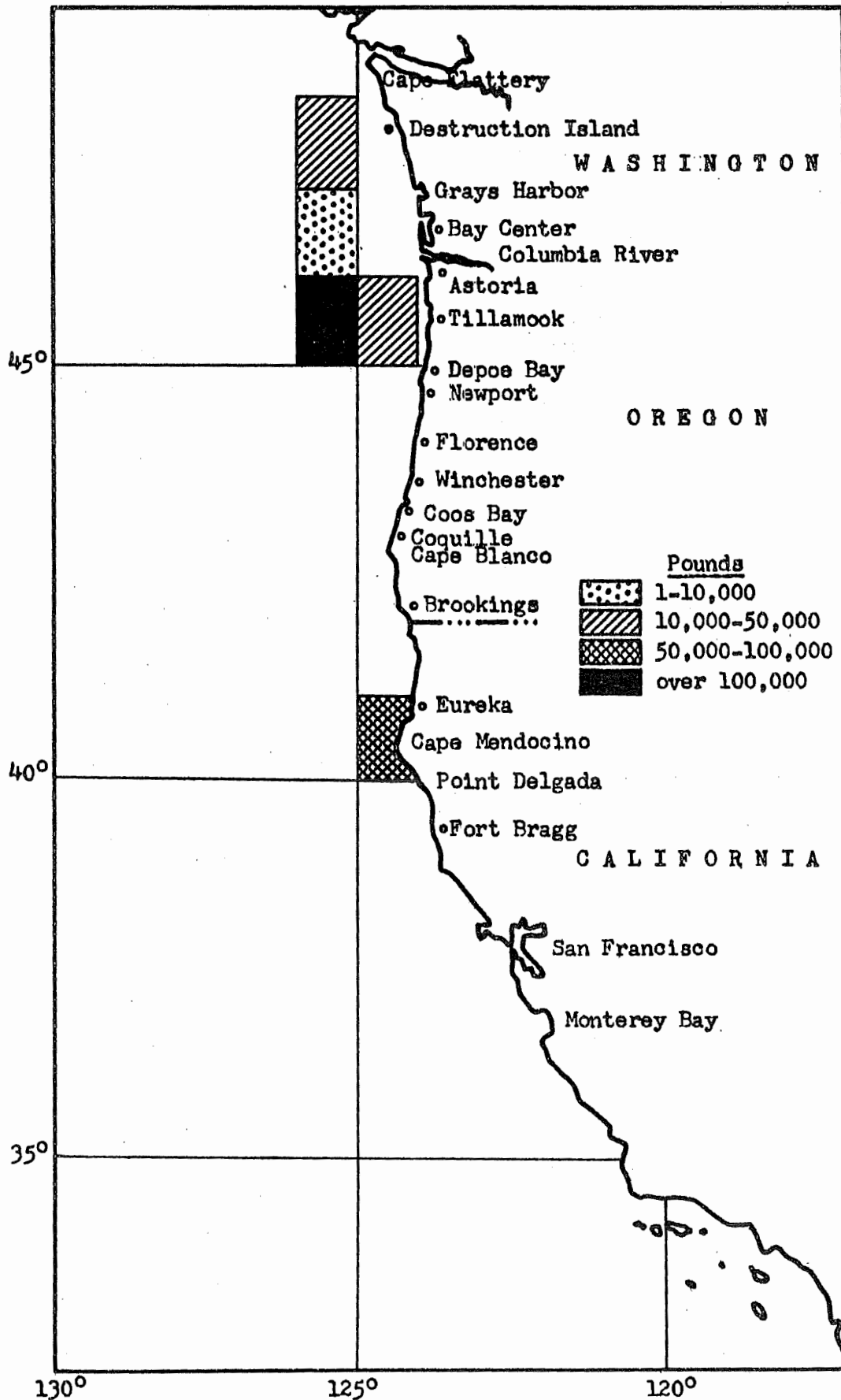


Figure 3
 Catch Localities for Pacific Albacore
 September 1951

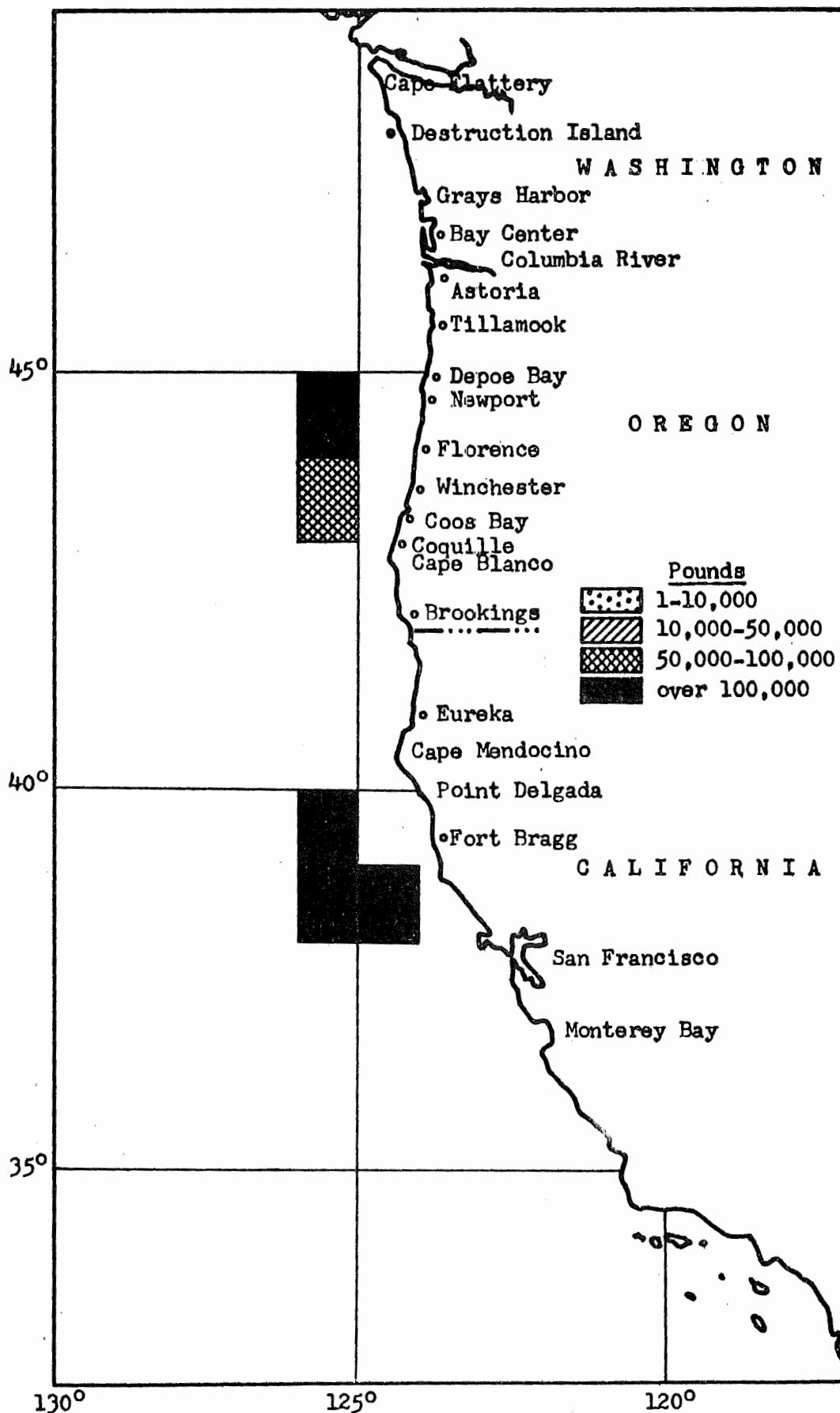


Figure 4
 Catch Localities for Pacific Albacore
 November 1951

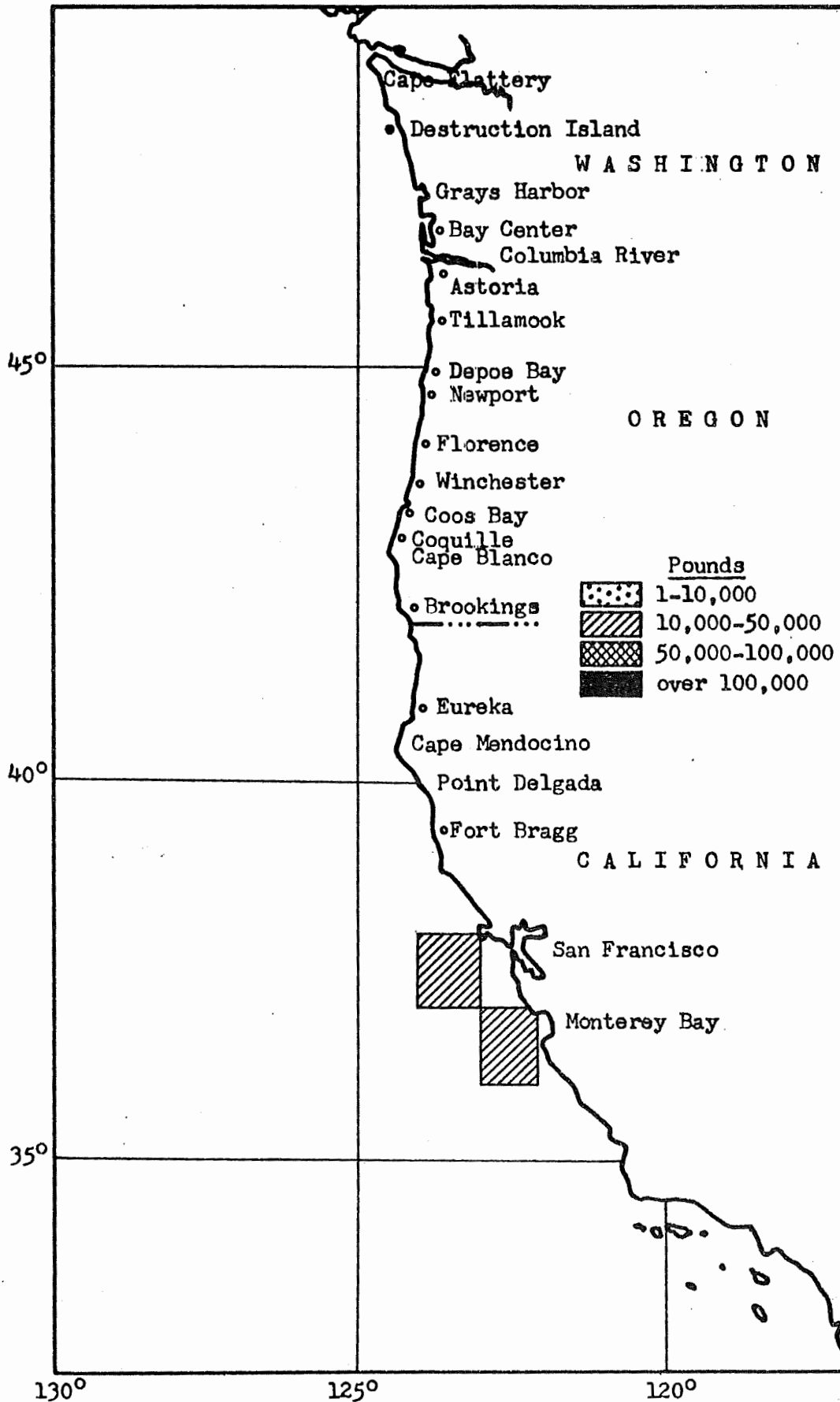


Figure 5
 Catch Localities for Pacific Albacore
 July 1952

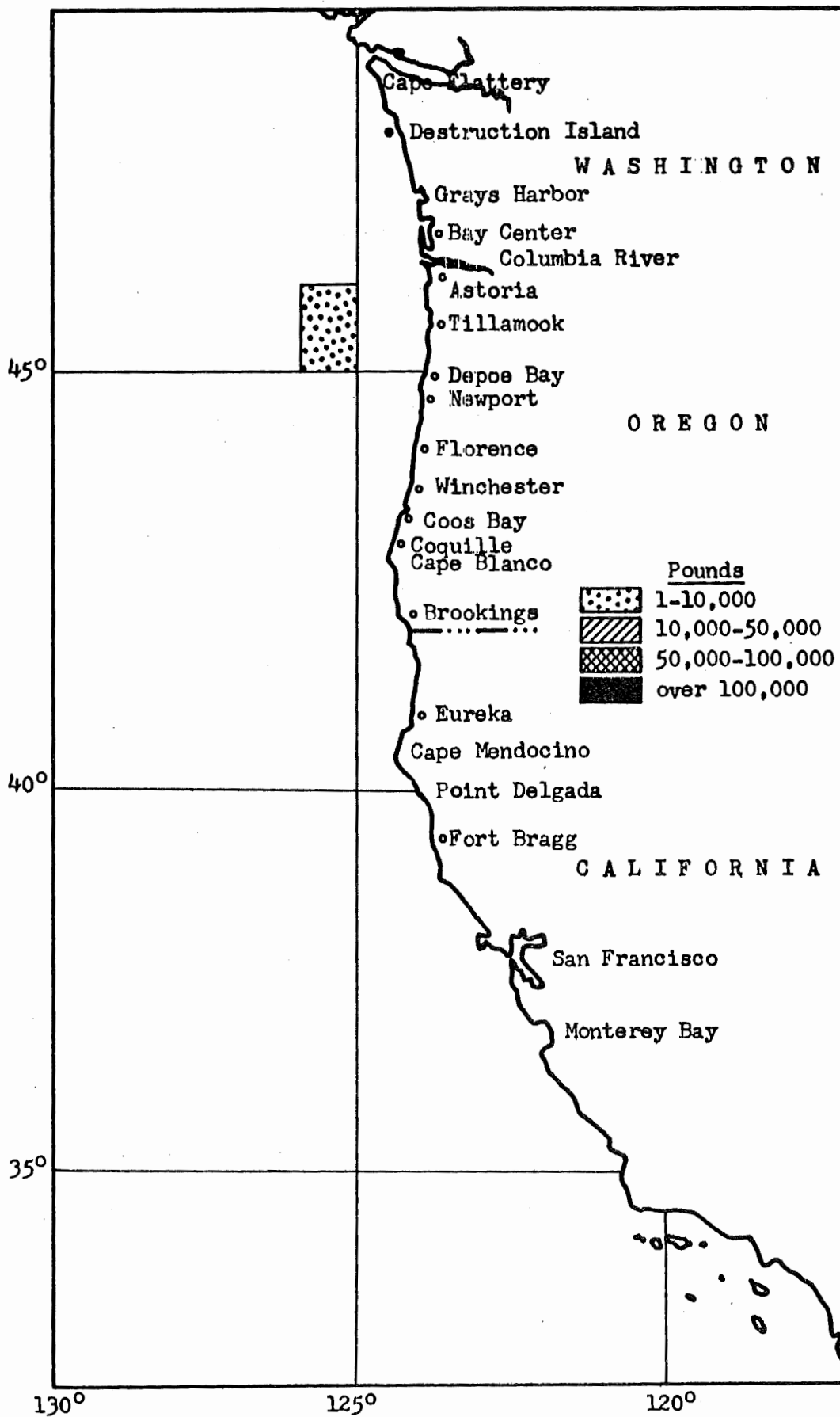


Figure 6
 Catch Localities for Pacific Albacore
 August 1952

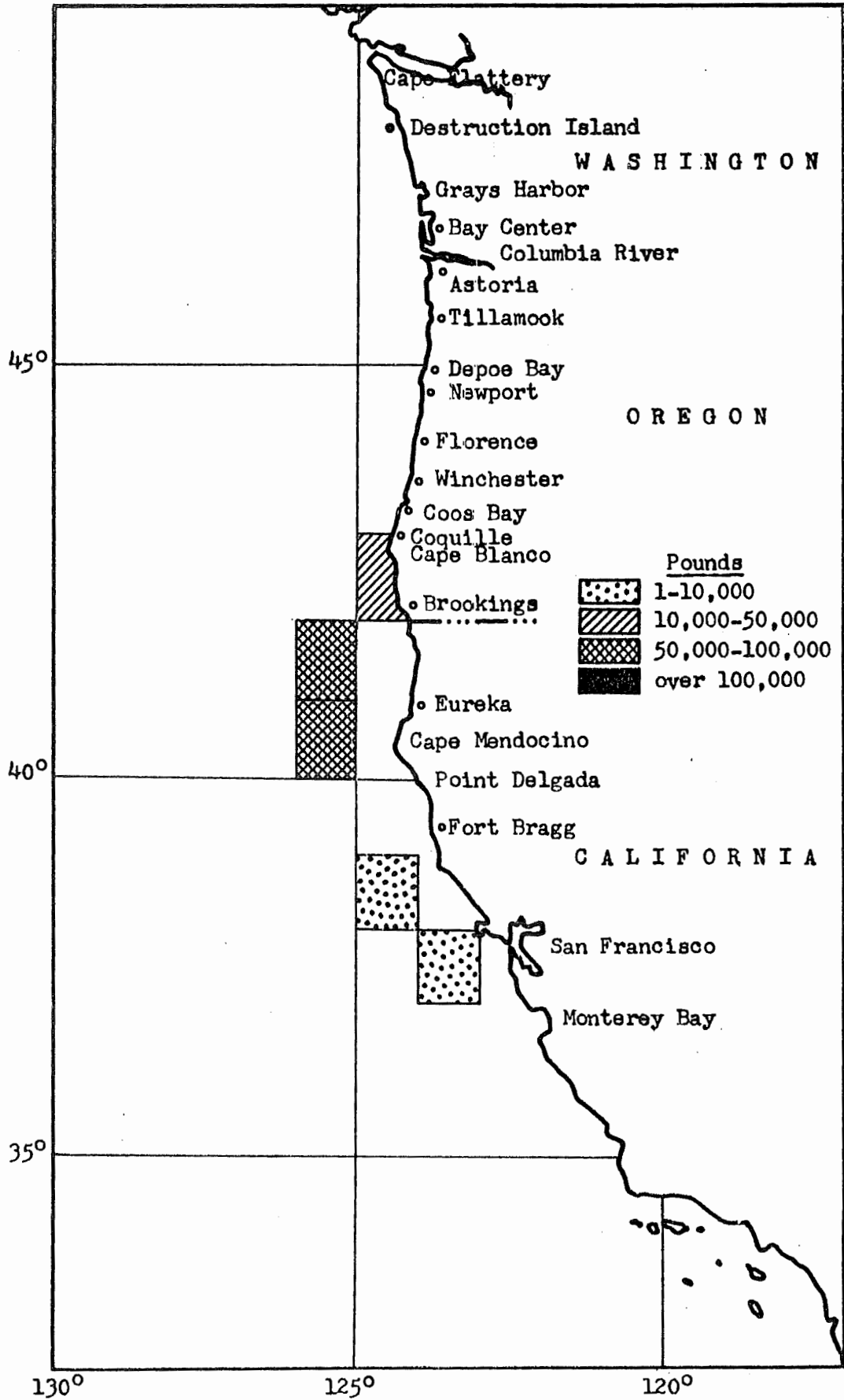


Figure 7
 Catch Localities for Pacific Albacore
 September 1952

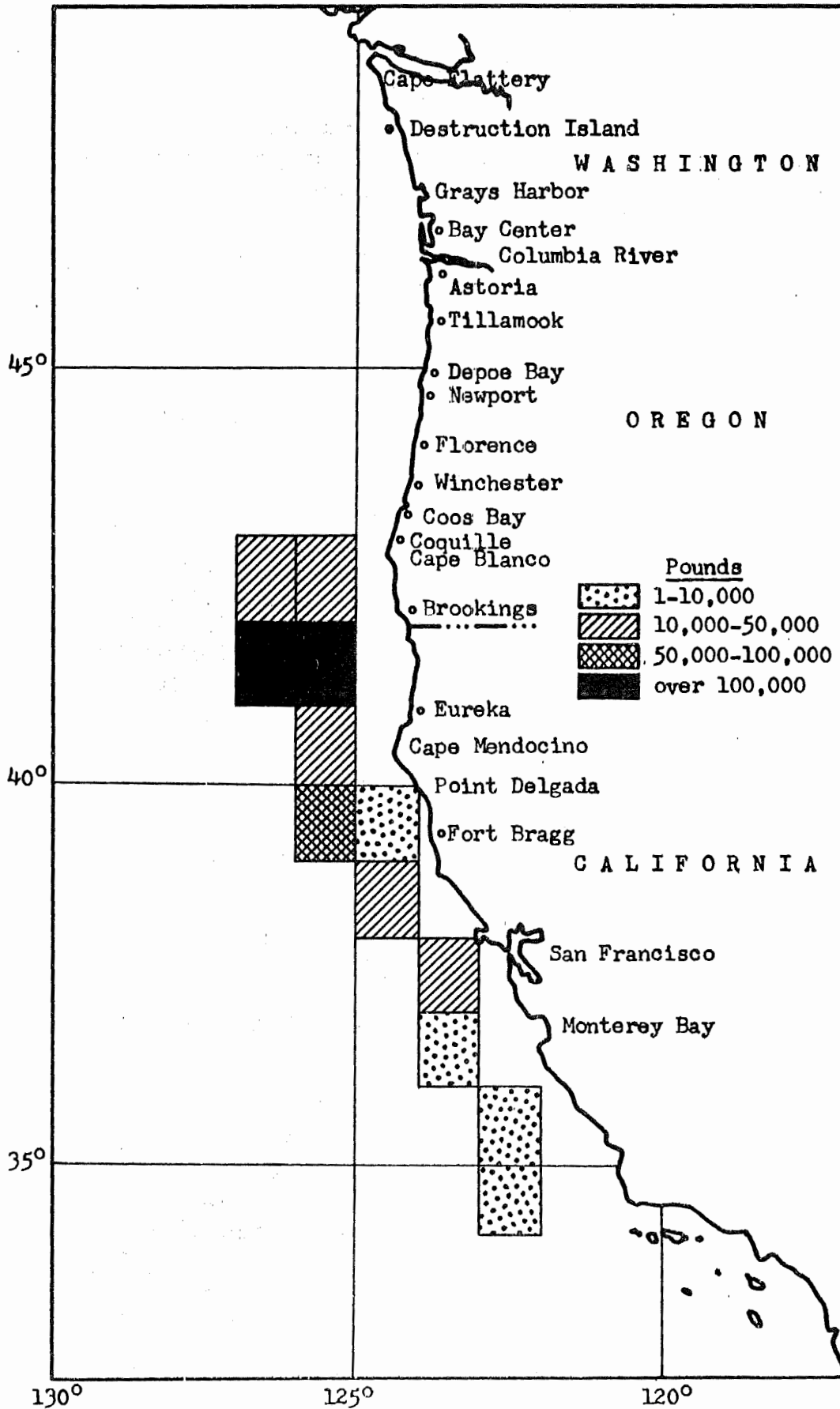


Figure 8
 Catch Localities for Pacific Albacore
 October 1952

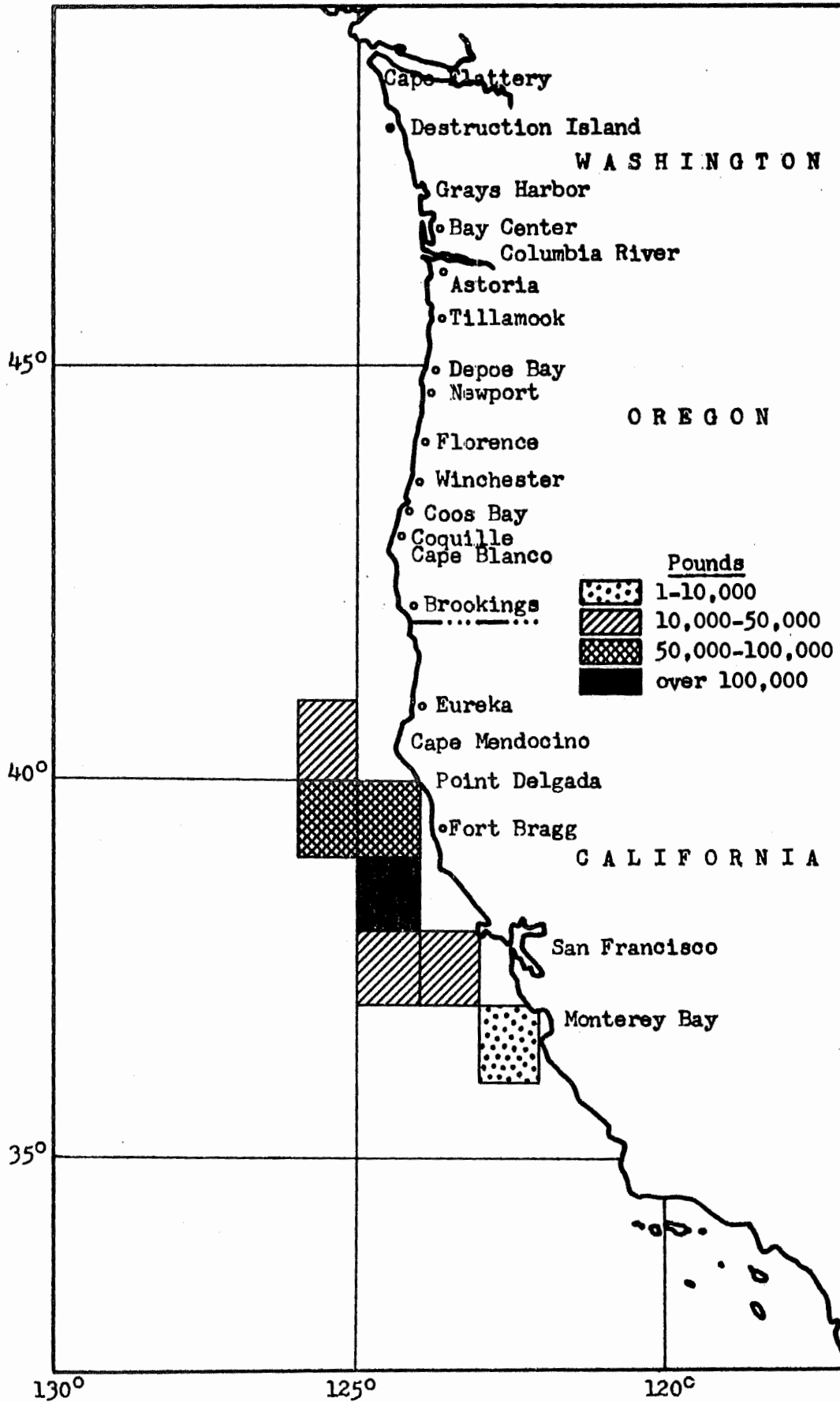


Figure 9
 Catch Localities for Pacific Albacore
 August 1953

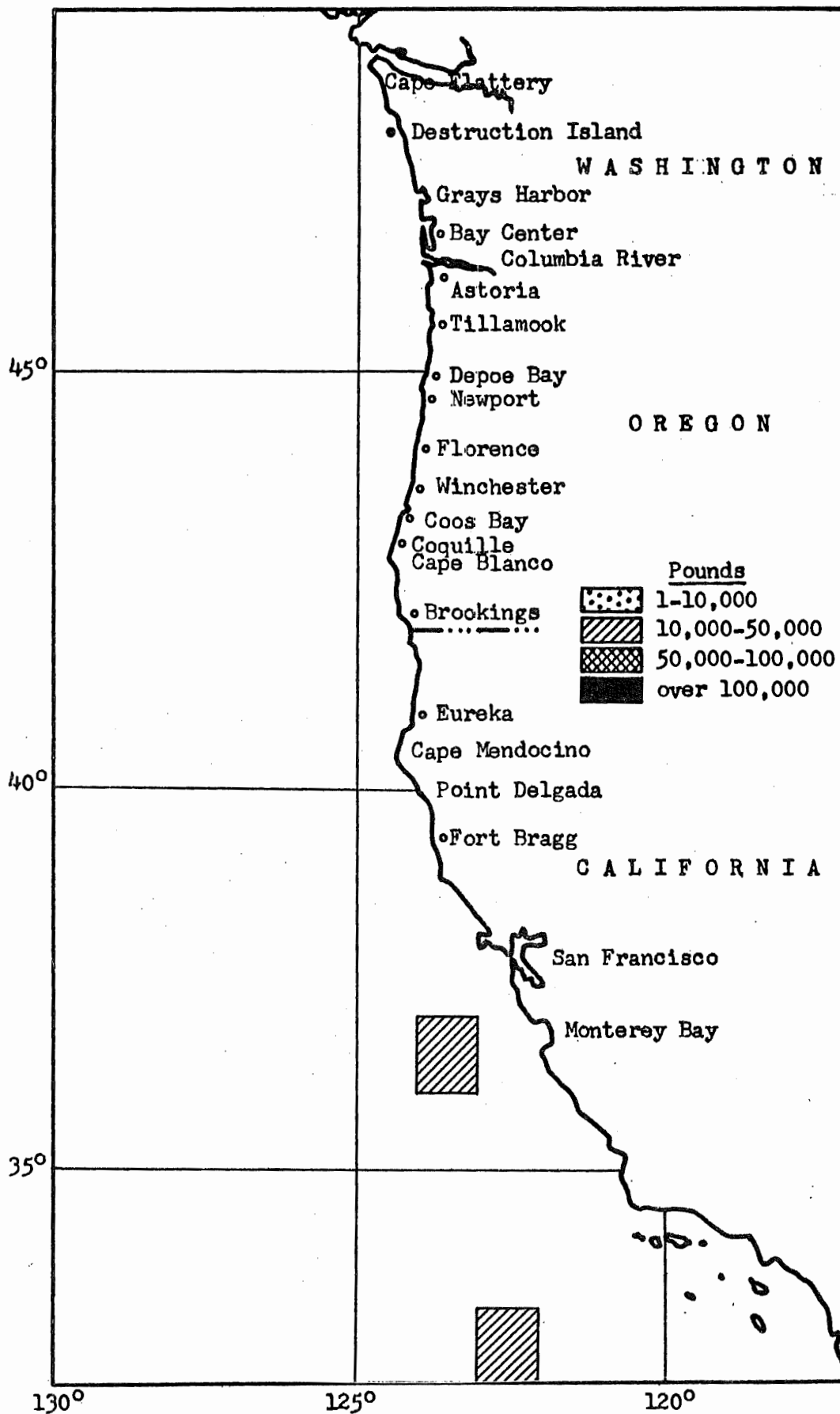


Figure 10
 Catch Localities for Pacific Albacore
 September 1953

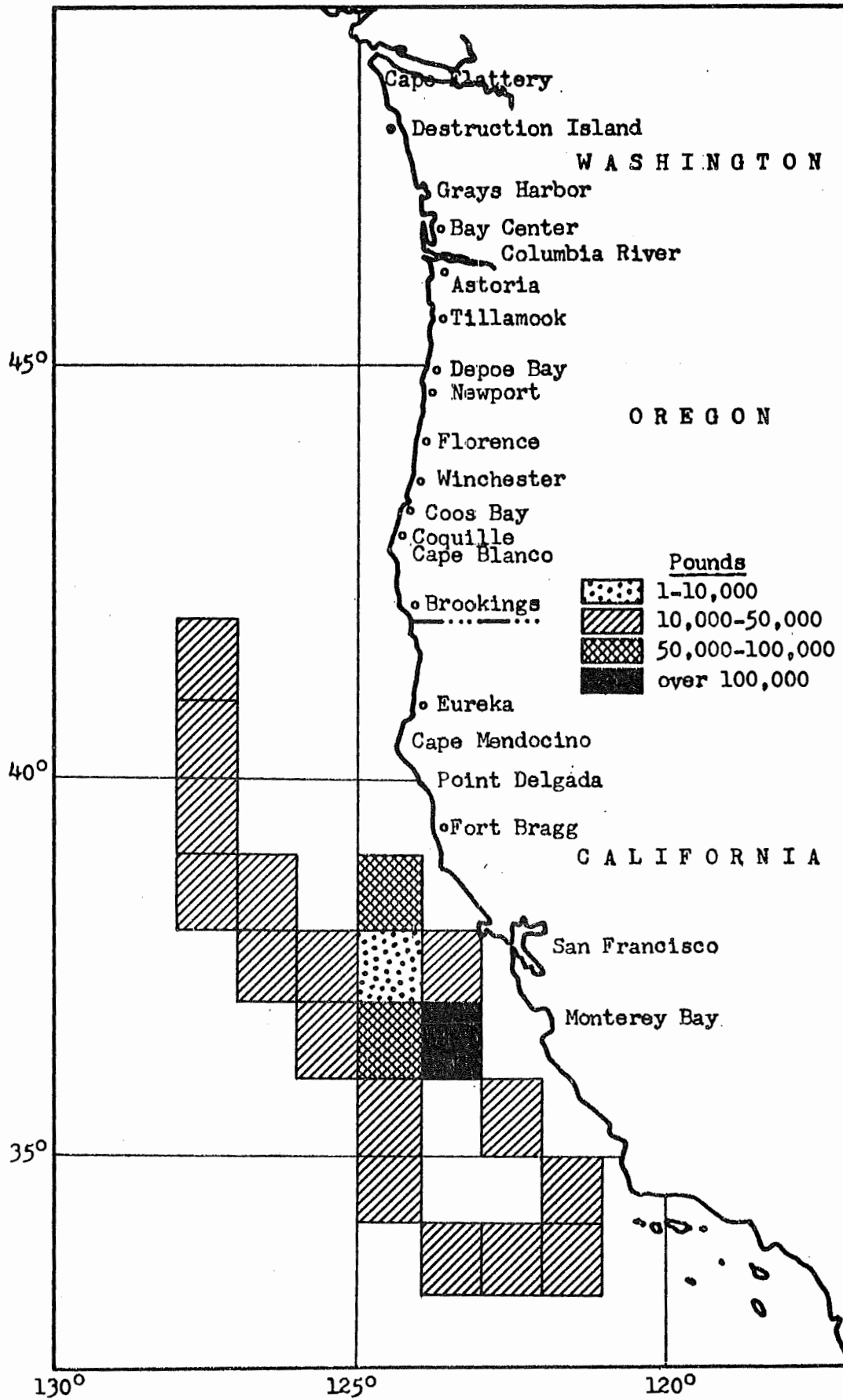


Figure 11
 Catch Localities for Pacific Albacore
 October 1953

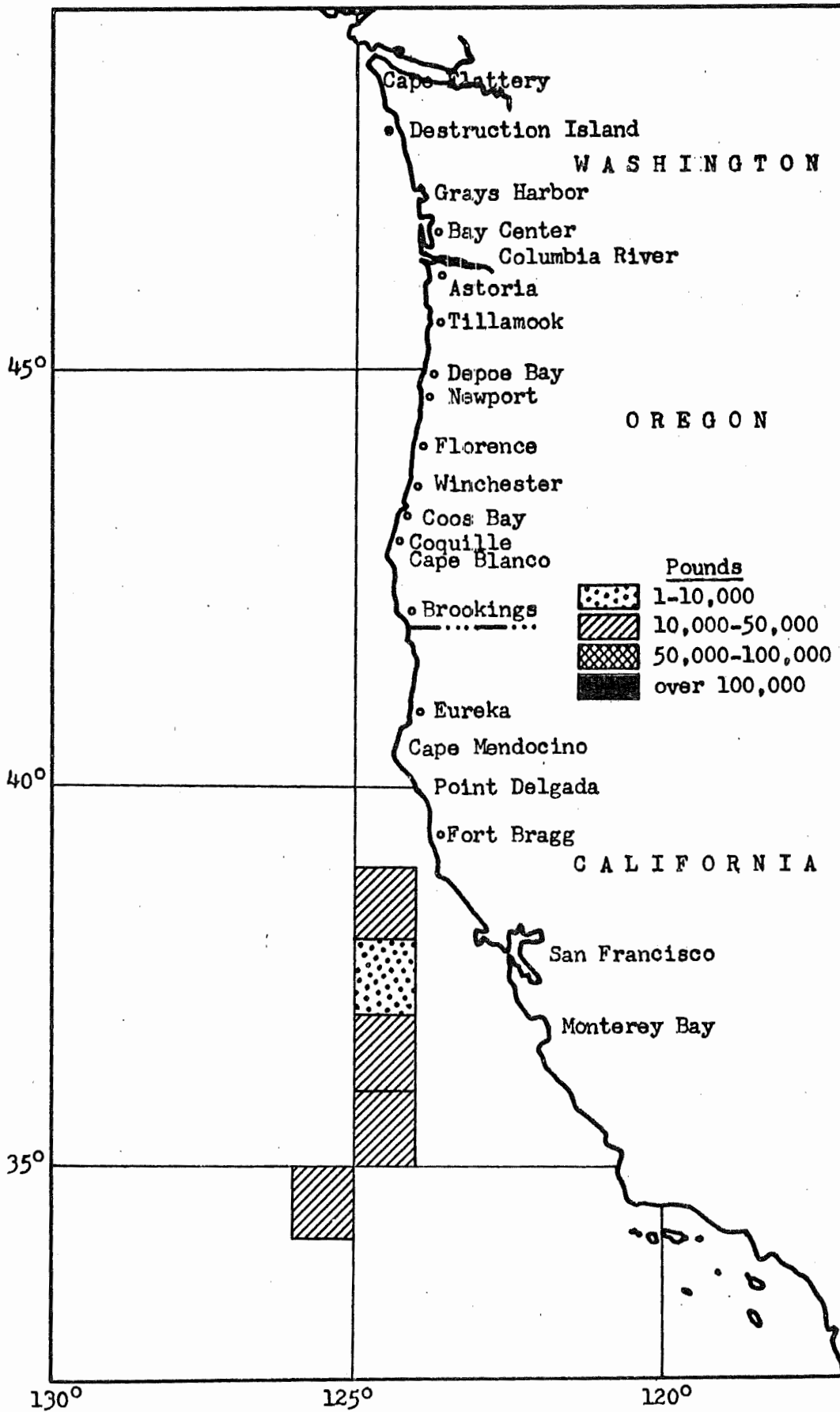


Figure 12
 Catch Localities for Pacific Albacore
 August 1954

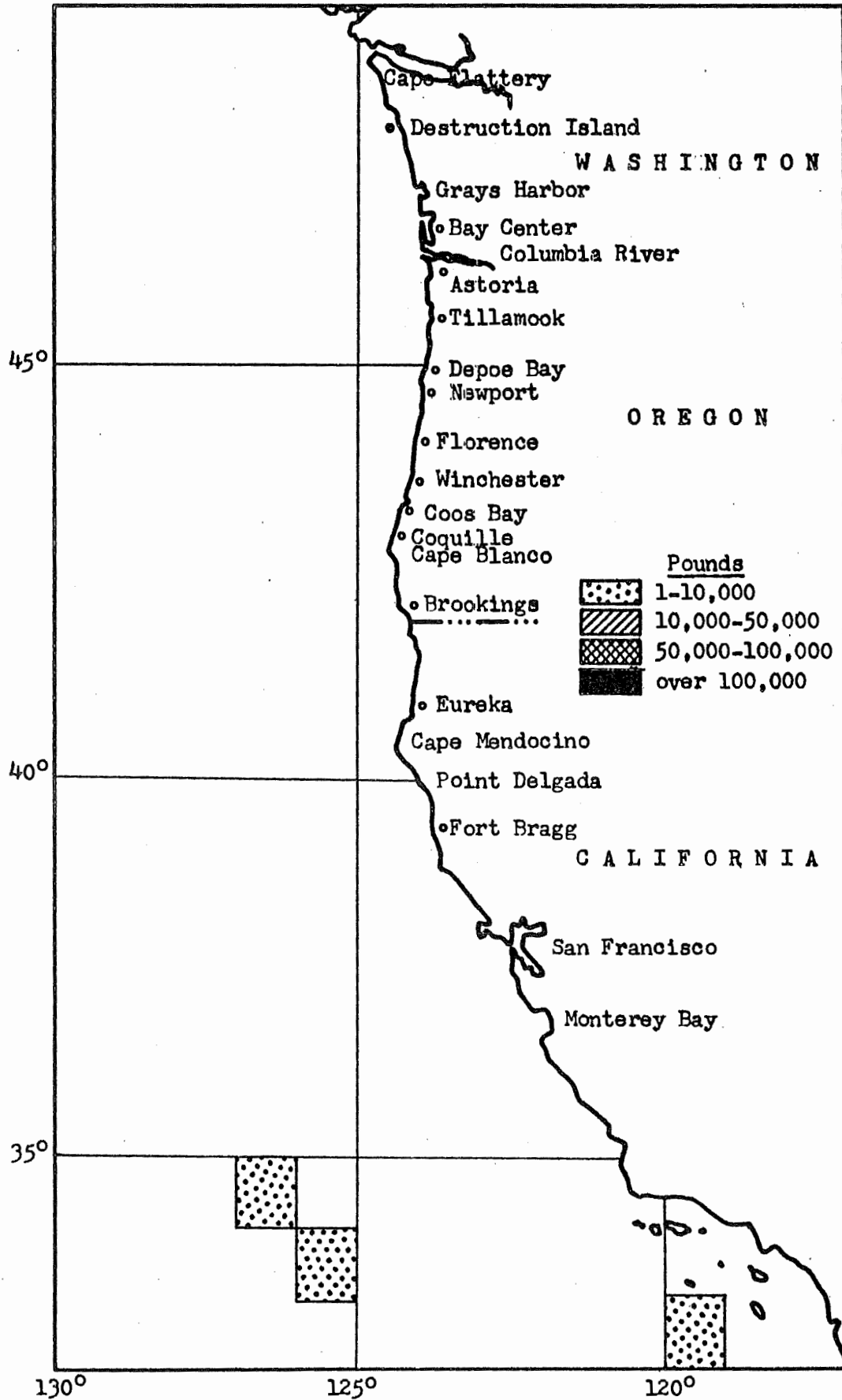


Figure 13
 Catch Localities for Pacific Albacore
 September 1954

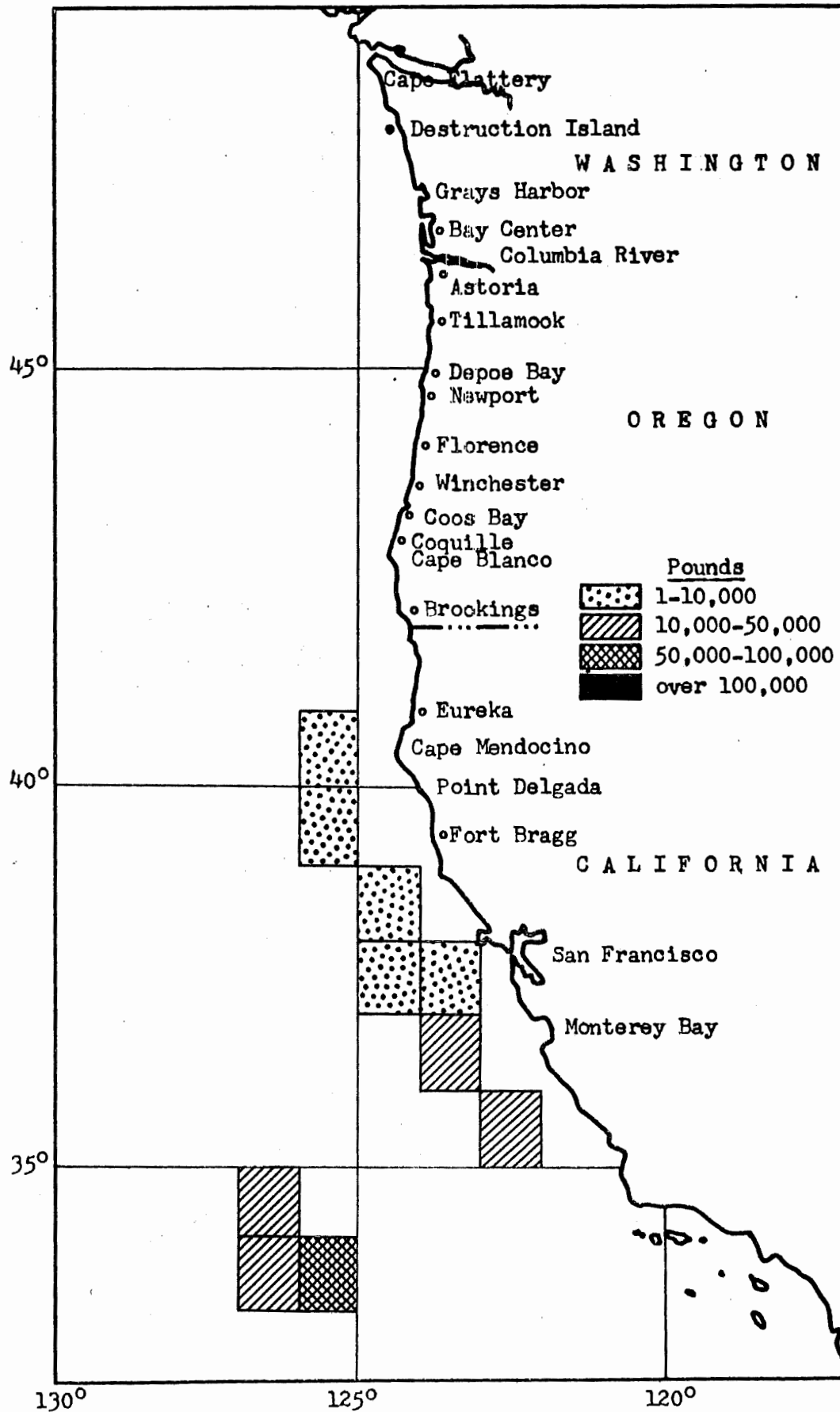


Figure 14
 Catch Localities for Pacific Albacore
 October 1954

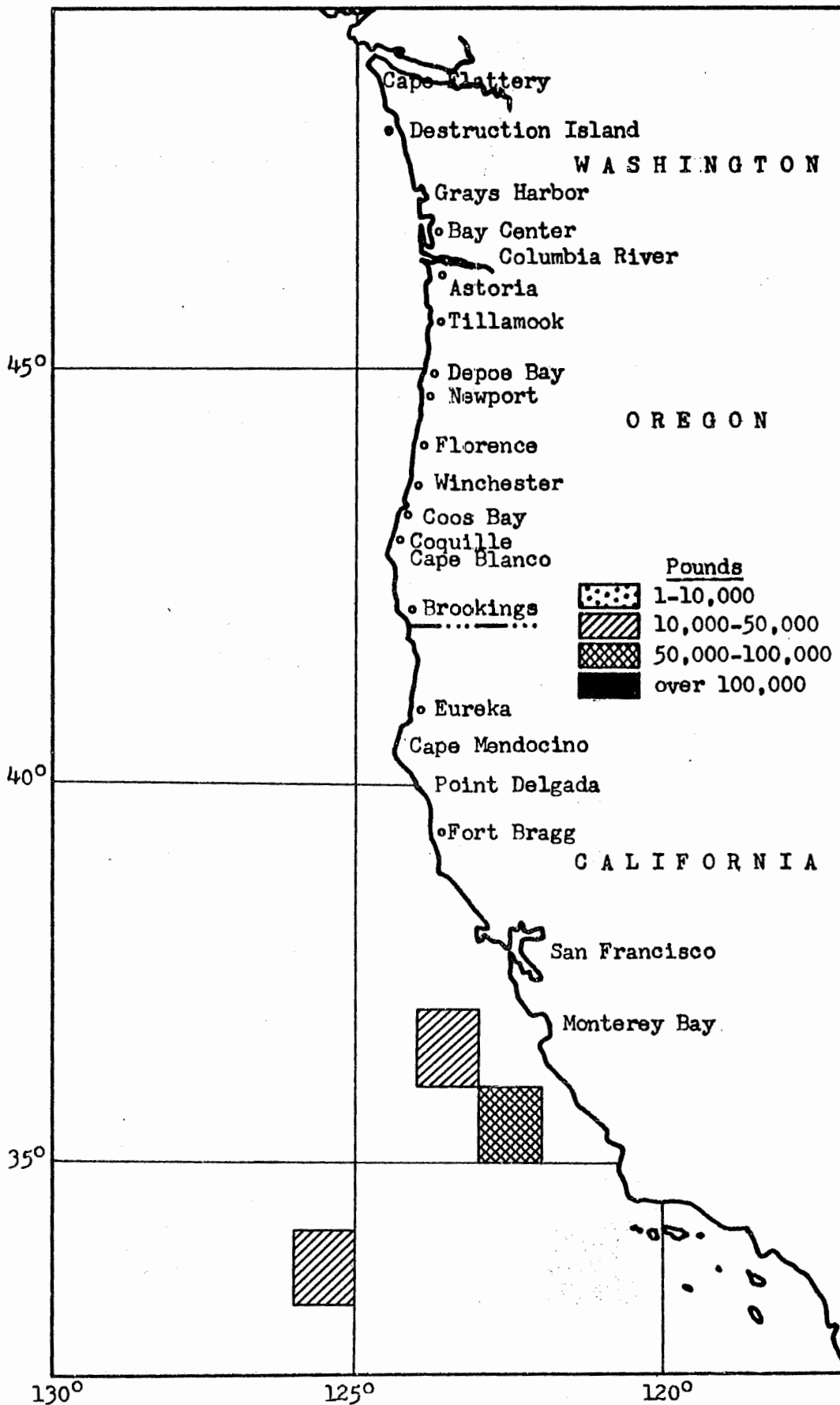


Figure 15
Catch Localities for Pacific Albacore
September 1955

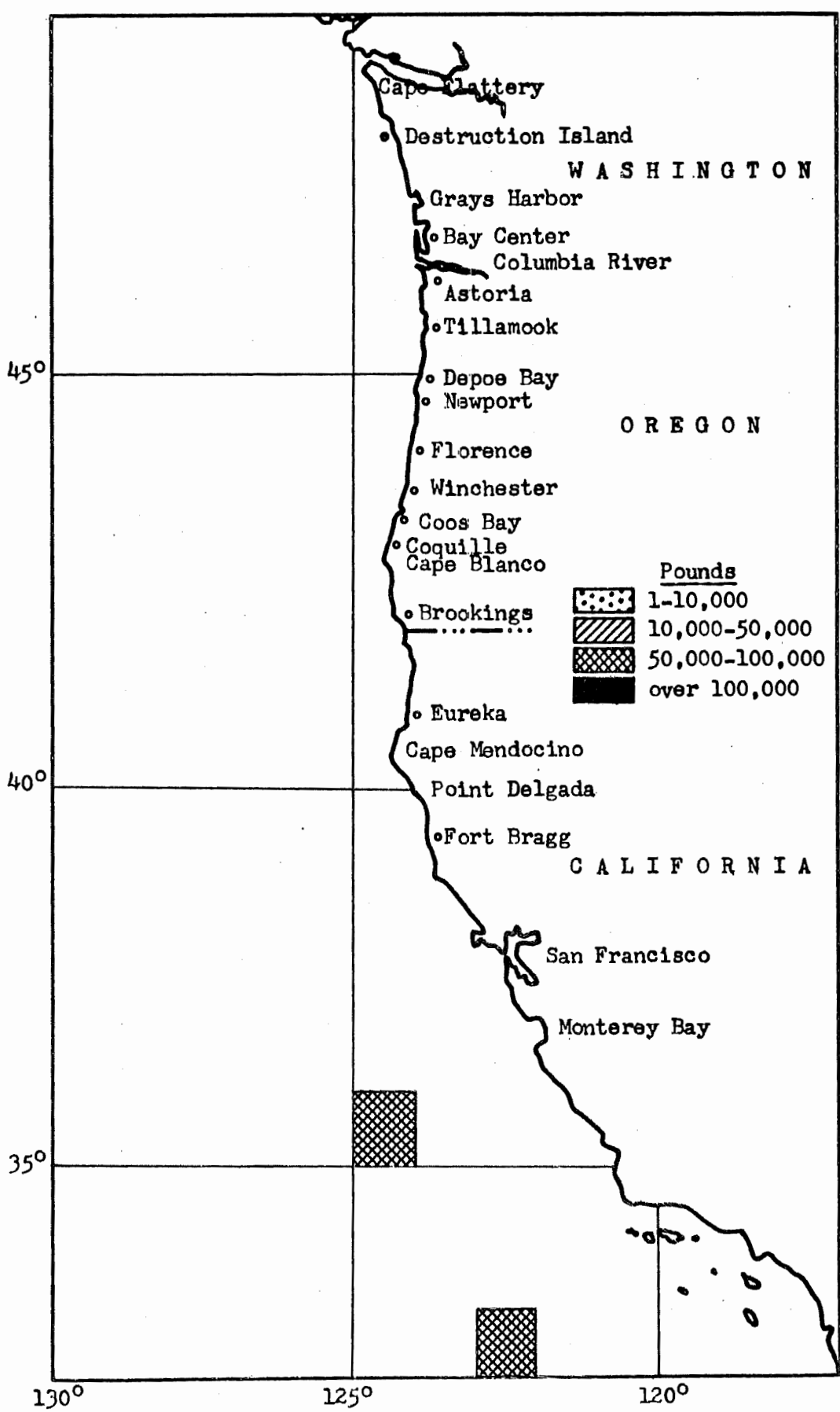


Figure 16
 Catch Localities for Pacific Albacore
 October 1955

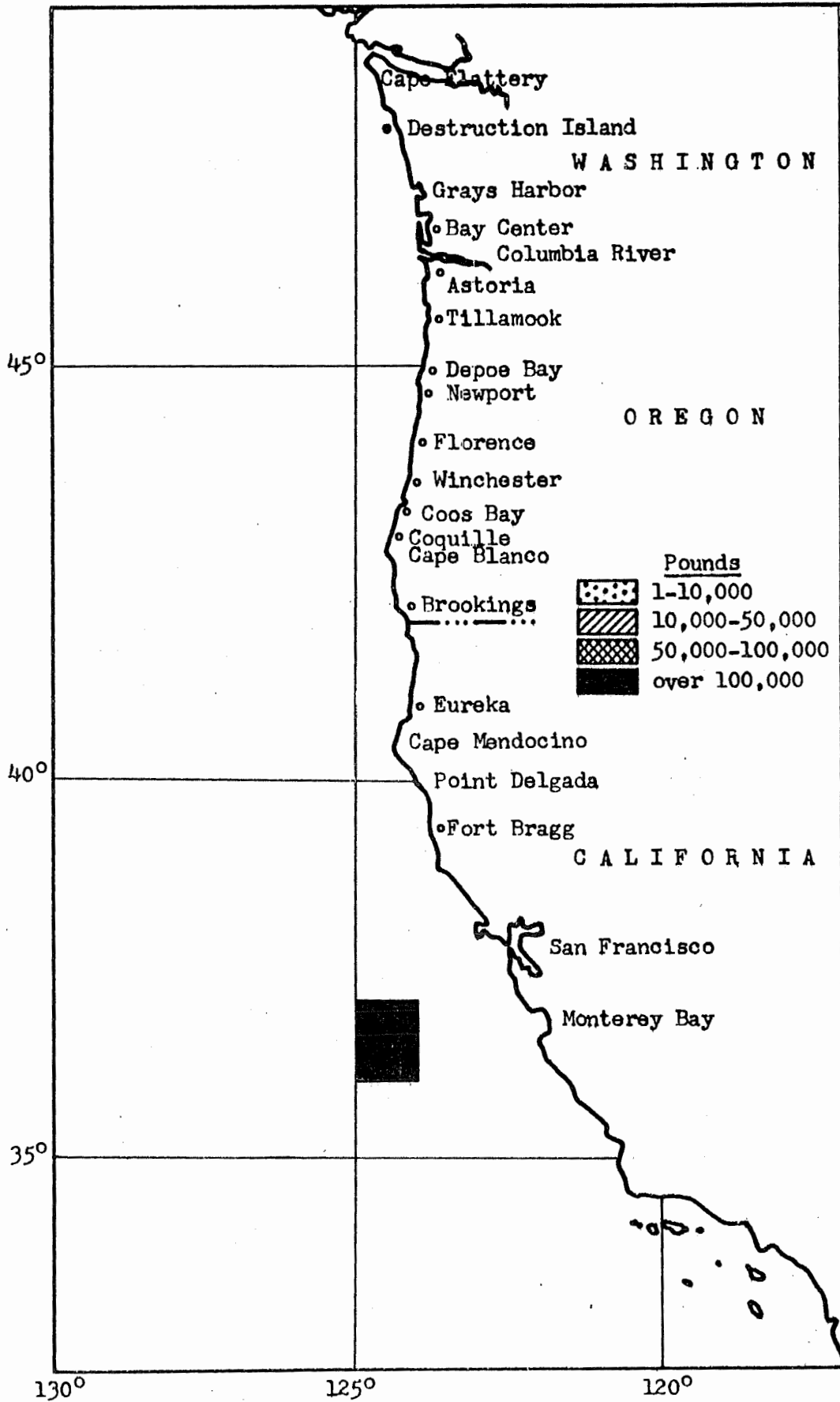


Figure 17
Catch Localities for Pacific Albacore
August 1956

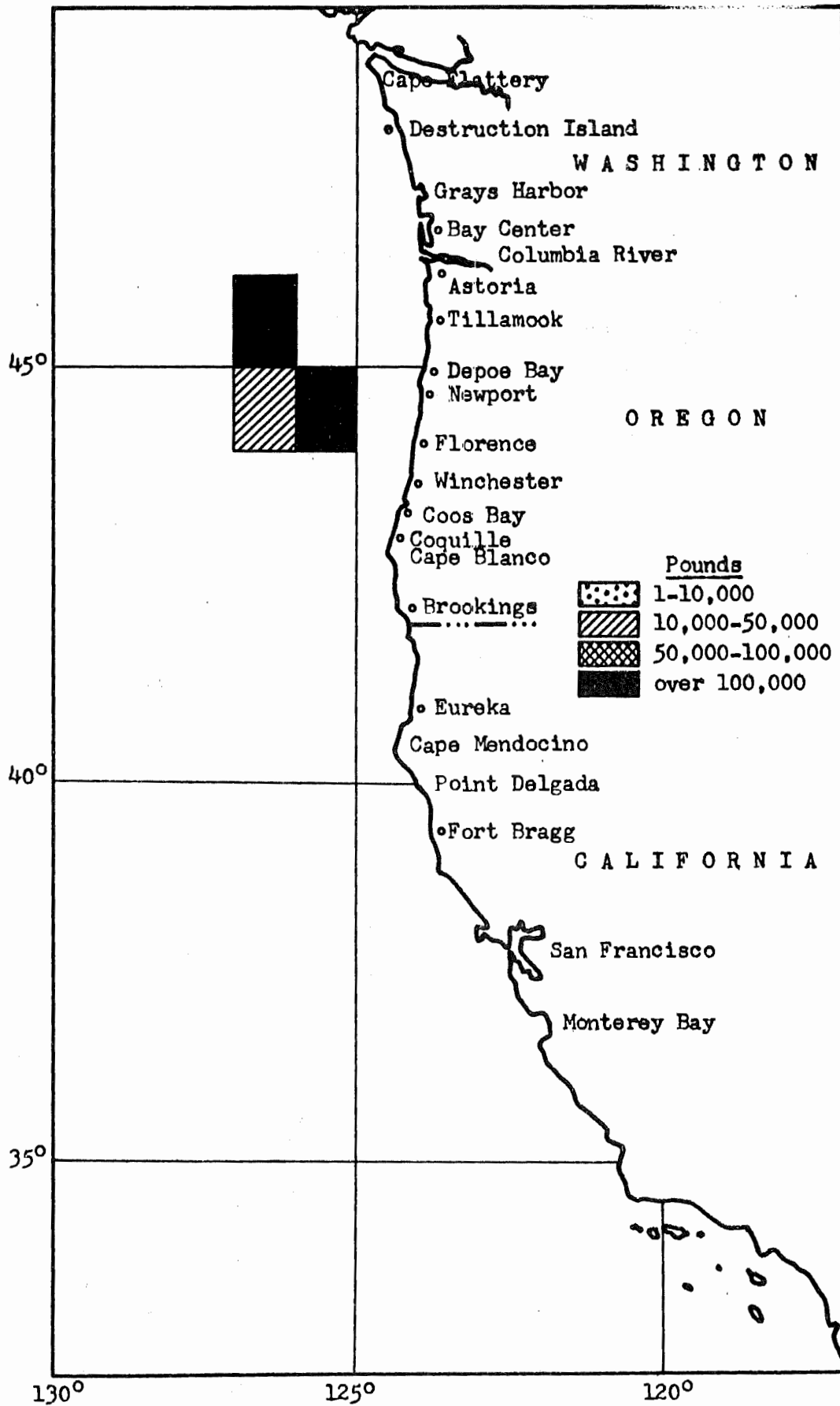


Figure 18
 Catch Localities for Pacific Albacore
 September 1956

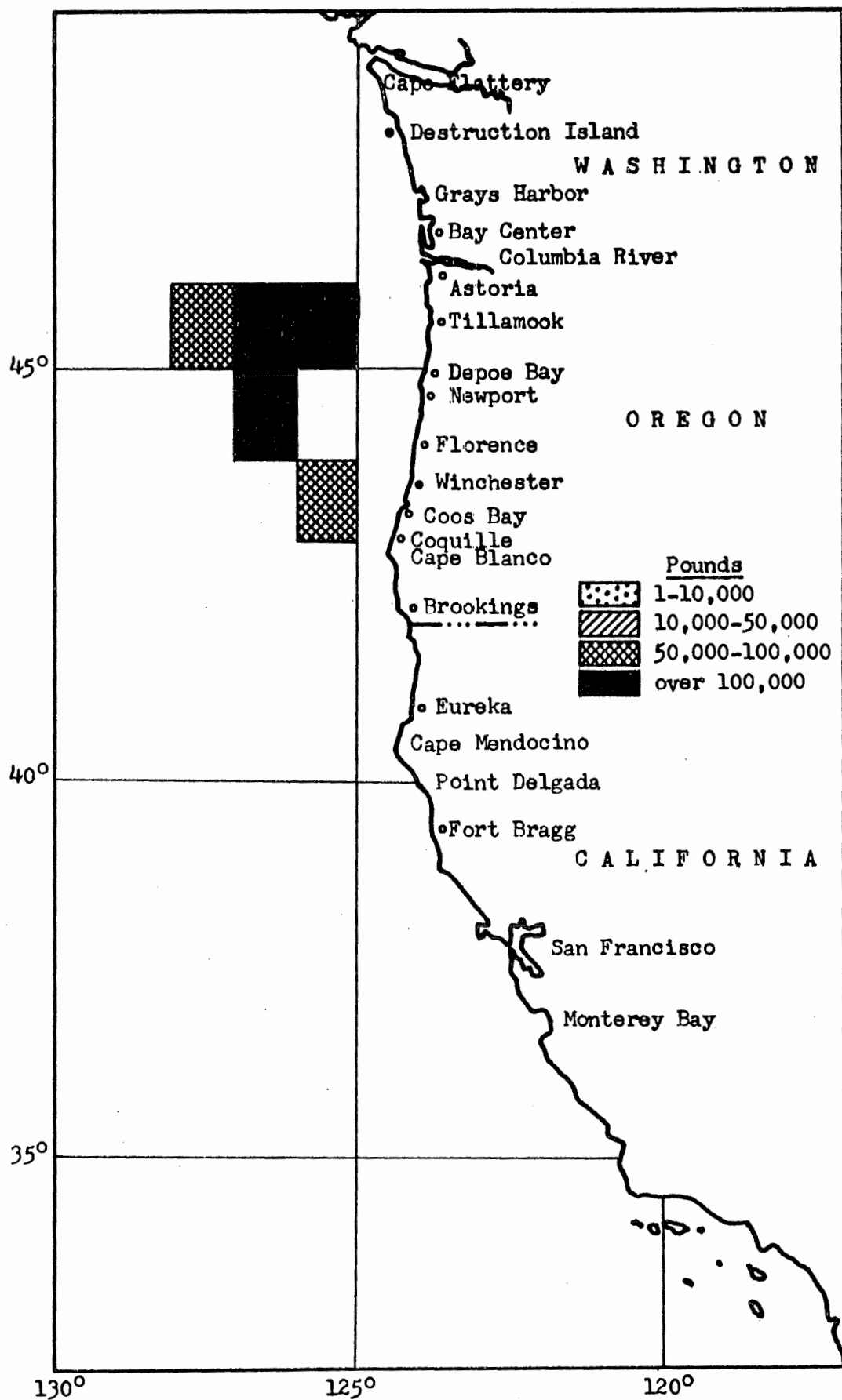


Figure 19
 Catch Localities for Pacific Albacore
 July 1957

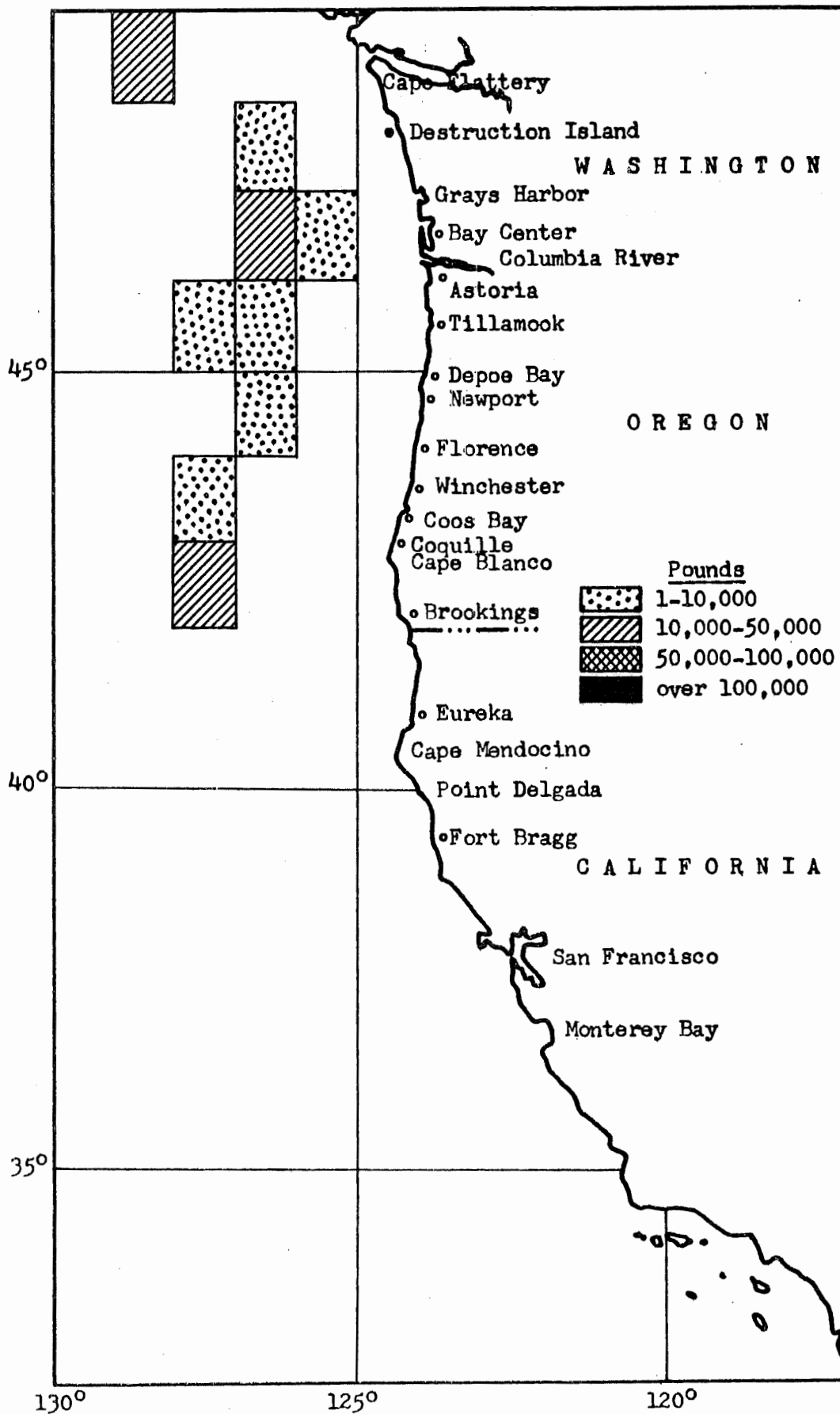


Figure 20
 Catch Localities for Pacific Albacore
 August 1957

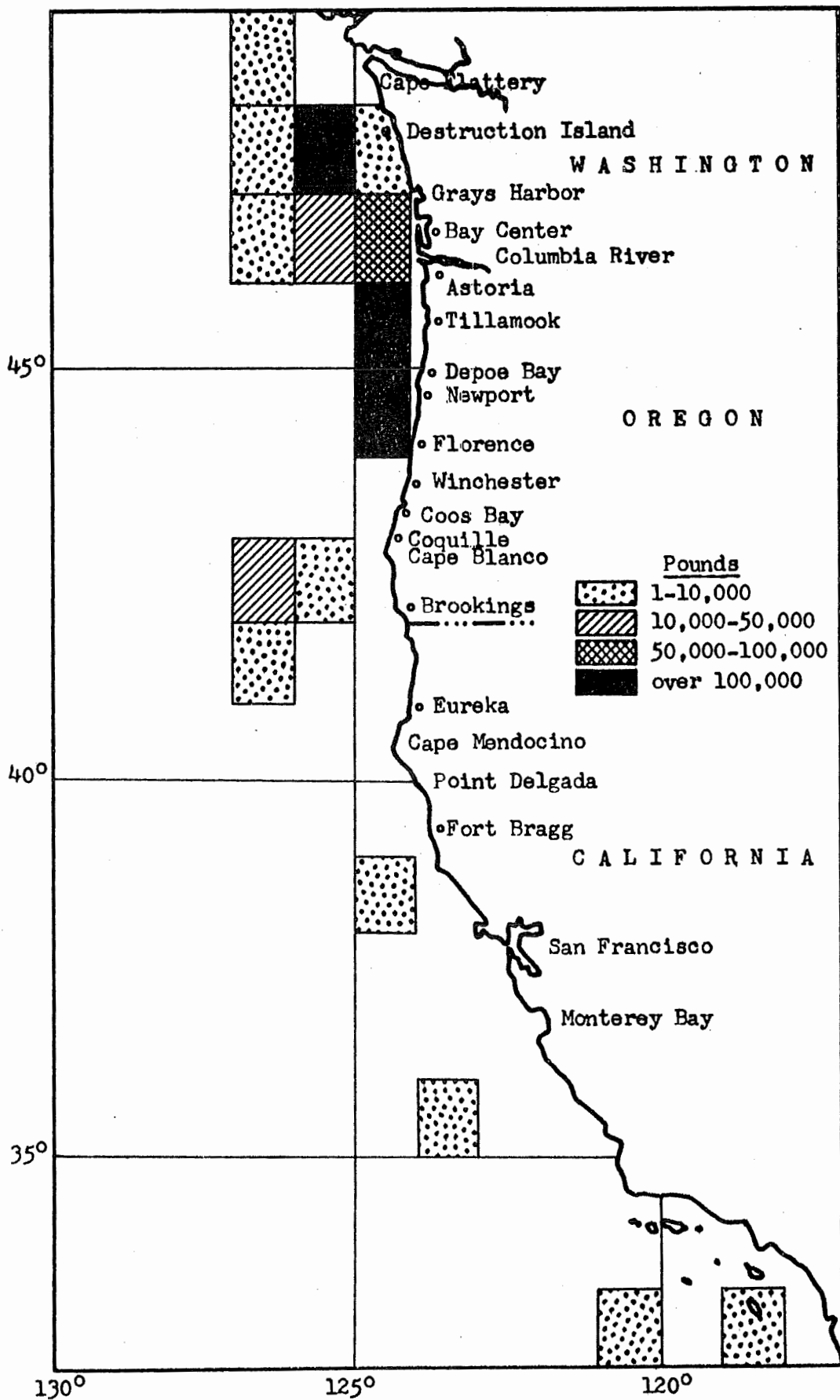


Figure 21
 Catch Localities for Pacific Albacore
 September 1957

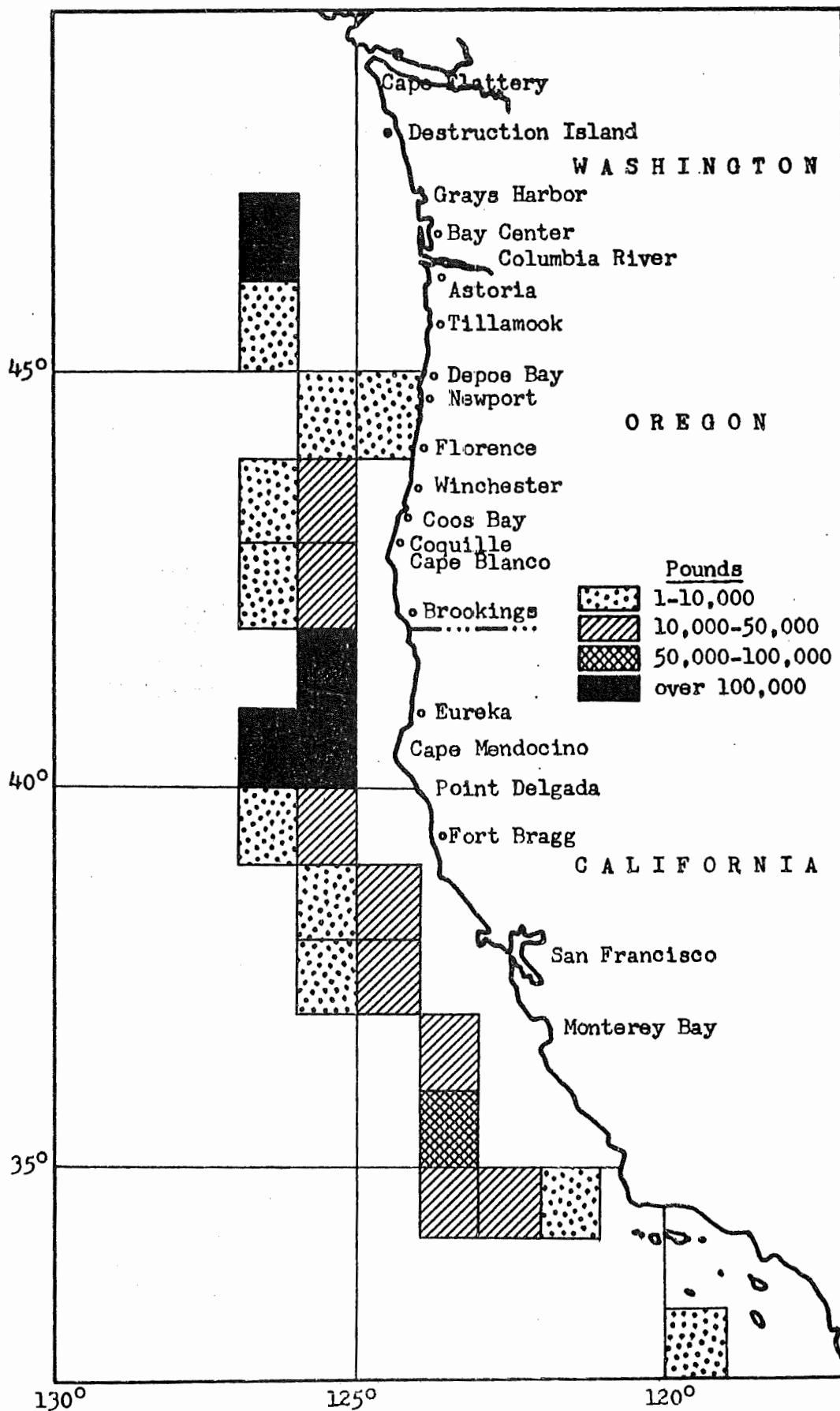


Figure 22
 Catch Localities for Pacific Albacore
 October 1957

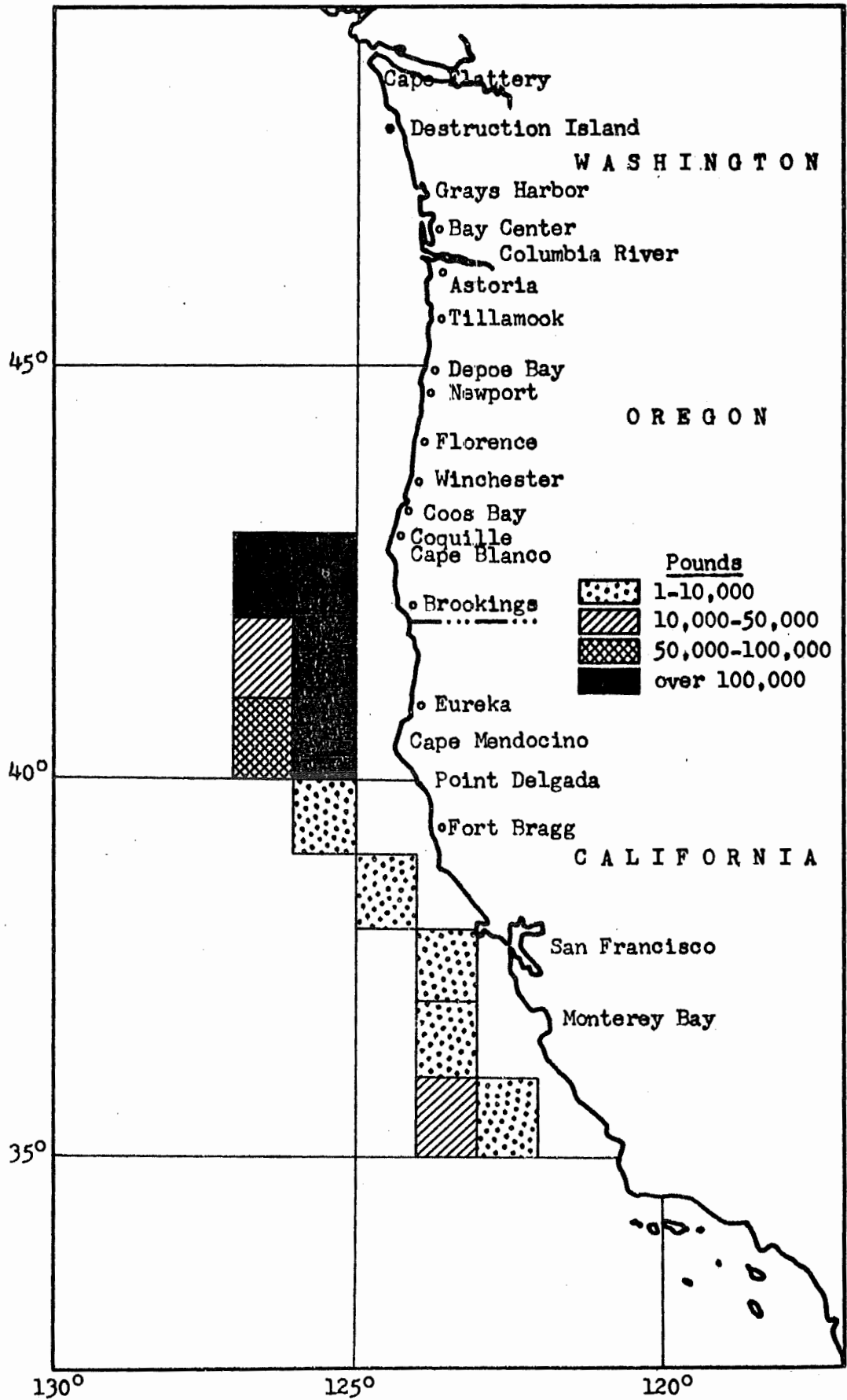


Figure 23
 Catch Localities for Pacific Albacore
 July 1958

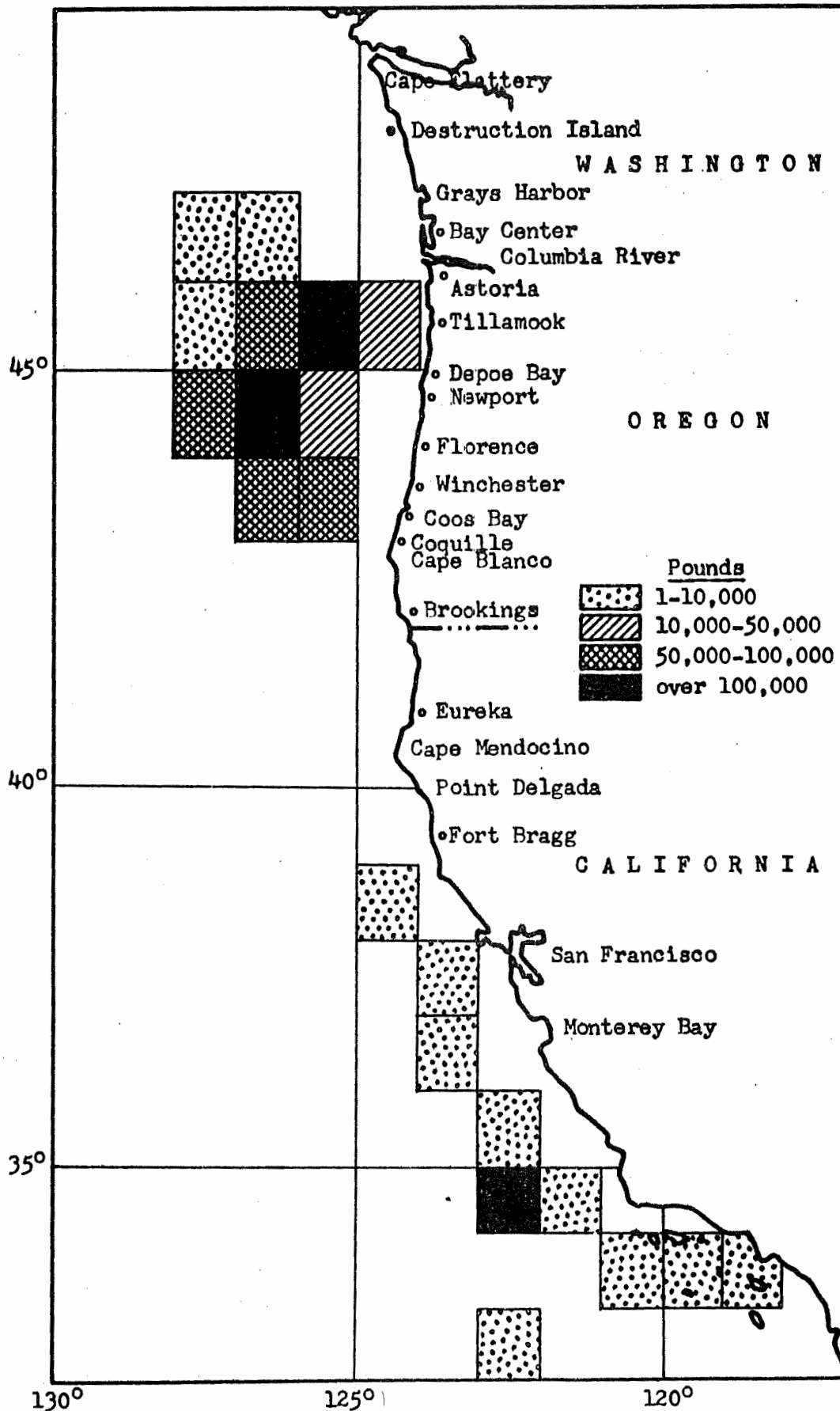


Figure 24
 Catch Localities for Pacific Albacore
 August 1958

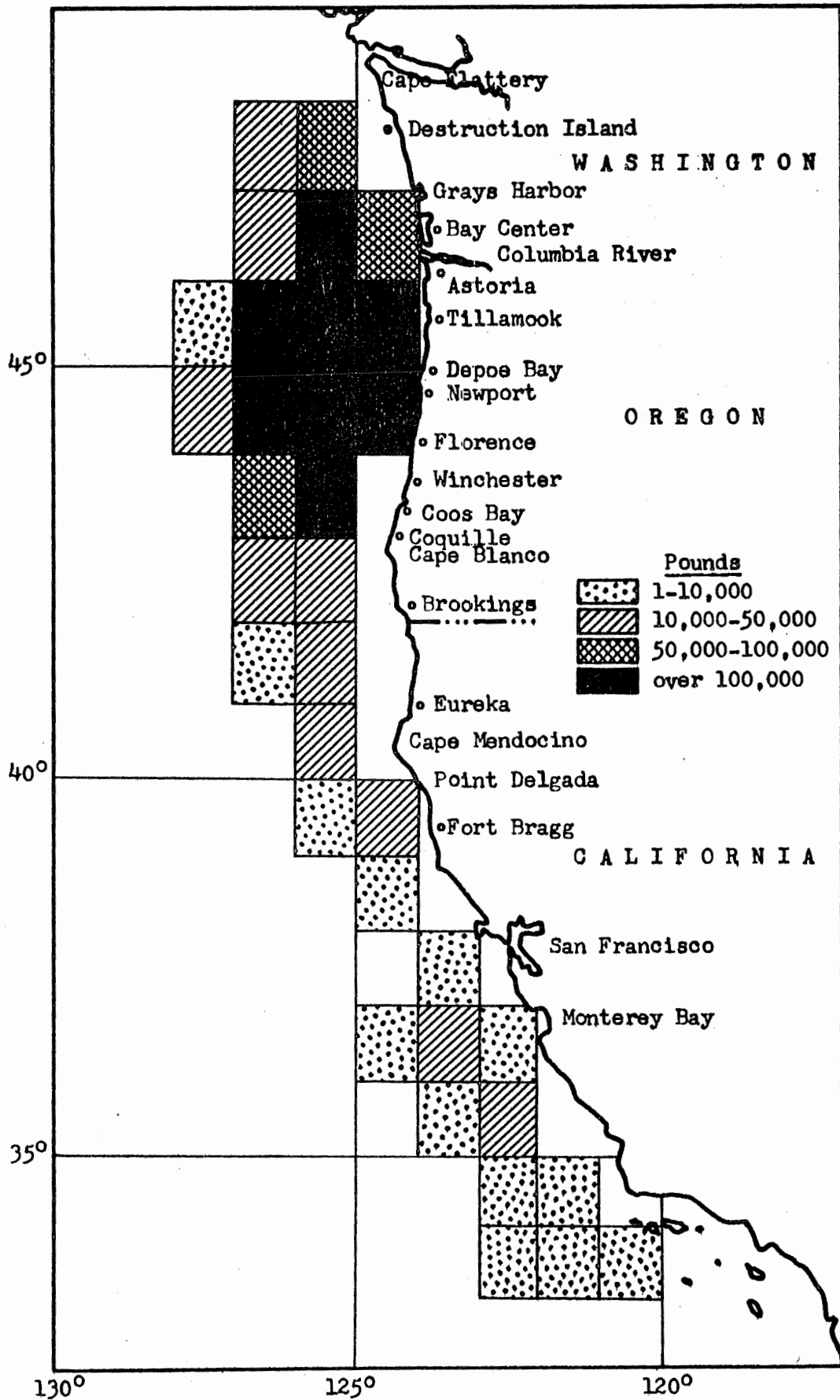


Figure 25
 Catch Localities for Pacific Albacore
 September 1958

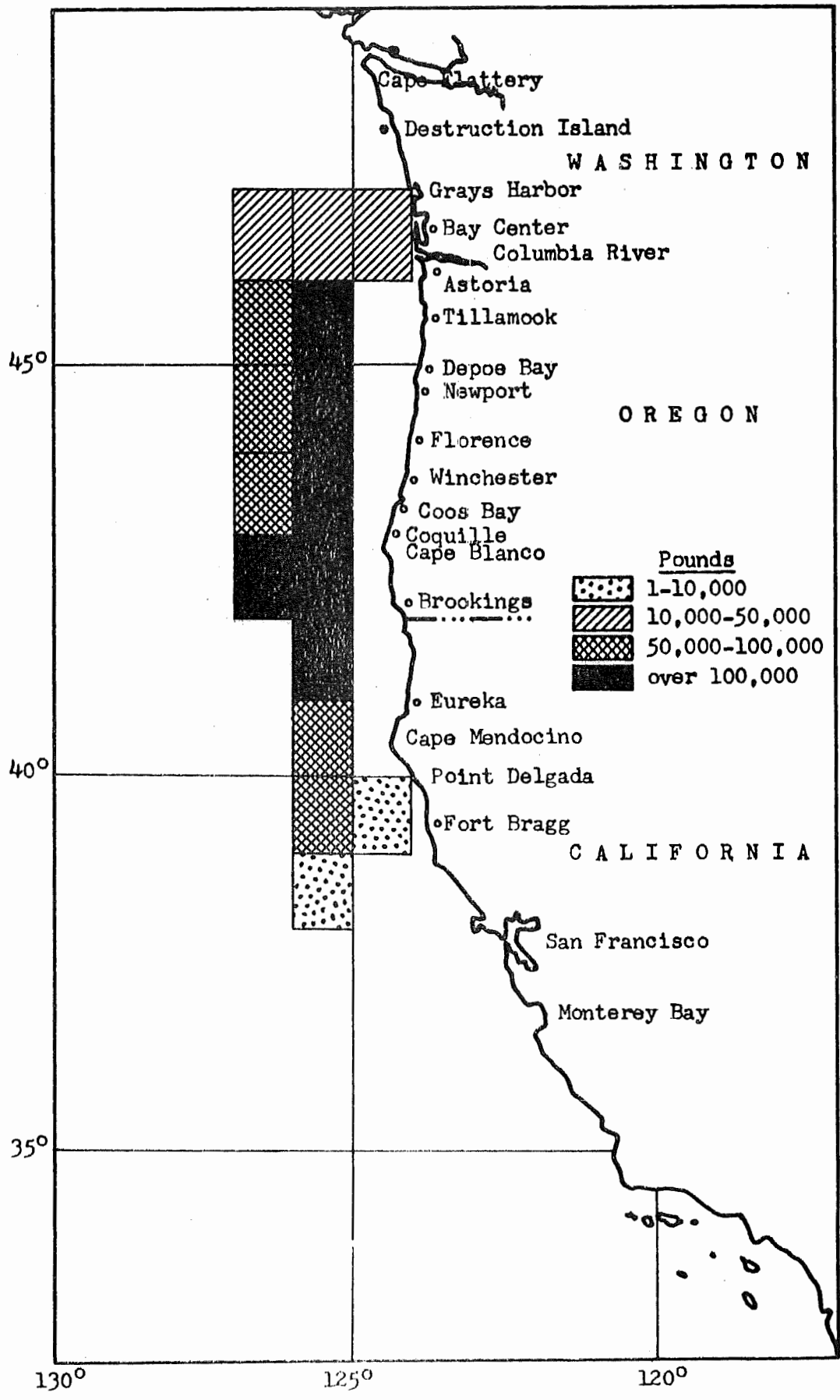


Figure 26
 Catch Localities for Pacific Albacore
 October 1958

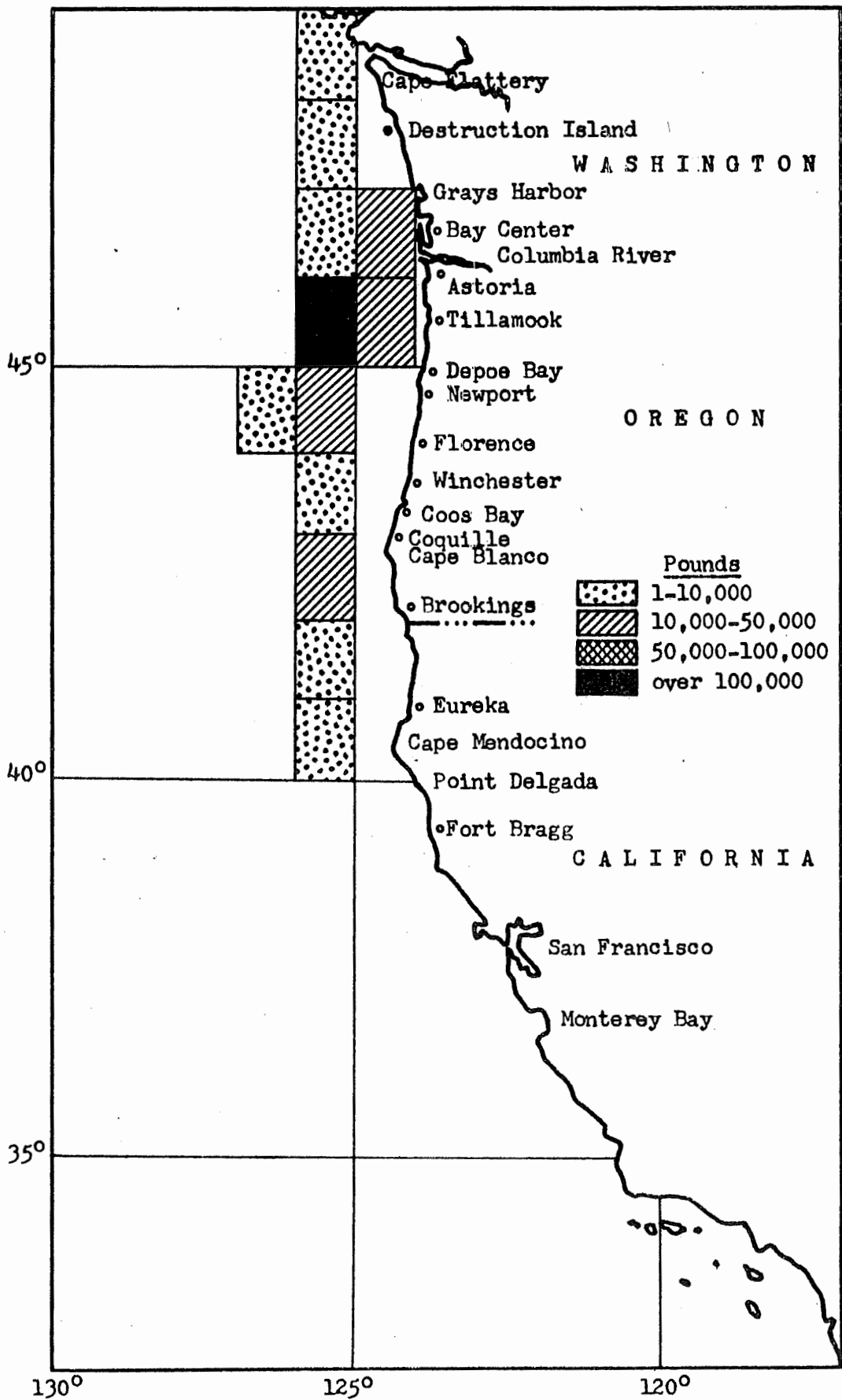


Figure 27
 Catch Localities for Pacific Albacore
 July 1959

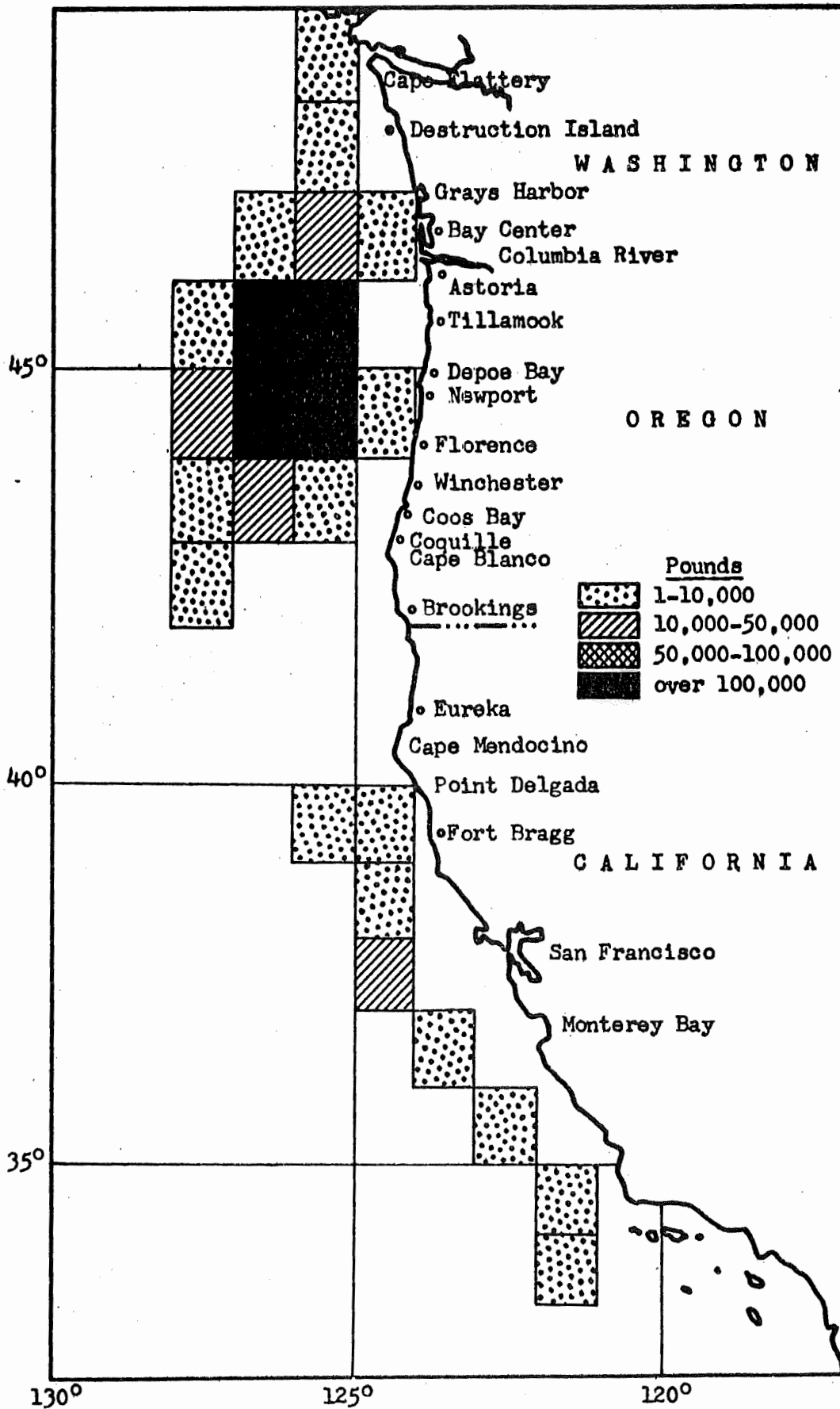


Figure 28
 Catch Localities for Pacific Albacore
 August 1959

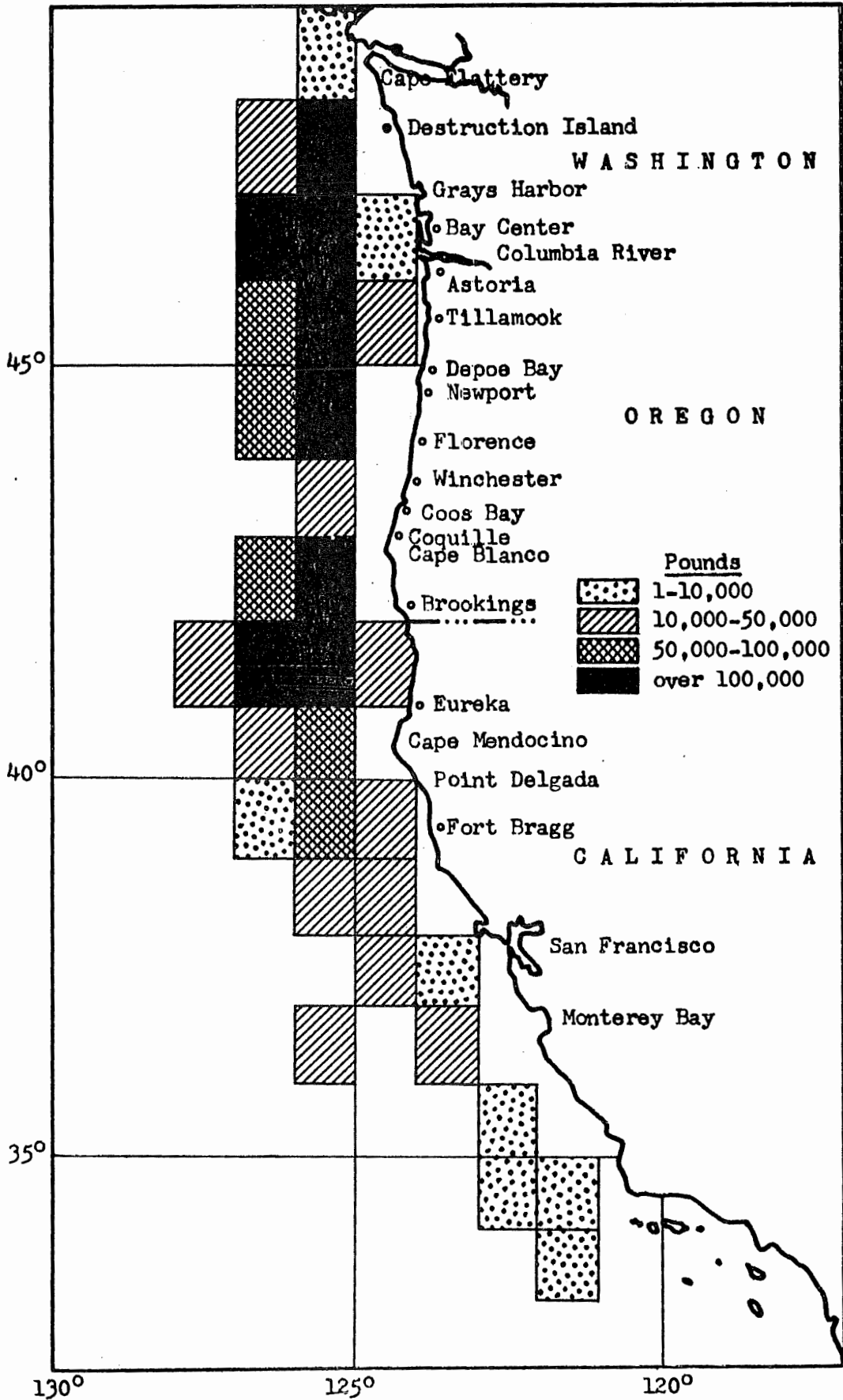


Figure 29
 Catch Localities for Pacific Albacore
 September 1959

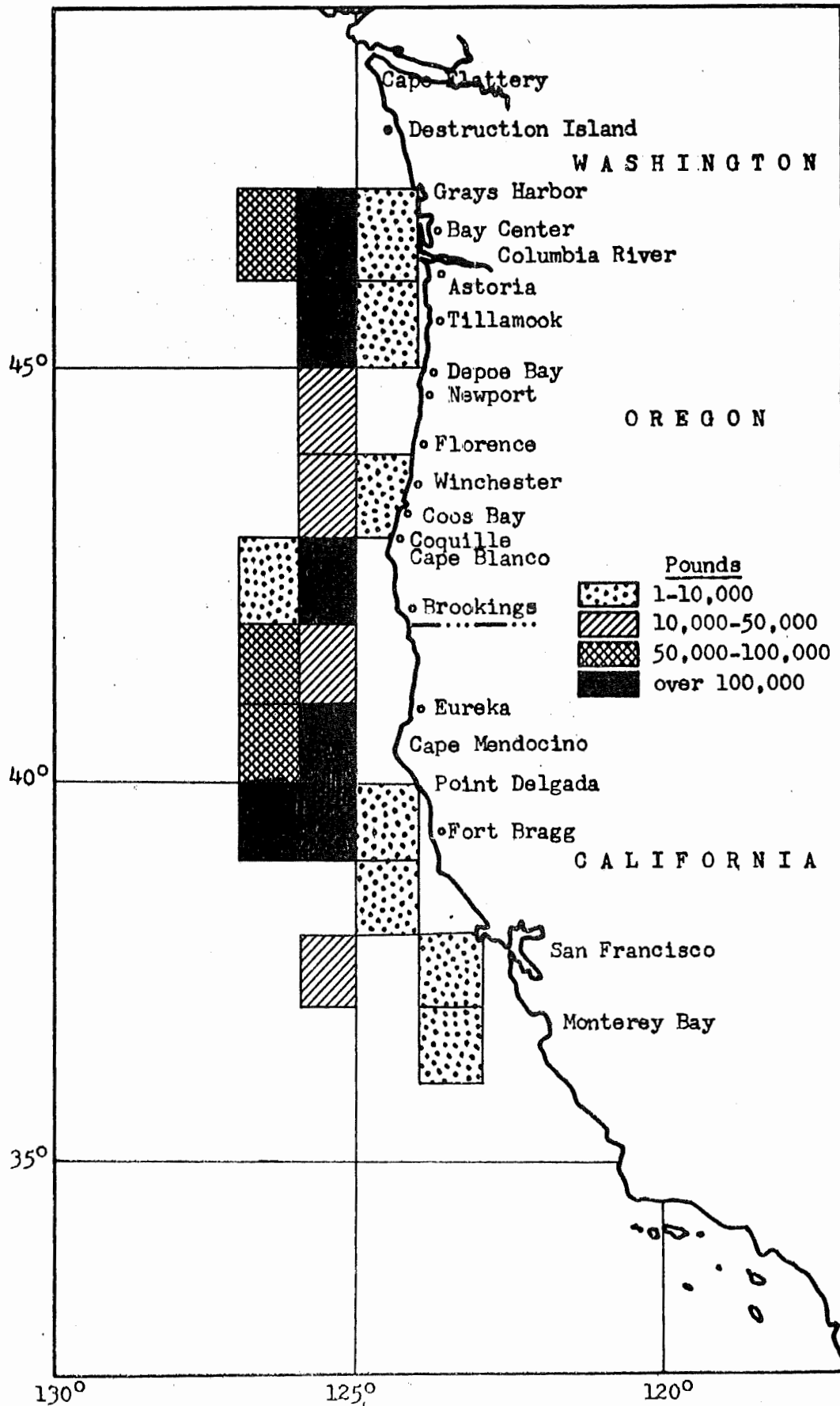


Figure 30
 Catch Localities for Pacific Albacore
 October 1959

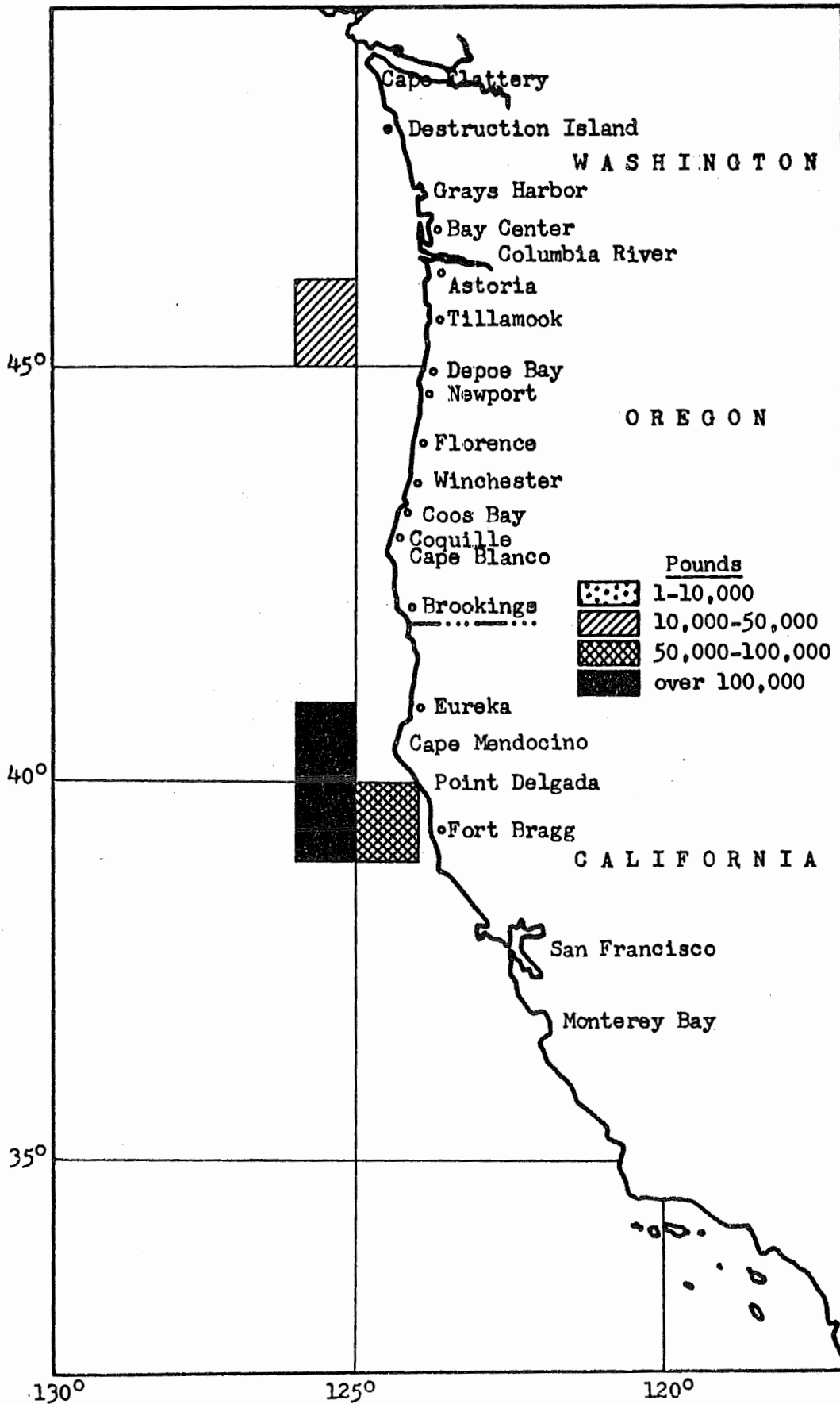


Figure 31
 Catch Localities for Pacific Albacore
 July 1960

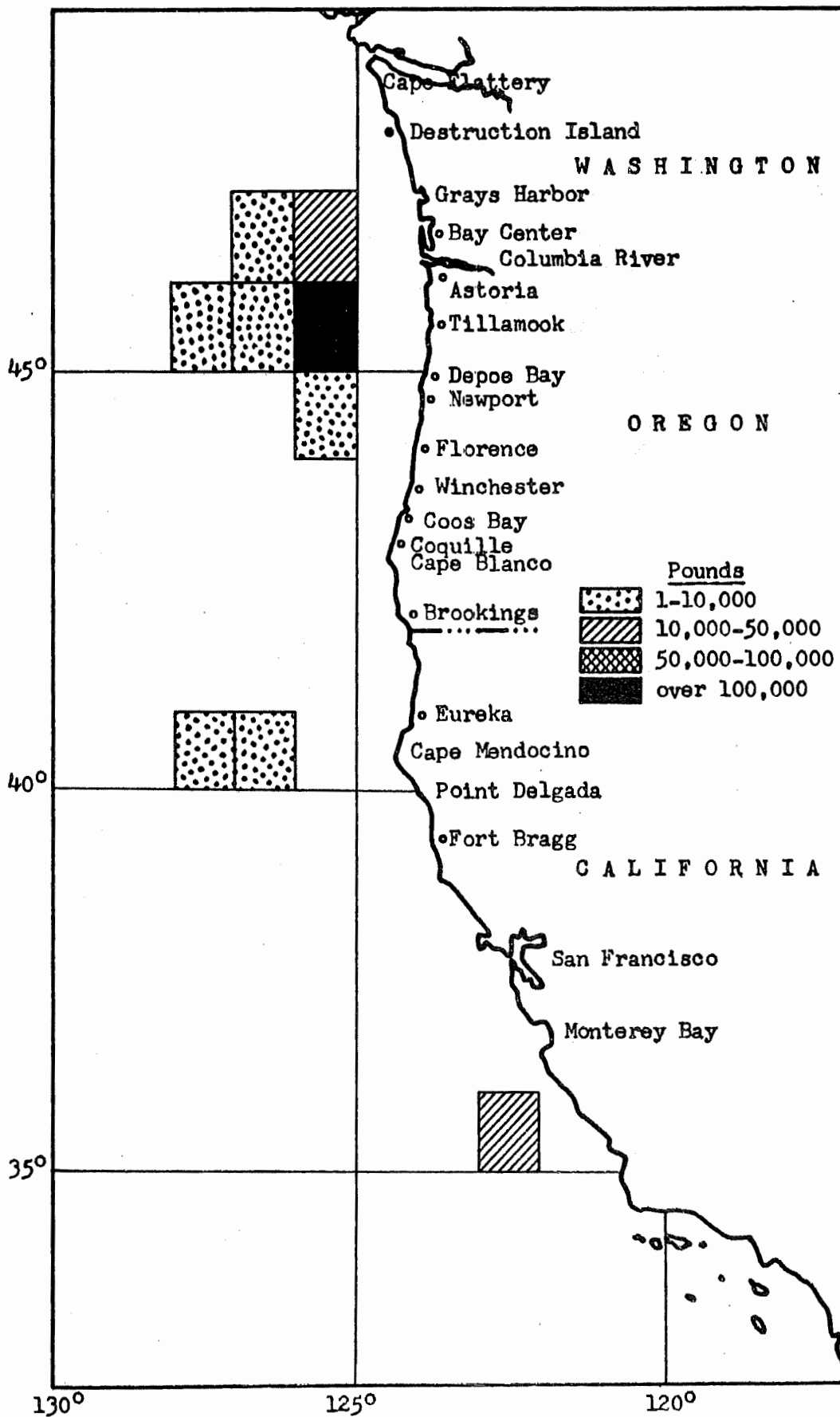


Figure 32
 Catch Localities for Pacific Albacore
 August 1960

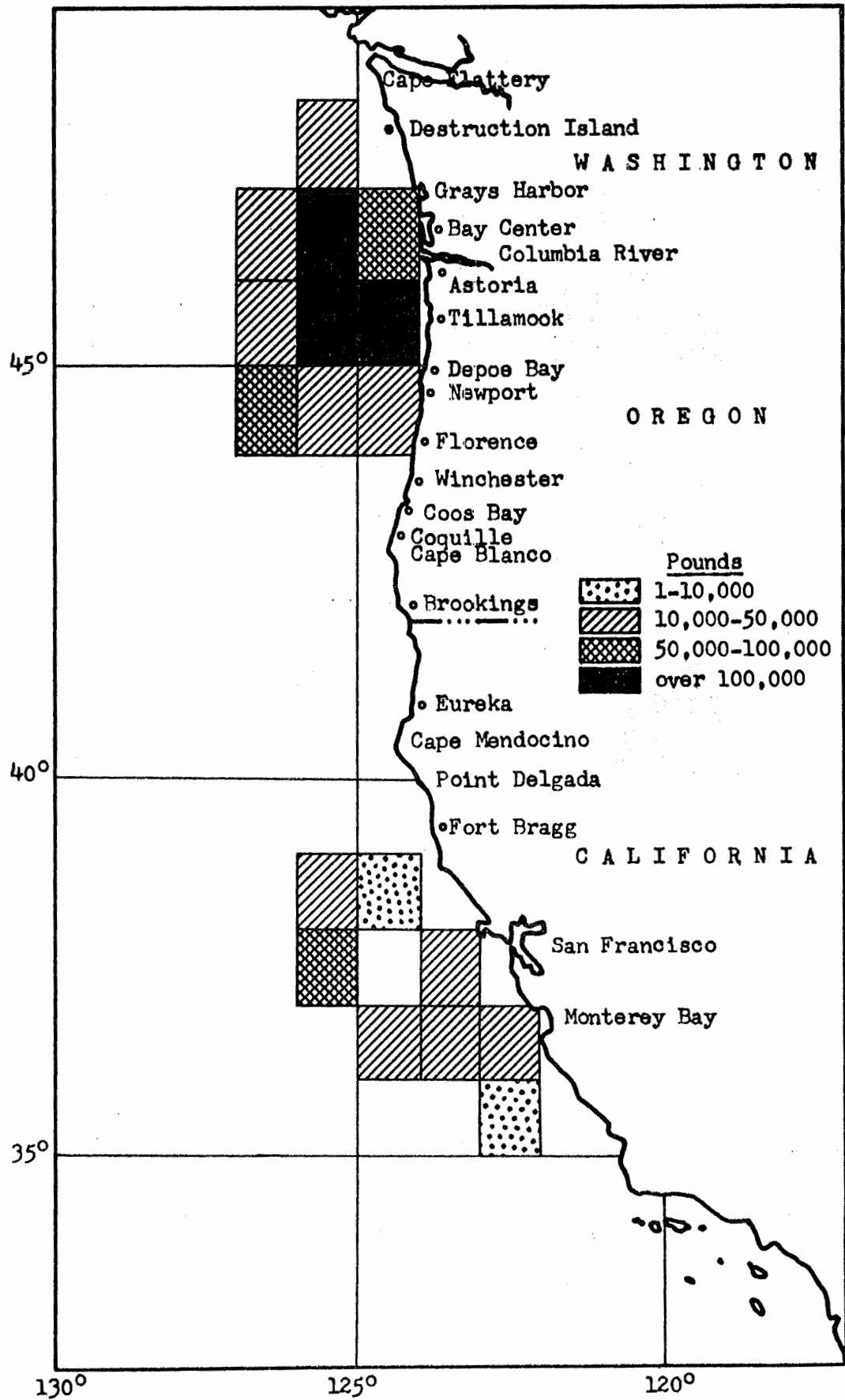


Figure 33
 Catch Localities for Pacific Albacore
 September 1960

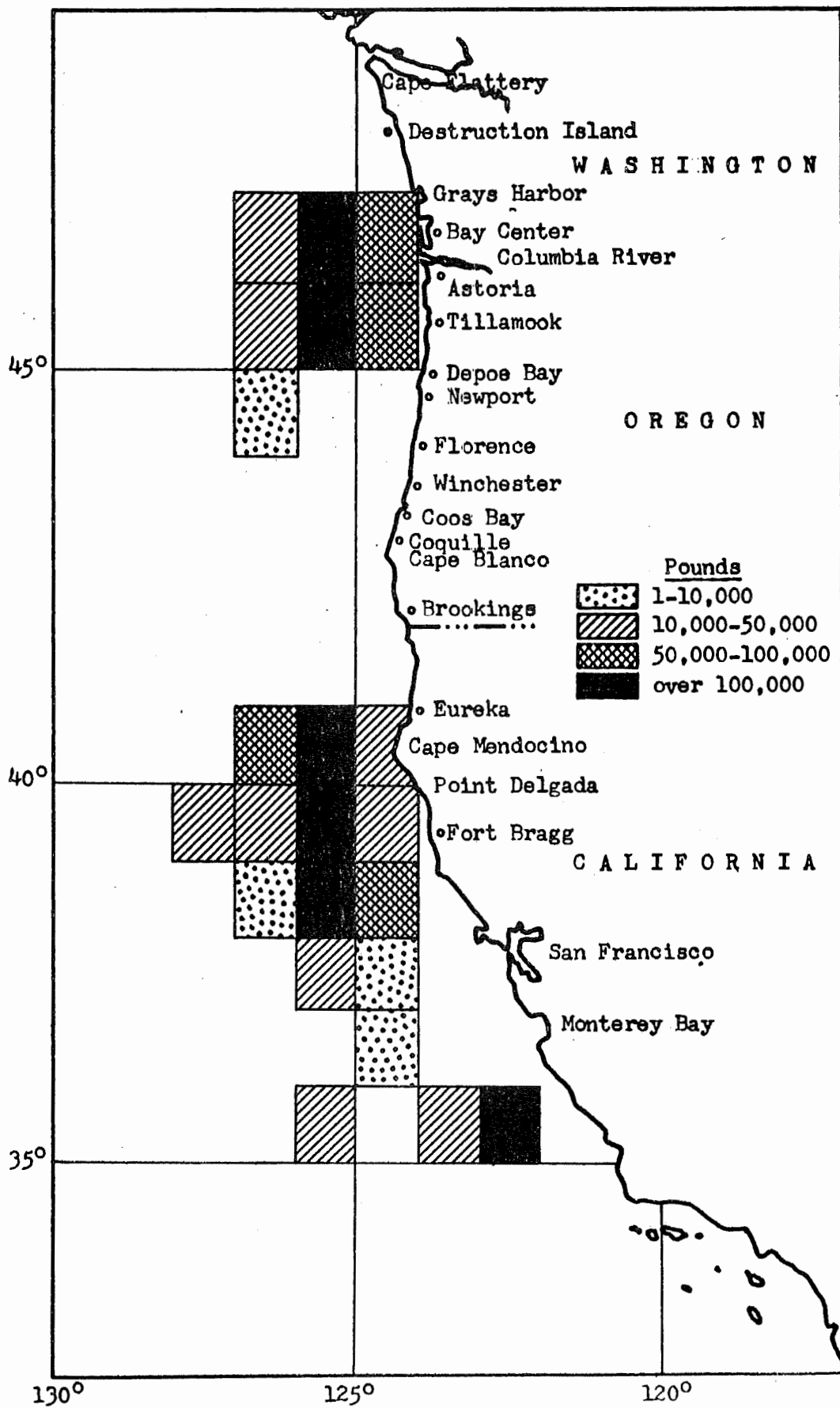


Figure 34
 Catch Localities for Pacific Albacore
 October 1960

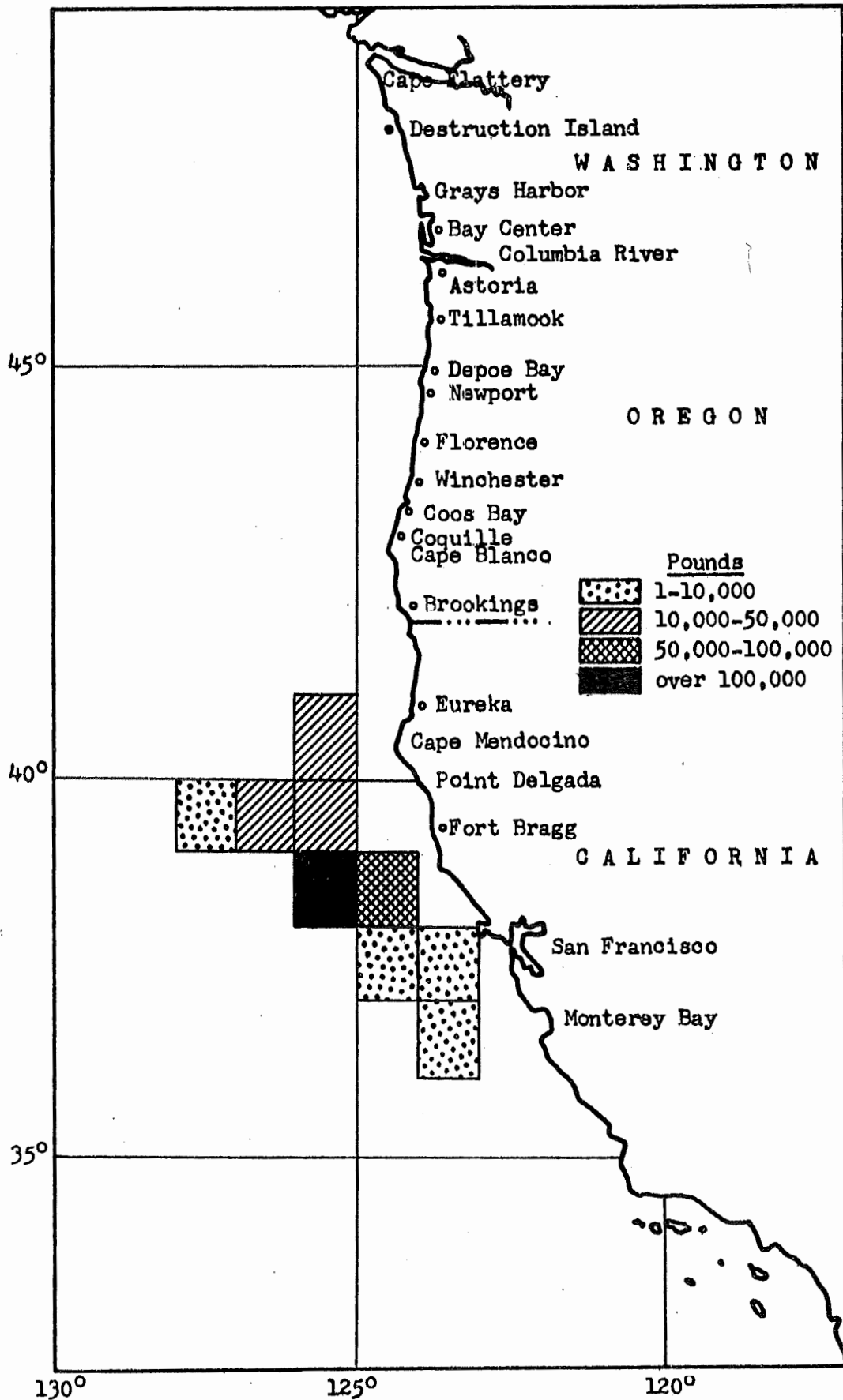


Figure 35
Albacore Length-Frequency Distribution by Month
1939

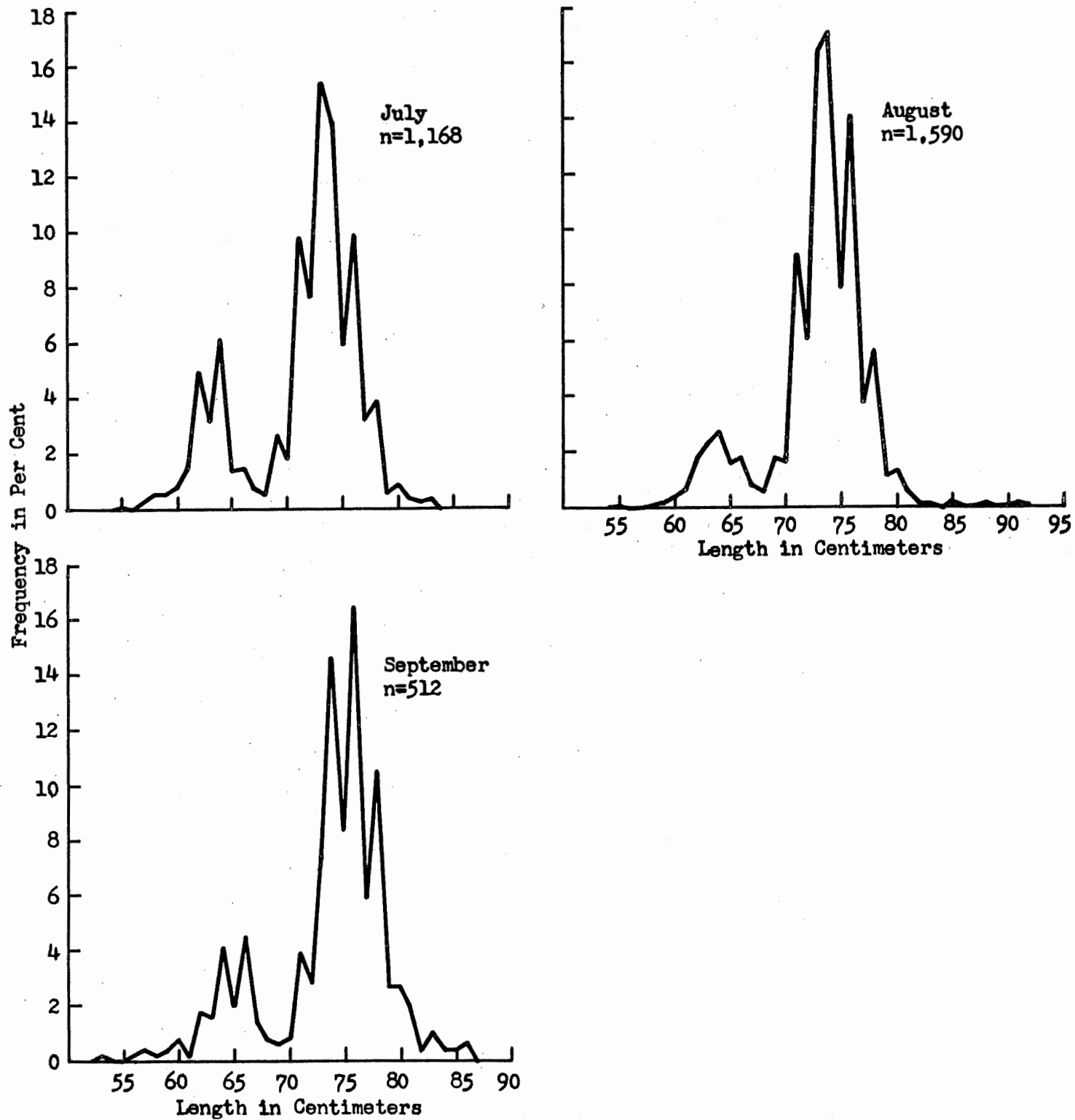


Figure 36
Albacore Length-Frequency Distribution by Month
1940

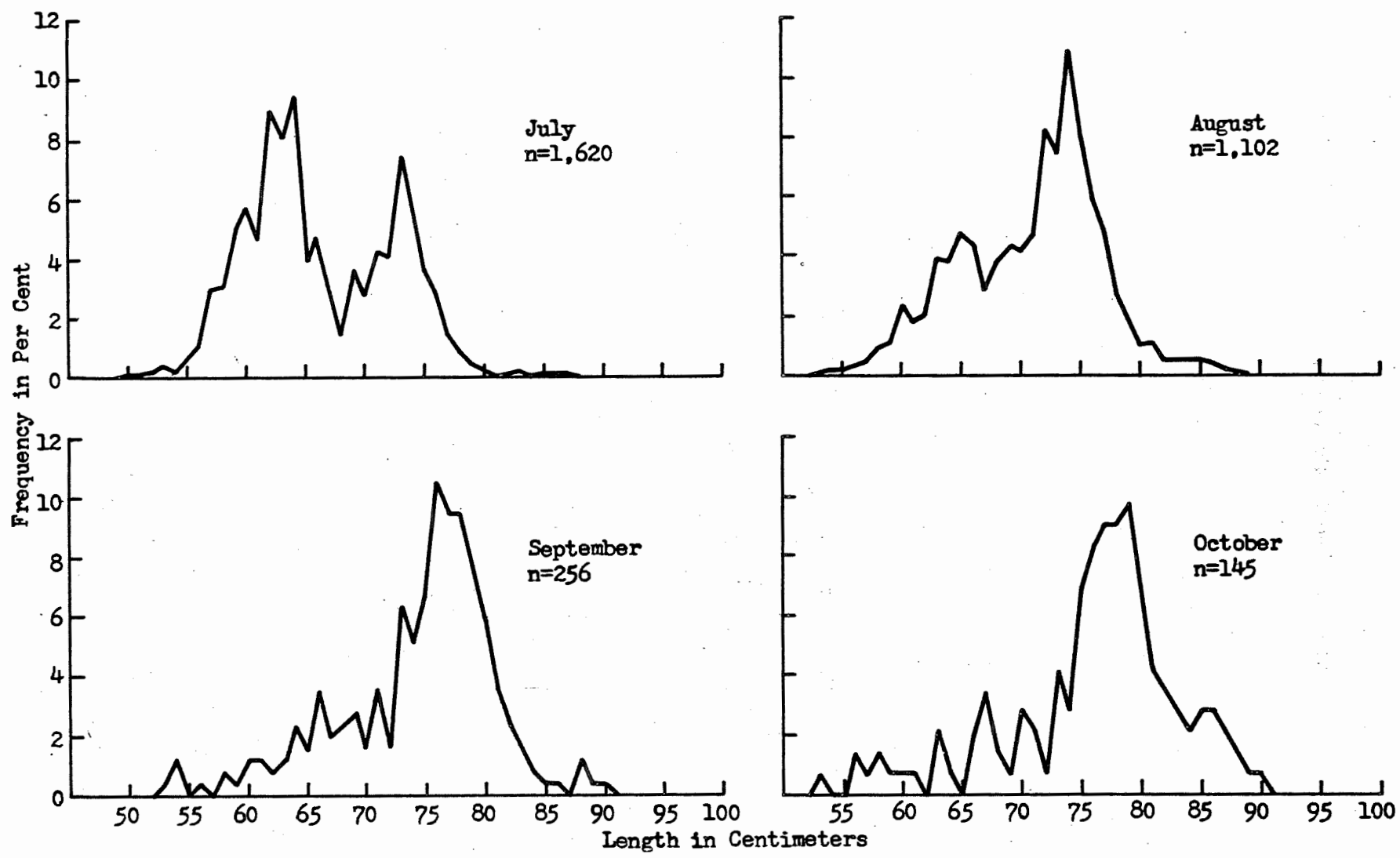


Figure 37
 Albacore Length-Frequency Distribution by Month
 1941

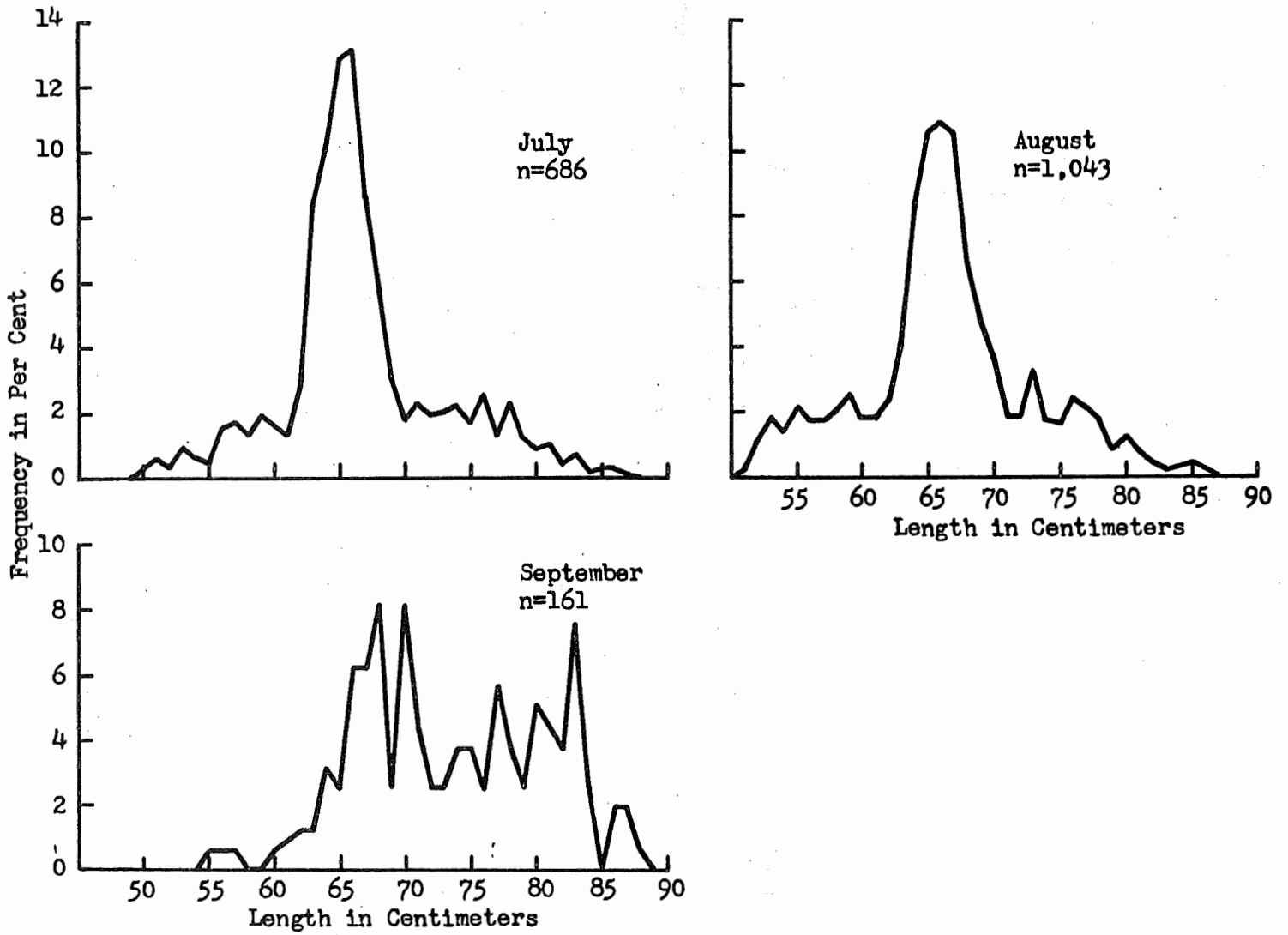


Figure 30
Albacore Length-Frequency Distribution by Month
1942

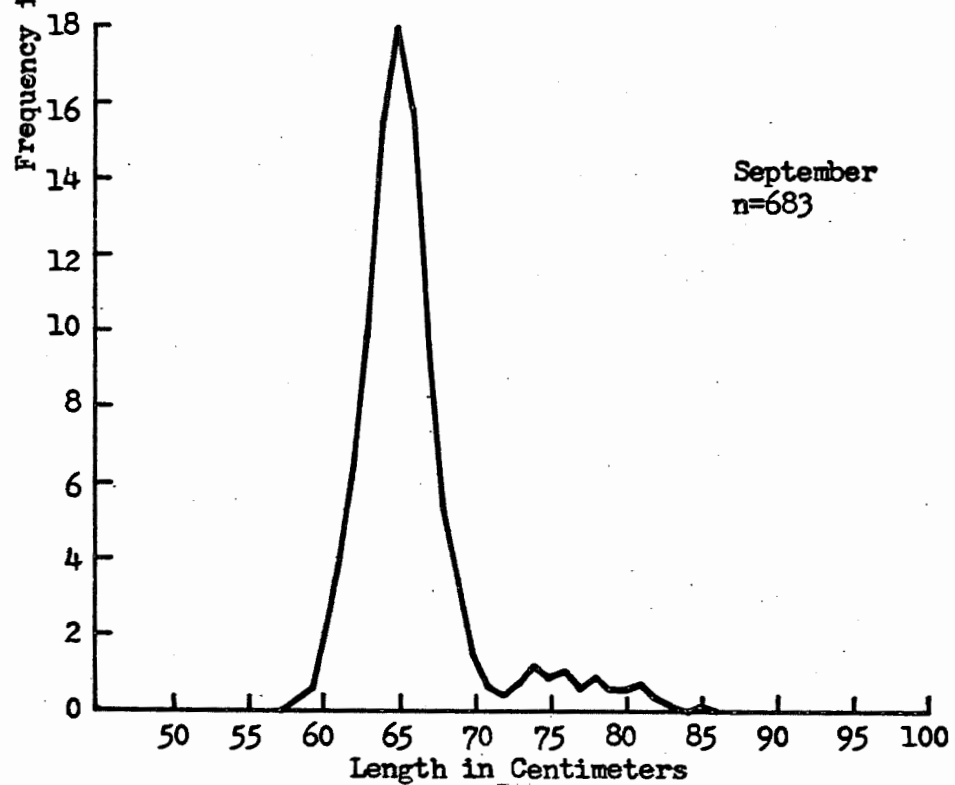
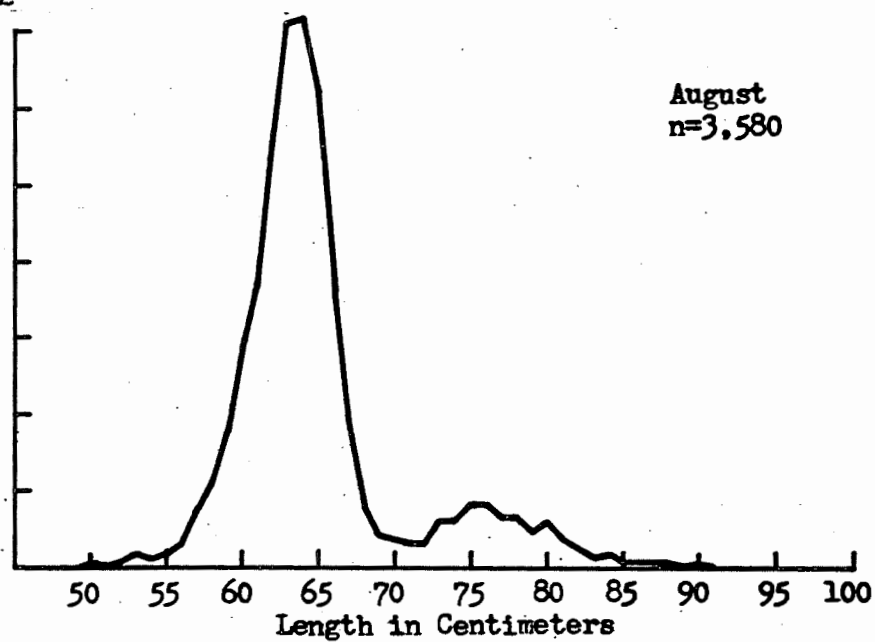
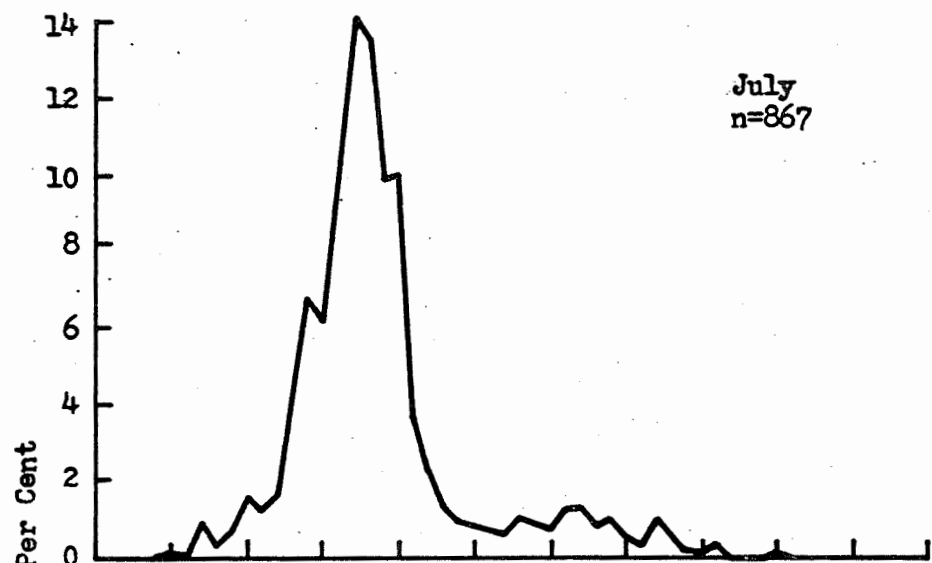


Figure 39
Albacore Length-Frequency Distribution by Month
1947

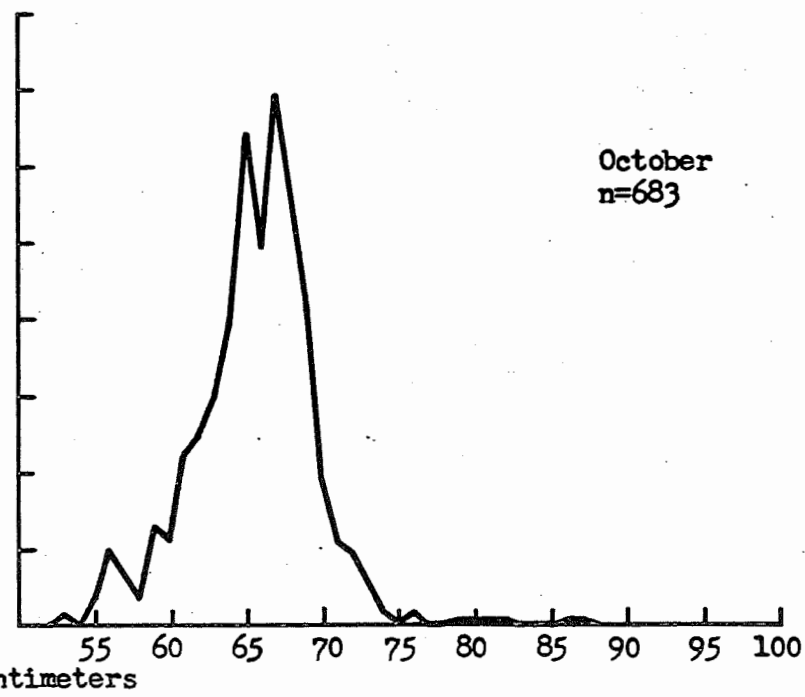
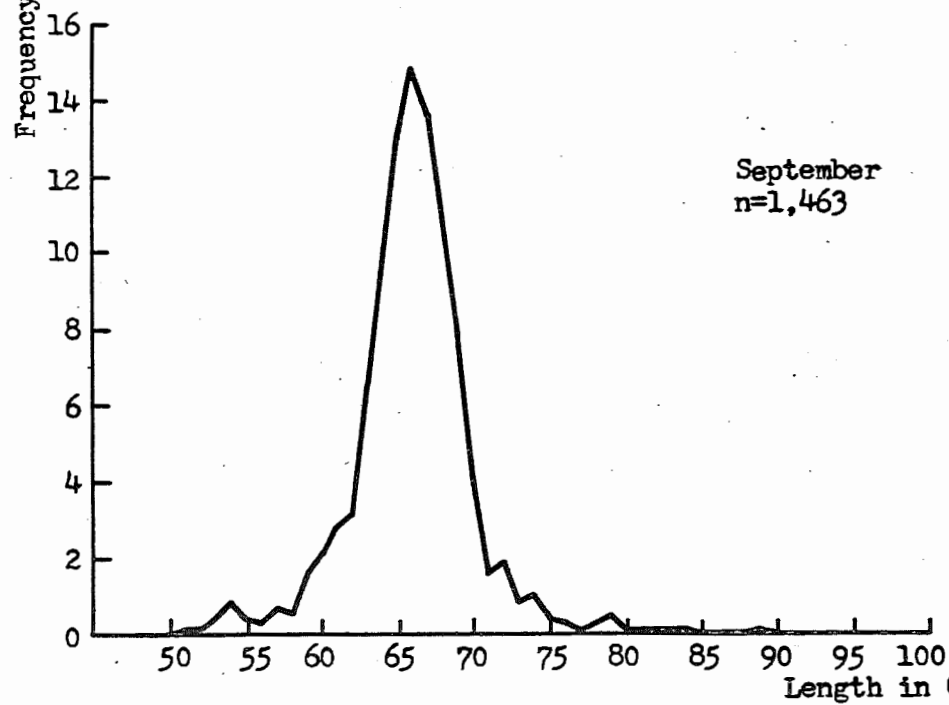
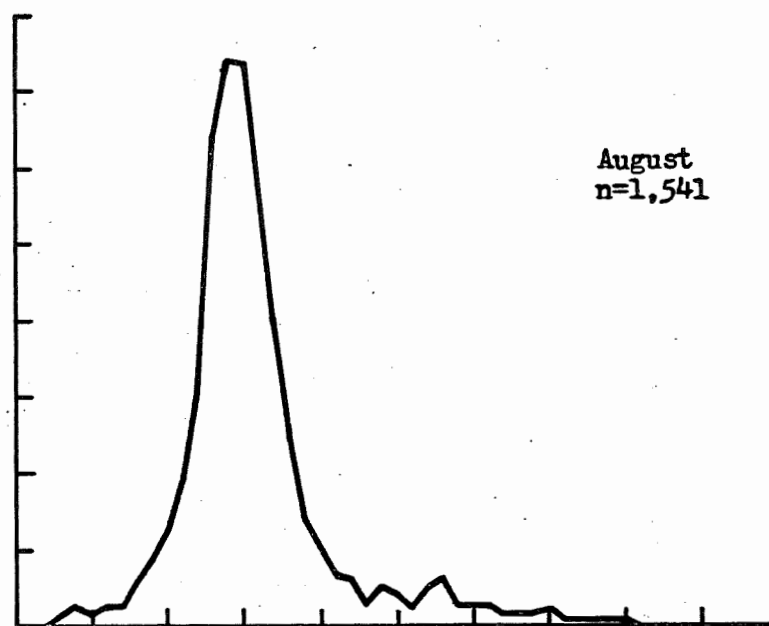
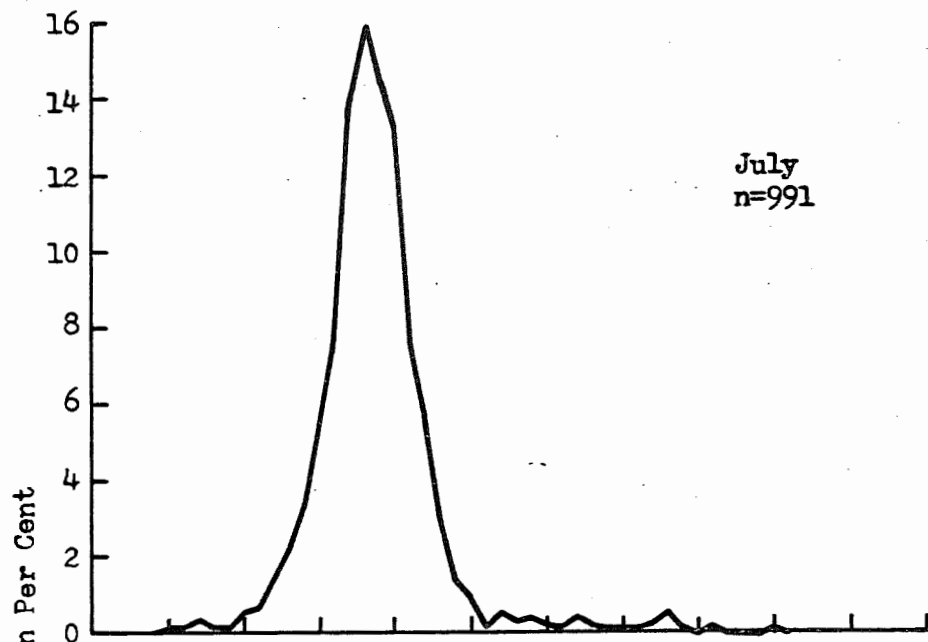


Figure 40
Albacore Length-Frequency Distribution by Month
1948

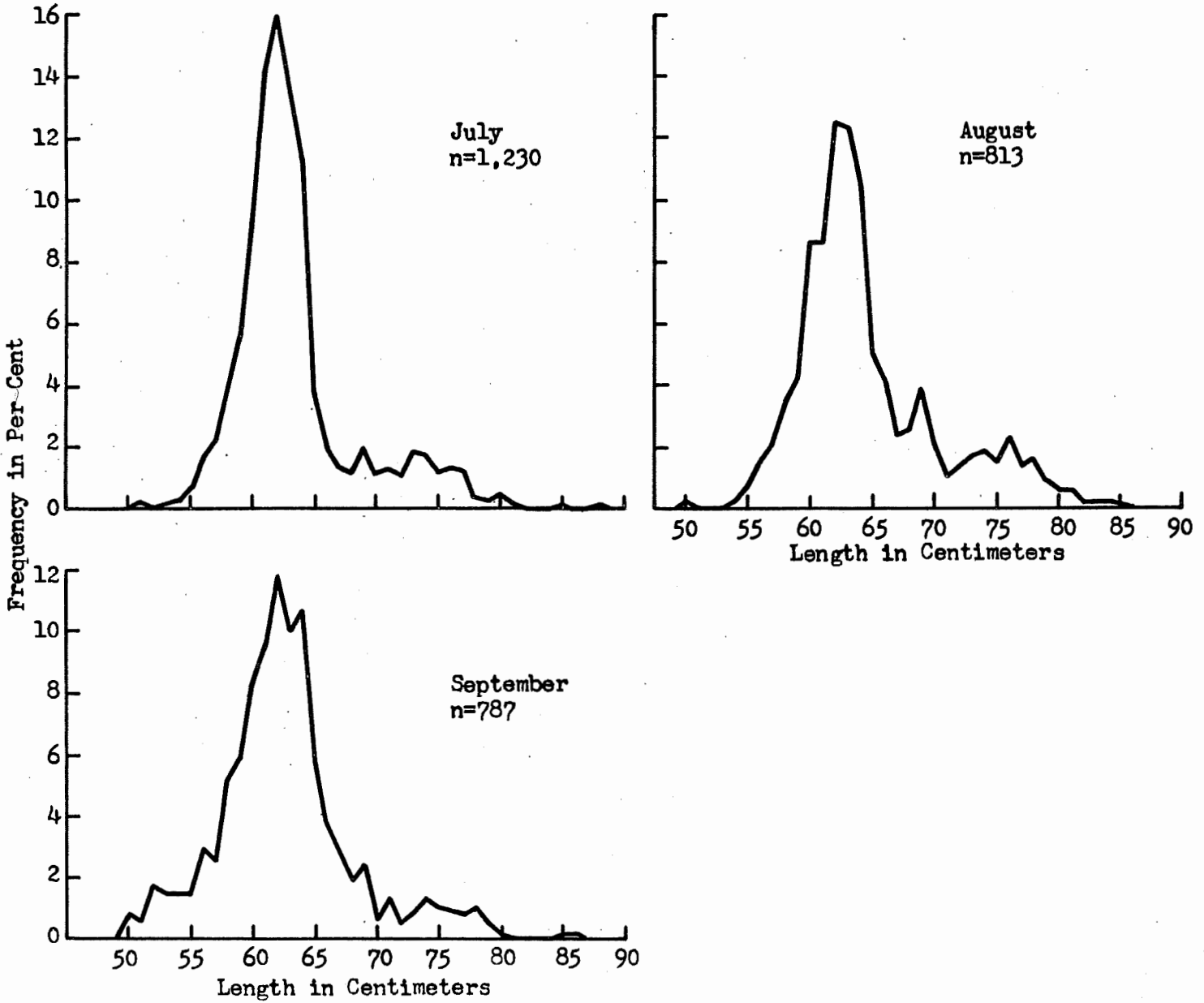


Figure 41
Albacore Length-Frequency Distribution by Month
1949

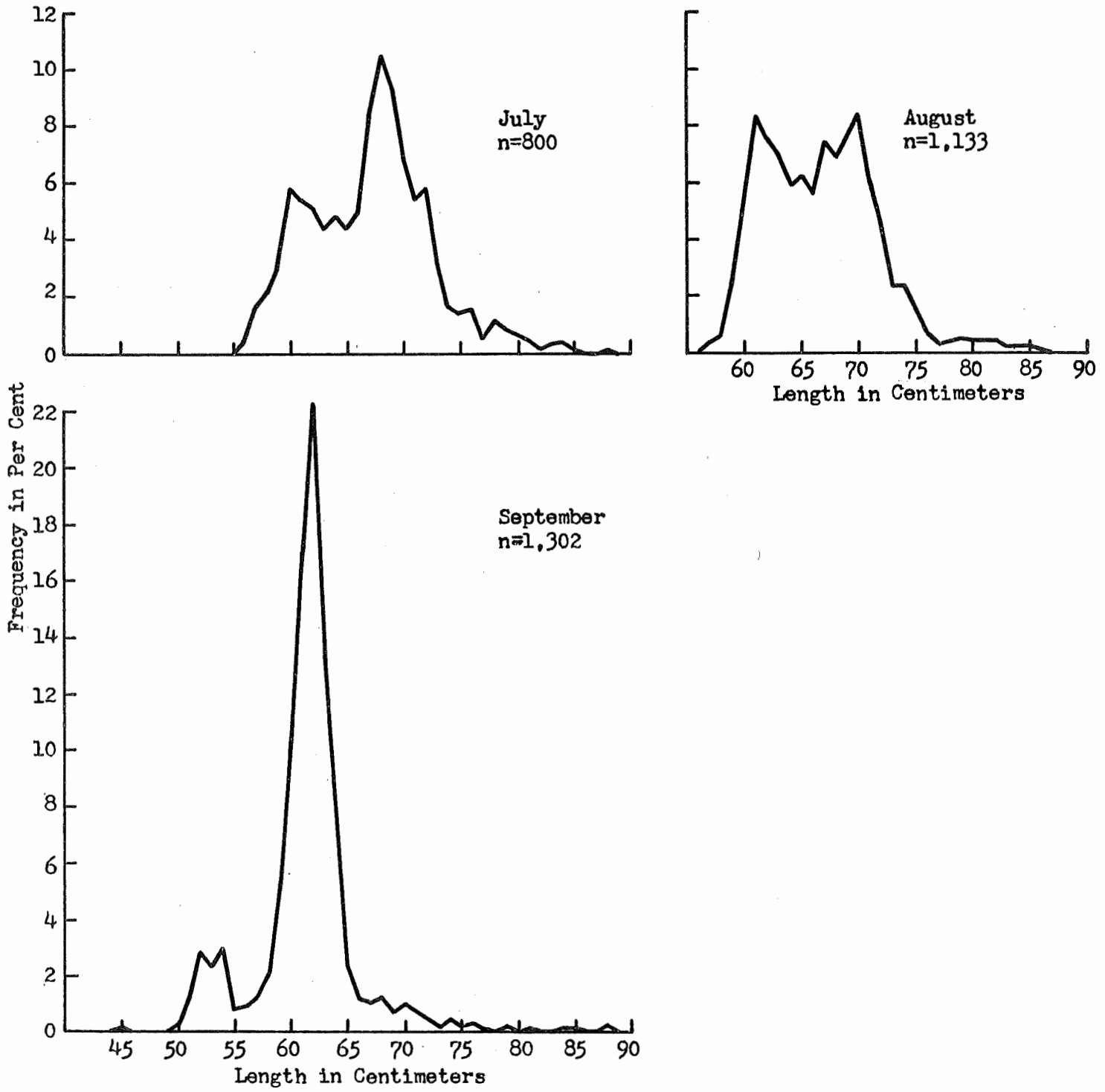


Figure 42
Albacore Length-Frequency Distribution by Month
1950

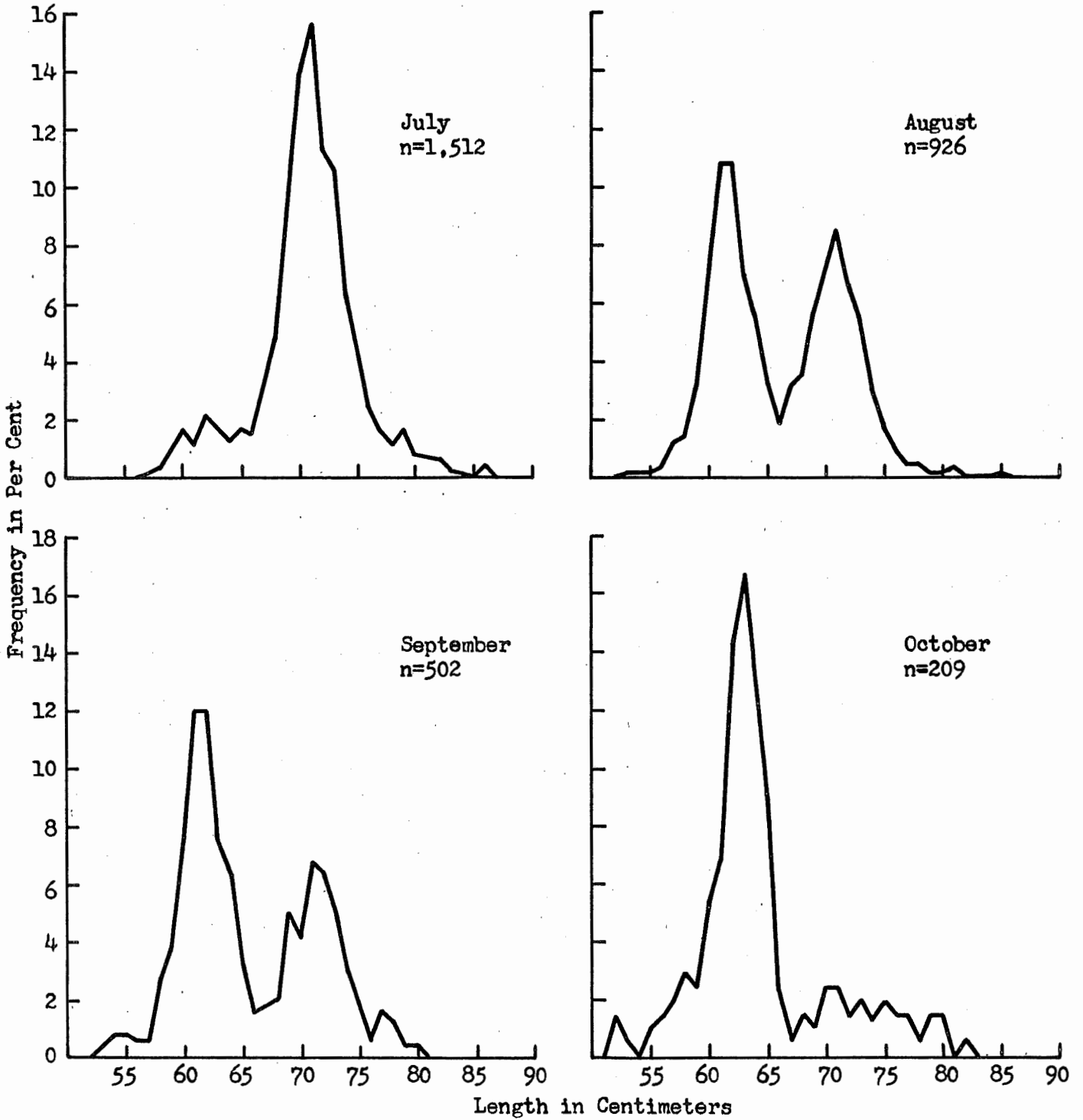


Figure 43
Albacore Length-Frequency Distribution by Month
1951

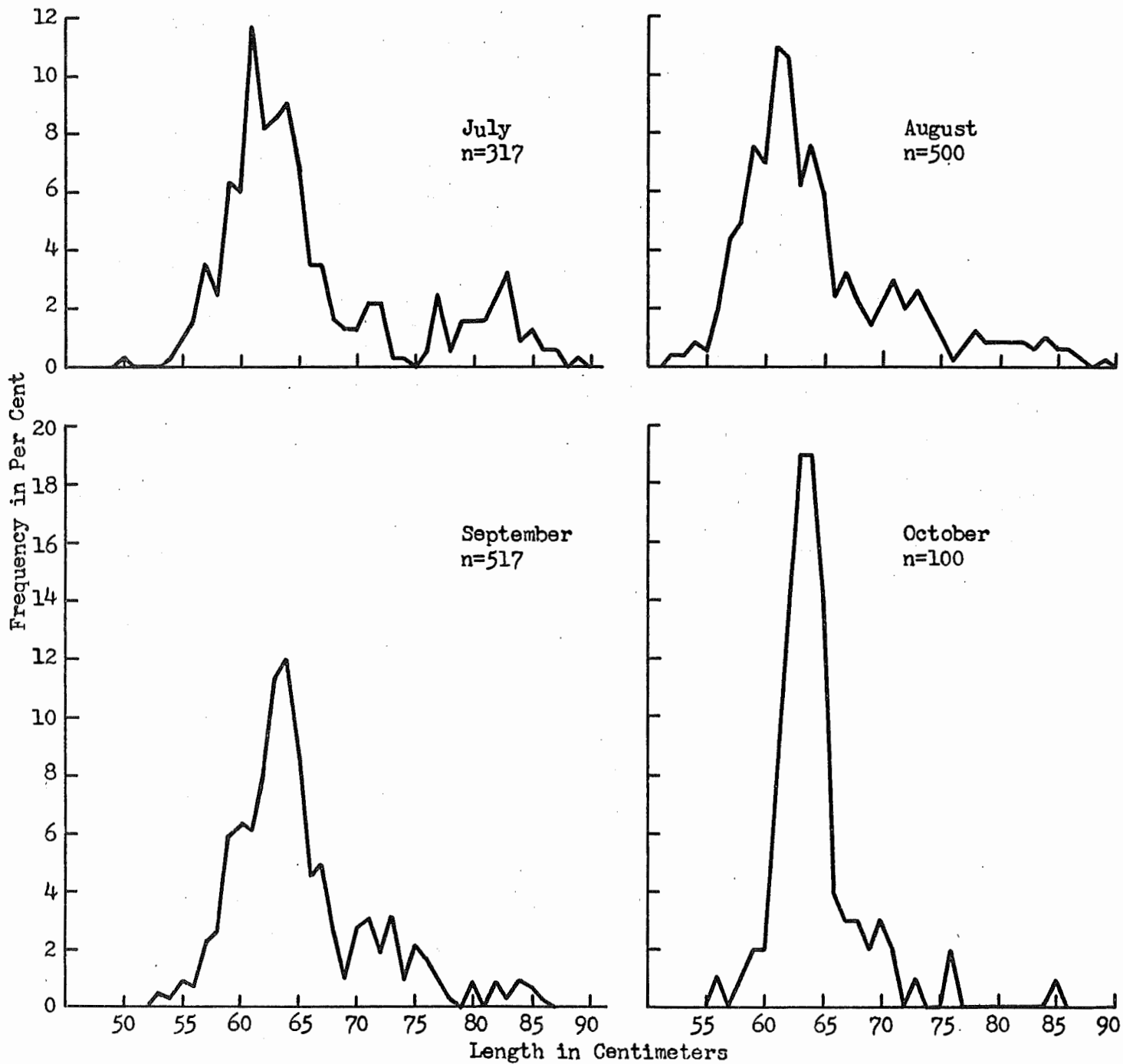


Figure 44
Albacore Length-Frequency Distribution by Month
1952

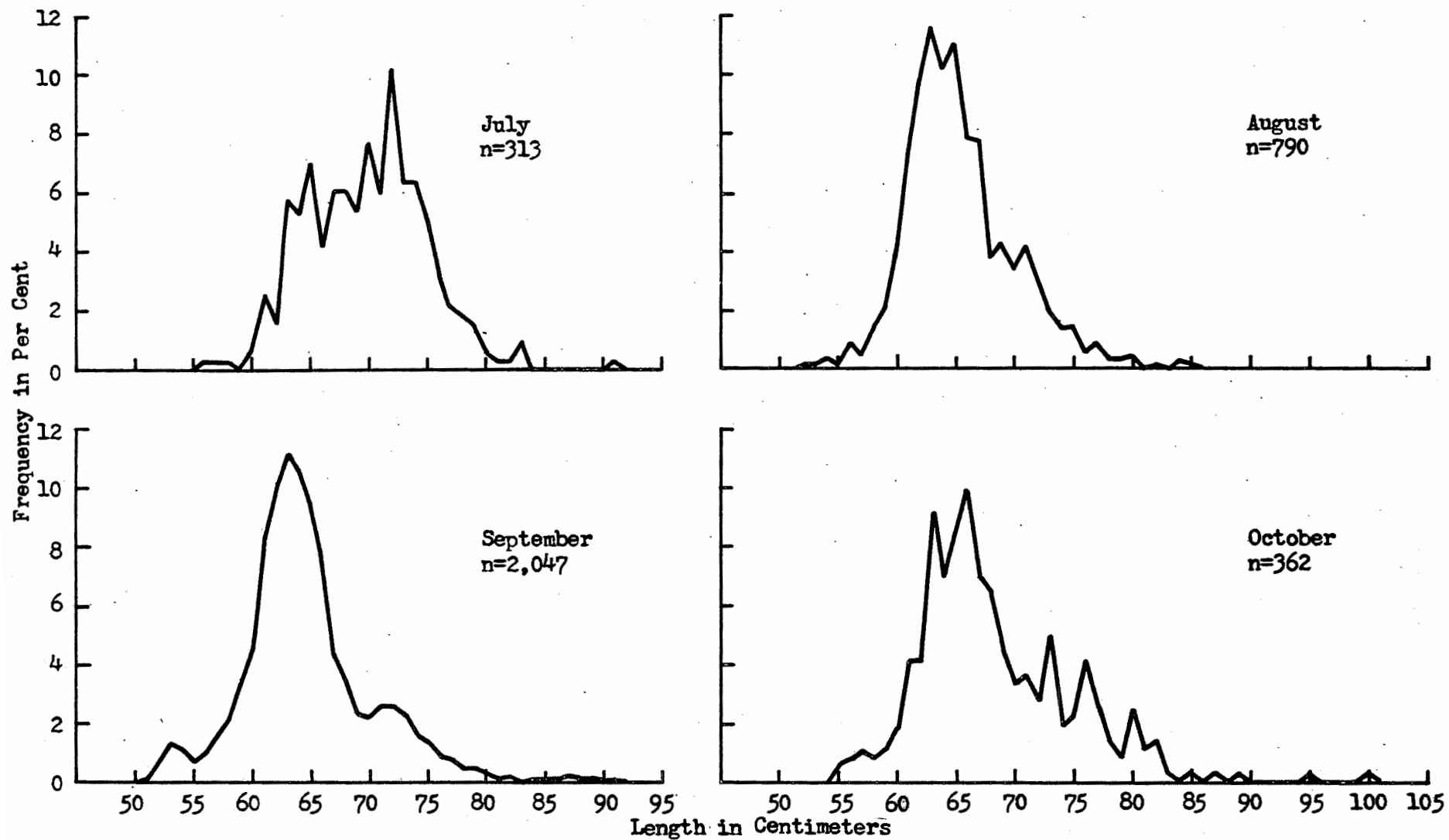


Figure 45
Albacore Length-Frequency Distribution by Month
1953

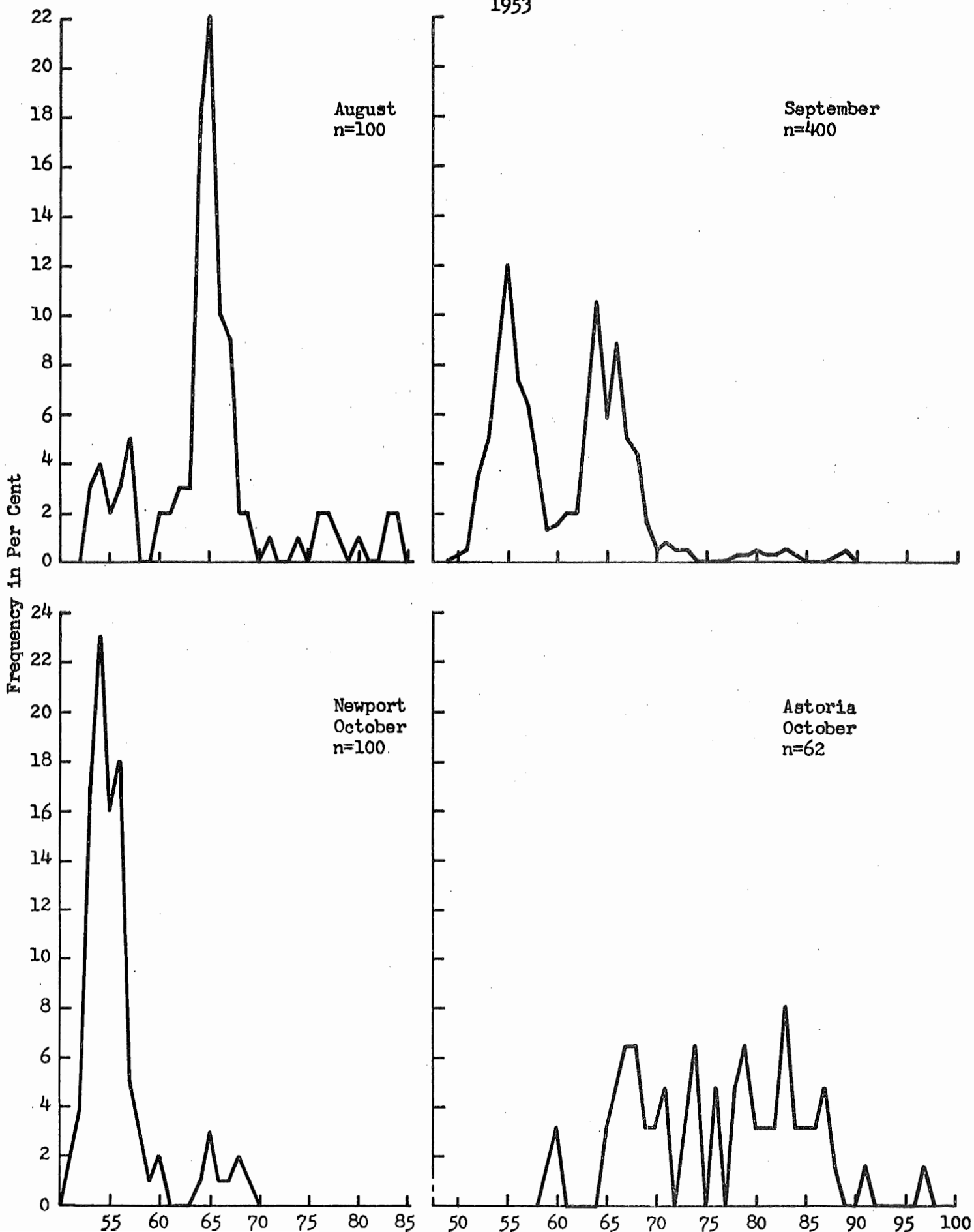


Figure 46
Albacore Length-Frequency Distribution by Month
1954

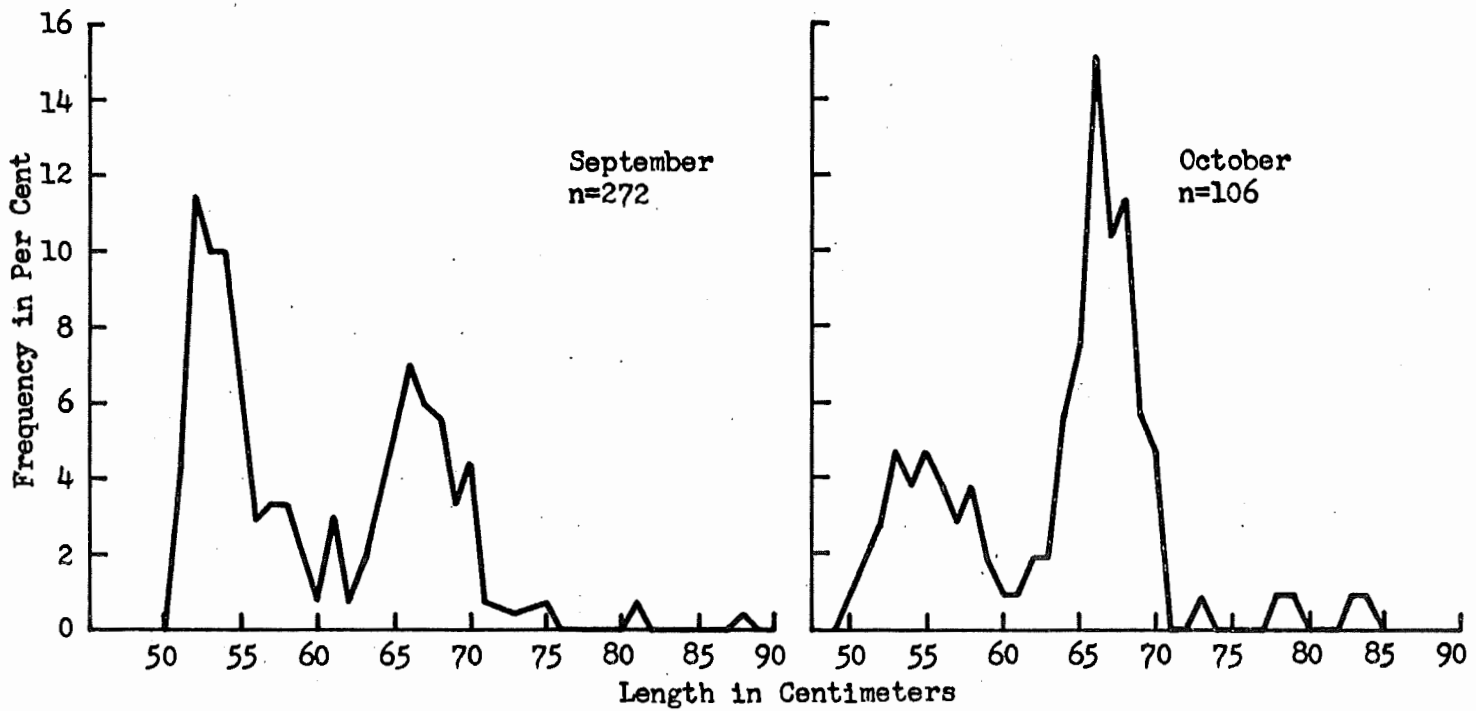
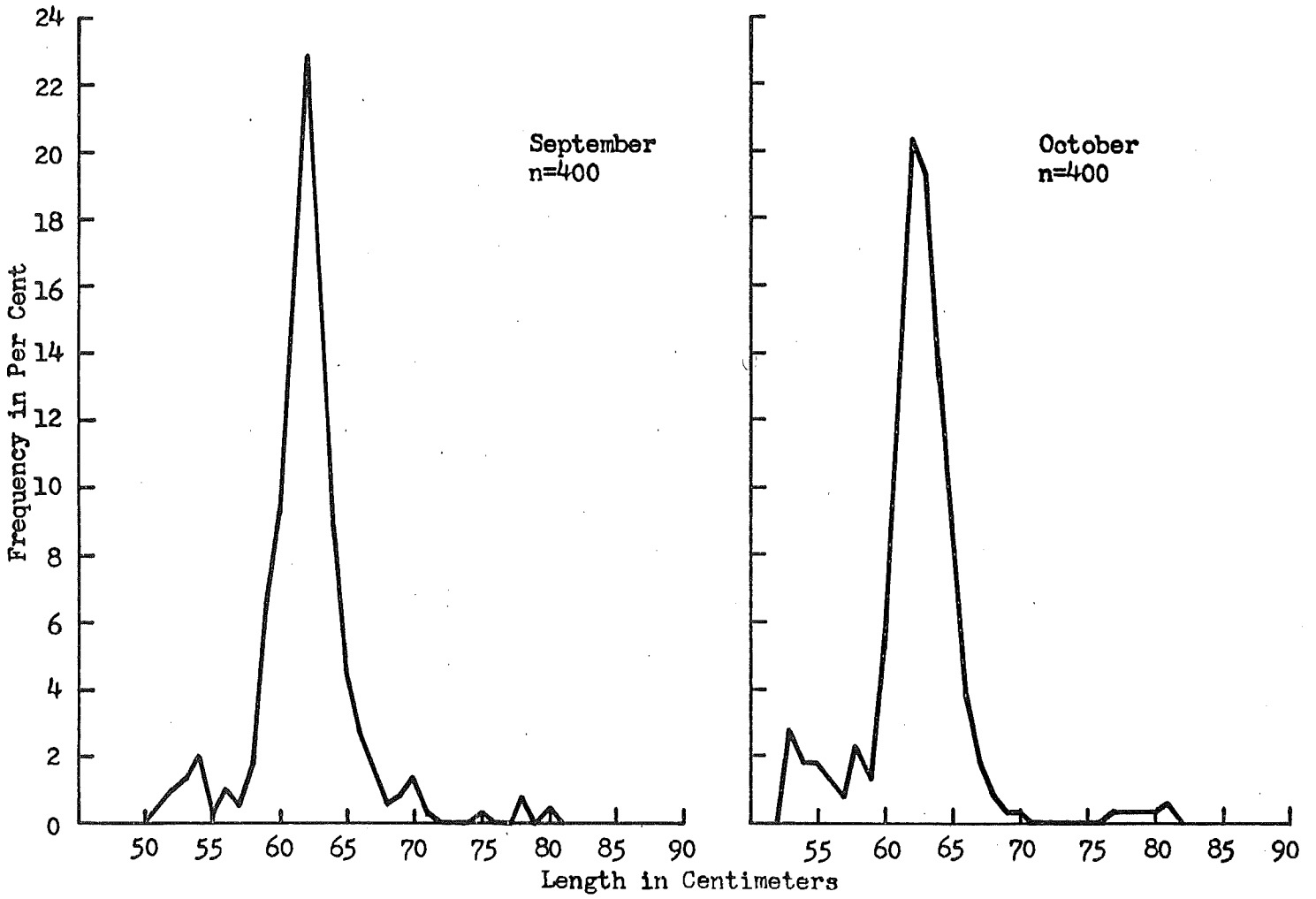


Figure 47
Albacore Length-Frequency Distribution by Month
1955



3

Figure 48
Albacore Length-Frequency Distribution by Month
1956

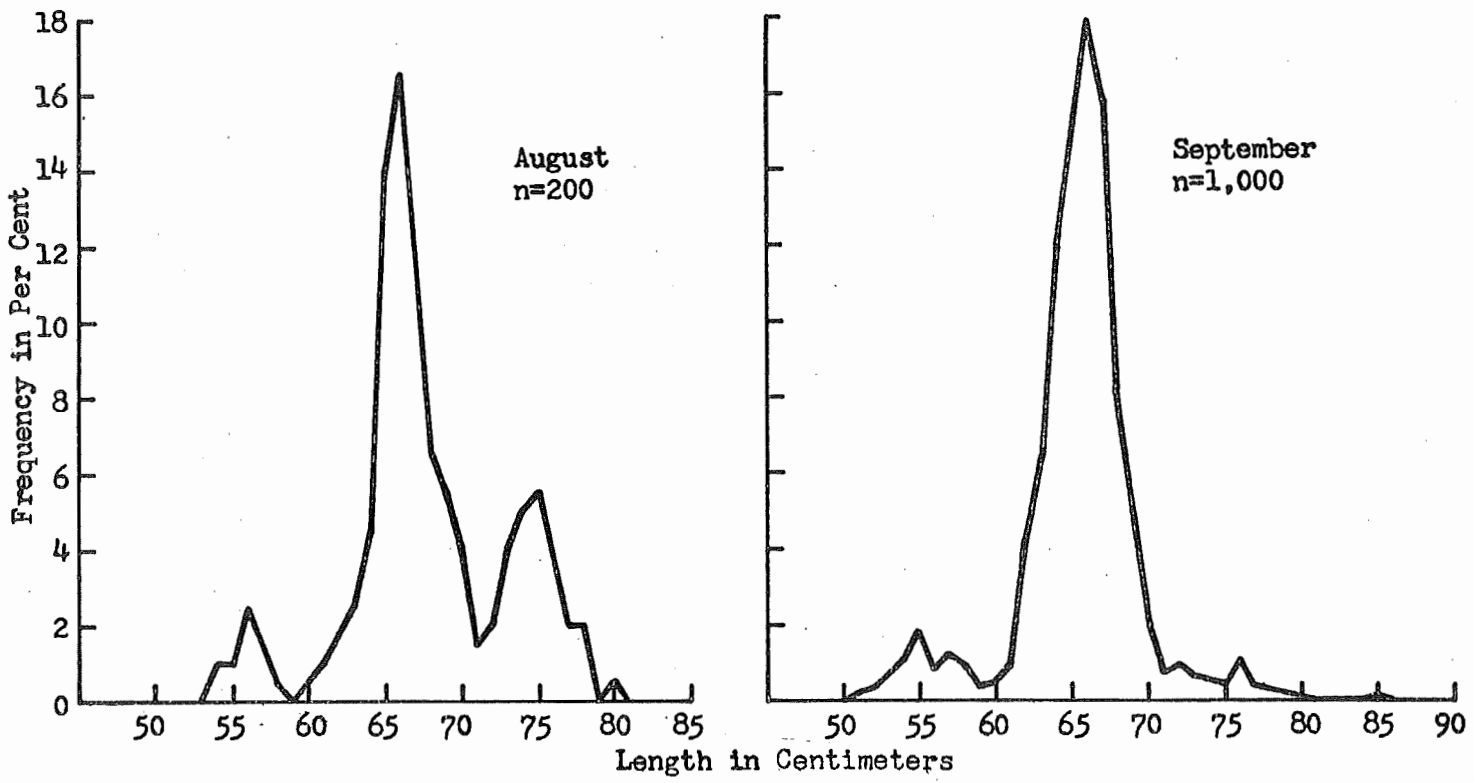


Figure 49
Albacore Length-Frequency Distribution by Month
1957

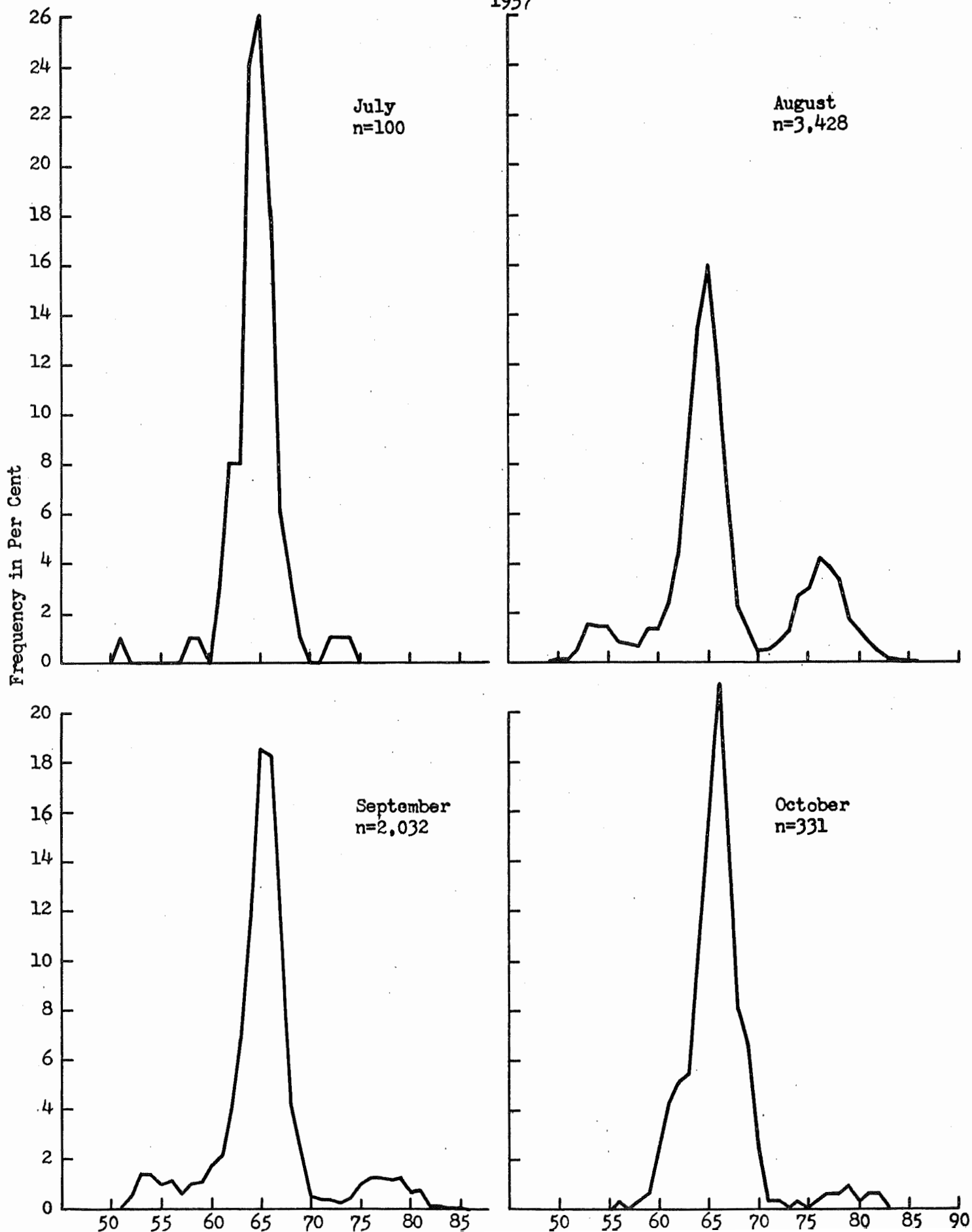


Figure 50
 Albacore Length-Frequency Distribution by Month
 1958

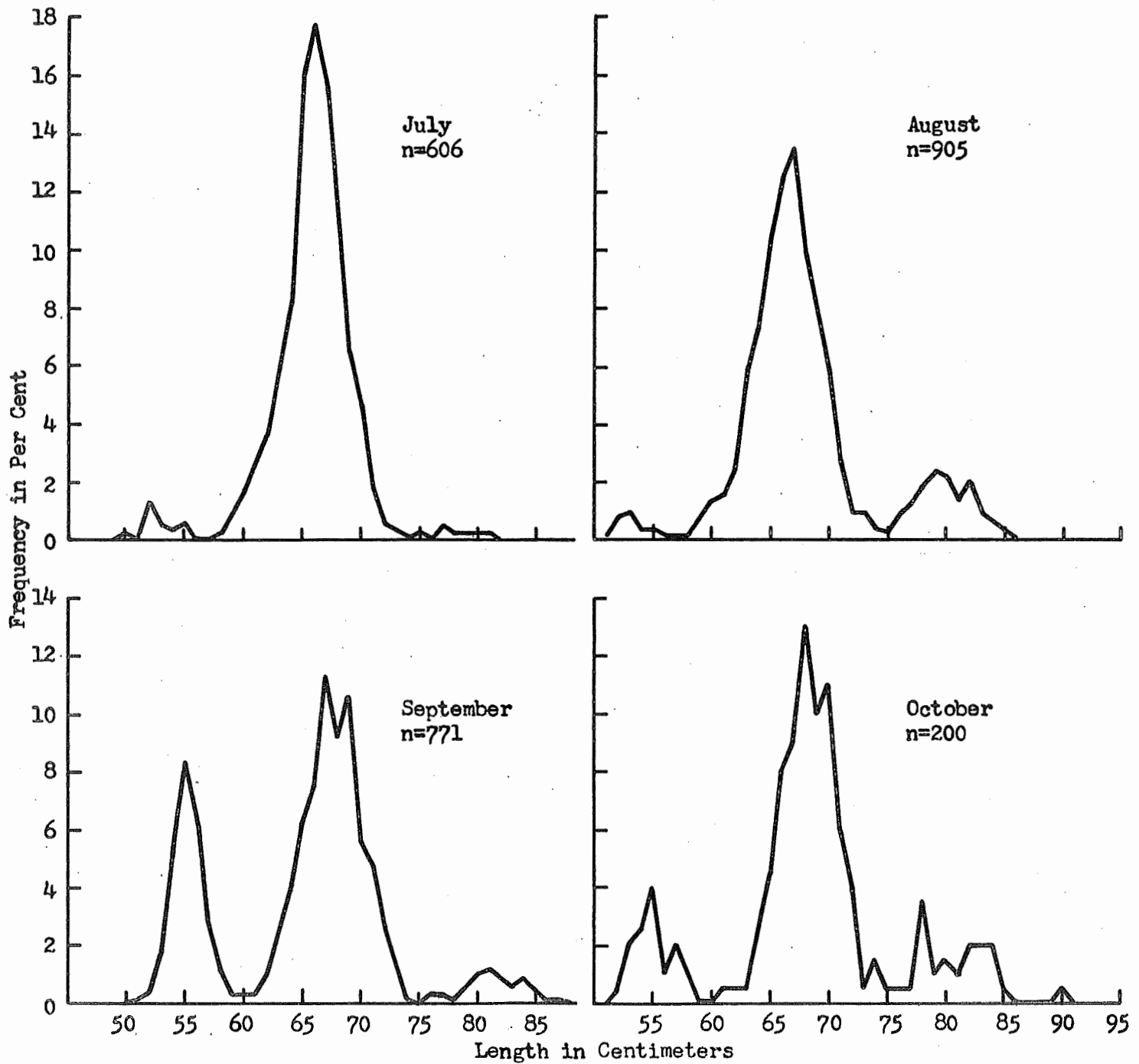


Figure 51
Albacore Length-Frequency Distribution by Month
1959

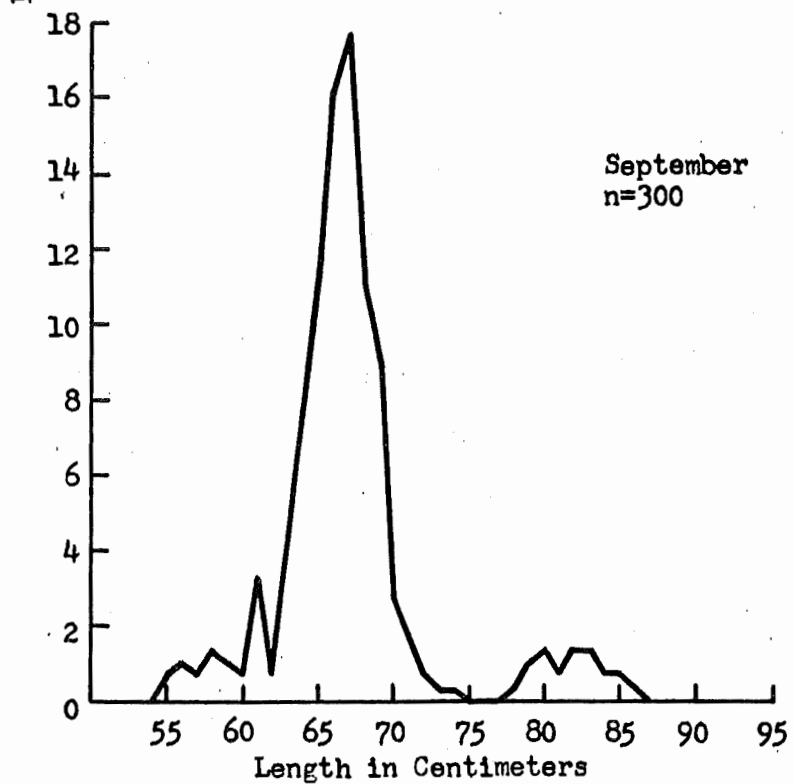
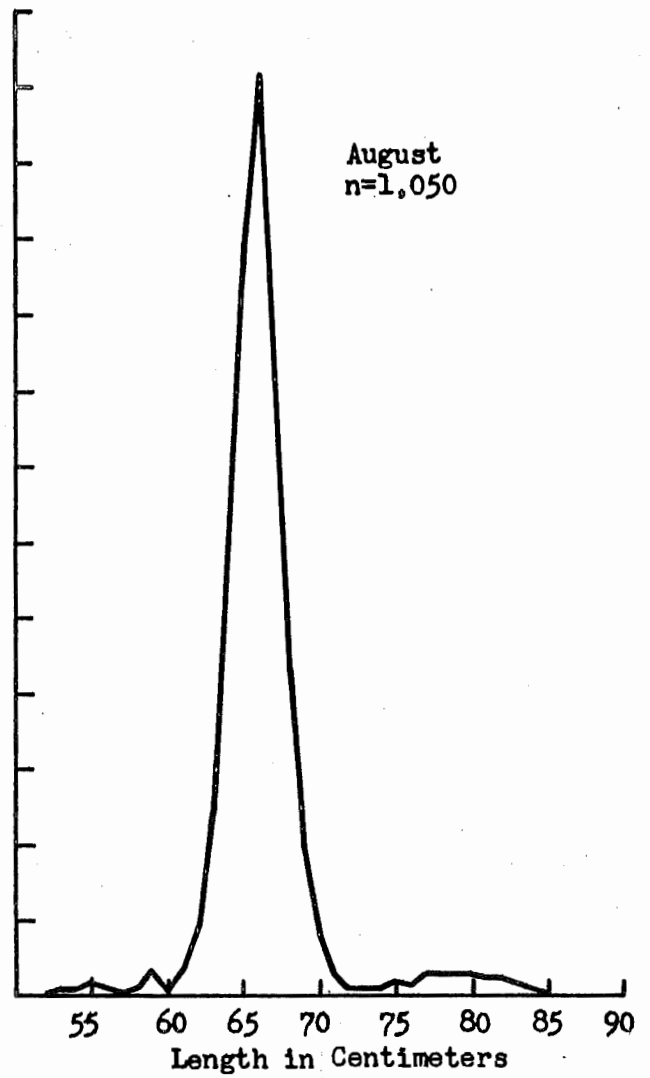
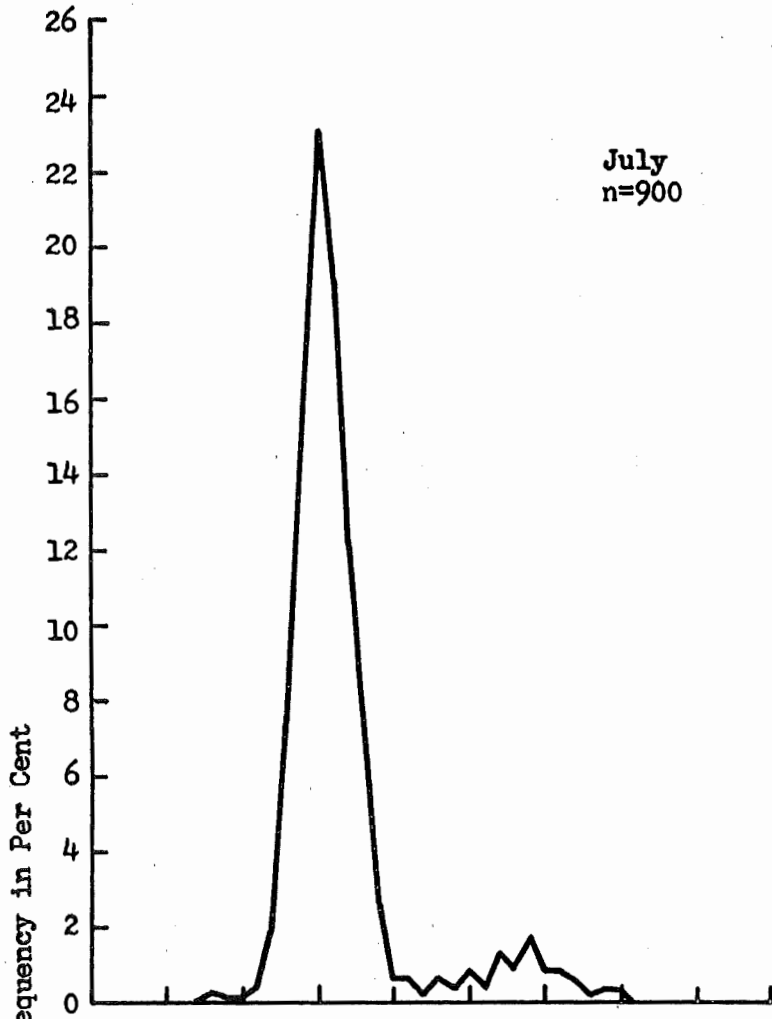


Figure 52
 Albacore Length-Frequency Distribution by Month
 1960

