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**STATE OF CALIFORNIA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FISH AND GAME BUREAU OF MARINE FISHERIES
FISH BULLETIN No. 69**

**Age and Length Composition of the Sardine Catch off the Pacific Coast of the
United States and Canada, 1941–42 through 1946–47**

by

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and

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California Division of Fish and Game

1948

FOREWORD

This report results from one phase of the cooperative investigation of the Pacific sardine carried on by the Fisheries Research Board of Canada, the Province of British Columbia, the Washington Department of Fisheries, the Fish Commission of Oregon, the California Division of Fish and Game, and the U. S. Fish and Wildlife Service.

Following this initial publication it is hoped that summaries of the age composition of the sardine catch can be published annually.

April, 1948.

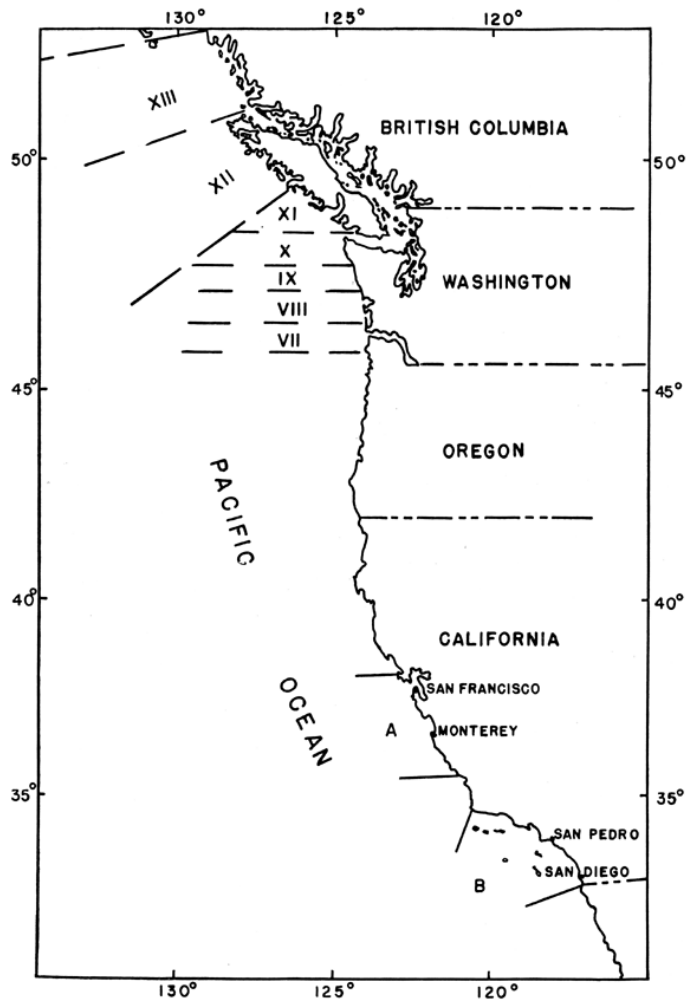


FIGURE 1. Sardine fishing areas, VII-XIII, areas in the Pacific Northwest fishery. A, San Francisco-Monterey fishing grounds. B, Southern California fishing grounds.

(4)

FIGURE 1. Sardine fishing areas. VII-XIII, areas in the Pacific Northwest fishery. A, San Francisco-Monterey fishing grounds. B, Southern California fishing grounds

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1. INTRODUCTION

Since November, 1919, the California Division of Fish and Game has been gathering data to contribute to the understanding of causes underlying changes in abundance of the sardine,¹ *Sardinops caerulea*. A knowledge of the relative proportions of the various age groups of fish in the population is an important element in such studies.

Prior to 1924, an attempt was made by Thompson (1926a) and assistants to read the age marks on the scales and otoliths of this species, but results did not prove satisfactory. However, an indirect method of assessing age by tracing dominant size groups through the fishery was continued. (Thompson, 1926b; Scofield, 1926; Higgins, 1926; Clark, 1931, 1936, 1939). During the period 1928–1933, a study of otoliths of sardines taken in the California fishery was made by H. C. Godsil, but this also proved unsatisfactory. In March, 1938, Walford and Mosher (1943a, 1943b) of the U. S. Fish and Wildlife Service started examination of the scales and otoliths of sardines, commencing with the young and later including older fish. This study established the validity of the method of reading scales to determine age in the sardine. The scale method was recommended as more advantageous in some respects than the otolith method, particularly after a rather simple method of mounting scales dry and projecting their enlarged images was developed.

Starting with the 1941–42 season in California a comprehensive program for scale collecting and age reading was undertaken jointly by the U. S. Fish and Wildlife Service and the California Division of Fish and Game. The Fisheries Research Board of Canada, the Washington State Department of Fisheries, and the Fish Commission of Oregon participated in the work by adding the collection of scales from sardines in northern waters. Their collections were included in the age-reading project. This report deals with the first six seasons of age determinations and presents the age composition of the catch without interpretation of the data.

During these six seasons determinations of age from scales were made by biologists of the Fish and Wildlife Service and California Division of Fish and Game. These were: Lionel A. Walford, Kenneth H. Mosher, Wm. M. Morton, Osgood Smith, Mary Pavlicevich, and Frances Felin, of the federal agency; and Julius B. Phillips and Anita Daugherty of the state agency. For 1941–42, age determinations were made by Walford, Mosher, and Phillips; for 1942–43 by Walford, Mosher, Morton, and Phillips; for 1943–44, by Walford, Smith, Felin, and Phillips; for

¹ Also known as Pacific pilchard.

1944–45, by Smith, Felin, Pavlicevich, and Phillips; for 1945–46 and 1946–47, Felin, Phillips, and Daugherty.

The cooperative nature of the work was such that many other persons of the various agencies were involved—such as those sampling the catch in all the ports, mounting scale samples, processing, and tabulating the data which remain on file in the Fish and Wildlife Service laboratory at Stanford University. The helpful cooperation of all these persons is gratefully acknowledged.

We wish to thank Frances N. Clark of the California Division of Fish and Game for her outline of the methods of computing numbers of fish and John L. Hart of the Fisheries Research Board of Canada for his addenda in connection with estimates of numbers of fish and with sampling in the Pacific Northwest.

It is also our wish to express gratitude for the critical interest and help accorded by O. E. Sette, of the U. S. Fish and Wildlife Service, from the inception of the study and development of method by Walford and Mosher up to the present summary of data in the form of tables.

2. COLLECTION OF SCALES

In California, scales were taken from one-fifth of the fish included in sampling the catch for length composition. During the first four seasons under consideration, sampling was done daily at the three California ports, five samples of 50 fish each being taken each day when possible. In the 1945–46 and 1946–47 seasons the sampling was curtailed to include five samples each week in each of the three ports during the fishing season.

During the 1941–42 and 1942–43 seasons, the scales were taken from the first 10 fish that had satisfactory scales remaining on the body. It had been assumed at the time that fish which had lost their scales would occur in a random manner as far as length and sex were concerned. But a test made in 1942–43 revealed that the larger fish were over-represented in the scale samples, no doubt because smaller fish had lost their scales more frequently than larger fish. This made it necessary to adjust the data obtained for the 1941–42 and 1942–43 seasons. Values for those seasons in the following tables are on the adjusted basis. Elbert H. Ahlstrom, U. S. Fish and Wildlife Service, who supervised the task of weighting these data, found in addition to the above error, a personal bias wherein certain samplers tended to select the larger fish for the scale samples. But this was less important than the loss of scales from smaller fish.

During the 1943–44 season a system of scale sampling was devised wherein both biases were corrected. The sampler counted out from a bucket, 50 fish representing the regular sample, laying aside every fifth fish. The sizes of these 10 individuals represented the lengths² of fish from which scales were to be obtained. If satisfactory scales could not be found on any one of the 10 fish, another fish within 5 mm. of the same length was substituted. Tests have shown that the scale samples so collected were not materially biased.

² Body length, in millimeters, was measured from the tip of the jaws when closed to the termination of the fleshy part of the caudal peduncle after the scales were scraped away. Lengths were tabulated in two millimeter groups, the odd number being combined with the next higher even number.

The sampling methods in the Pacific Northwest differed in some details from those of California. In British Columbia, according to Hart, random samples of 100 fish (instead of 50) were taken from the first load which could be conveniently sampled on each day that fish were landed. Second and third samples were taken when opportunity offered. Length, weight and sex determinations were made for each fish in the entire sample, and scales were taken from every tenth fish. If any of the first 10 failed to have sufficient scales the first fish encountered in the sample in the same centimeter size group was substituted. During most of the years of the investigation British Columbia scales were mounted in the field at the time of collection. Techniques of sampling in Washington and Oregon were variable but essentially similar to those in California.

Usually scales taken from each fish were placed in a small vial containing water to which had been added a small amount of phenol, about 2 percent, to prevent the development of mold. Thus, the scales were kept moist until they could be cleaned and mounted dry between two slides. As standard practice six scales were selected for mounting, and only infrequently were as many as six not available. The only information placed on a slide was its serial number. Practically all the ages reported here are from scales preserved and mounted in this way; a few had been dried in envelopes at the time of collection and required supplementary soaking and washing in about 10 percent sodium hydroxide before mounting.

3. AGE DETERMINATION

The scales were read at a magnification of 30 diameters, obtained by projecting the scale image through a compound microscope with a 45-degree prism placed over the ocular. The prism reflected the image across to a mirror placed at a 45-degree angle and this in turn reflected the image downward to the table top. A special card ruled in millimeters was laid in the longitudinal axis of the scale image with the zero line at the posterior edge of the sculptured part of the scale and the position of each annulus and the margin of the scale marked on the card.

The scale readings were made by a group of three or four biologists of the federal and state agencies in such a manner that the results of the several persons could be mutually corroborative. The mounted slides were divided among readers by dealing them out in rotation. Each person made his interpretations of age independently, marking the positions of annual rings on the special card. Information regarding length, sex, date and other pertinent data were subsequently entered on the same card. No slides of scales were discarded as unreadable unless the slide contained all regenerated scales or more than one-third of the scales were from more than one fish.³ The number in both of the foregoing categories was insignificant.

During the period 1941–42 through 1944–45, when intensive sampling supplied large numbers of scale readings, each reader's results were tabulated by year-classes. If, according to a chi-square test, the resulting

³ Adventitious scales occasionally adhere to an individual from which scales are taken and are accidentally included in the sample.

year-class compositions of the several readers differed significantly⁴ from the average composition of all readers, the year-classes causing the discrepancies were re-examined by all readers together. In addition, all fish that had five or more rings were re-read by a different reader or all readers together. The final age determinations were summarized by lunar month and season.

After the sampling was reduced from a daily to a weekly basis, the numbers were too small to justify the use of the chi-square test. Therefore, in 1945–46 and 1946–47 duplicate readings were made on all scale samples in lieu of testing the readers' results statistically. Disagreements were resolved by all readers together.

The final age determinations were summarized by seasons, as defined by Clark (1940) to include the commercial take from June through the next May. The California fishery begins in late summer and autumn and extends into winter so that the fishing year is designated in the tables as 1941–42, etc.

In the Pacific Northwest the fishery begins in June and seldom carries into the following winter (1941, 1942 and 1944 were exceptions). Following local practice the British Columbia, Washington and Oregon data are designated by calendar year in tables where they appear separately. Where occurring in summary they are given the seasonal designation as with California data.

Tables 1–37 show, by seasons, the length composition of each age group in the samples for different areas (Fig. 1) along the coast in British Columbia, Washington and Oregon. Tables 38–87 show, similarly, the same data for California by ports, together with the Pacific Northwest summary, and a summary for the entire coast. Lengths are tabulated by sexes separately (M., F.) and sexes combined (T.). Fish that were not sexed or fish for which no lengths were recorded were entered only in the T. column.

As age is estimated from the number of annual rings present on the scale, Age 0 represents fish that are in their first year of life before the first winter ring is formed. Age 1 represents fish that have formed one winter ring between late fall and early spring following hatching. Thus, a fish which is caught in the winter fishery and shows one annulus well inside the margin of the scale is in its second year of life. Similarly a fish caught during the 1941–42 season and having two well-defined rings would be in its third year of life and assignable to the 1939 year-class.

Fish collected from late fall to early spring which show a ring close to the margin were assigned to a particular year-class according to an objective method of determining whether or not the submarginal ring should be classed as a "new ring." (Walford and Mosher, 1943b.) If a

⁴ In these tests the 5 percent level of significance was selected. If the chi-square values indicated a probability greater than $P = .05$, the deviations of the readers from expected, or "theoretical," numbers at each age were considered to be due to random variation in the samples read by each person. If, conversely, the P value was less than .05 the divergence between readers in interpretation of ages was taken to be in excess of that due to chance alone. Since there is inherent in the 5 percent limit the probability that 1 time in 20 the low P value will occur by chance, some groups of samples undoubtedly were reviewed unnecessarily and some age readings were revised although perhaps originally correct.

new ring was present the fish was assigned to the same year-class as those which had not yet shown the new winter mark, or in which it was in process of forming.

Tables 88–93 give age composition of the catch in terms of numbers of fish caught in each port in California and in each separate political subdivision of the Pacific Northwest.

Fishing in California waters is carried on in the dark of the moon, and the lunar month, from full moon to full moon, is the time unit used. The lunar months in Tables 88–93 are designated by the name (in quotation marks) of the nearest calendar month, and their corresponding calendar dates are given in Table 100.

For the California fishery the calculations of the number of fish were based on the weight of the fish in the regular samples taken from the commercial catch. Each sample of 50 fish was weighed and the average weight of the fish determined. For seasons 1941–42 through 1944–45 when sampling was carried on daily, the total poundage in the daily catch was converted into numbers of fish by dividing by the average weight of all fish in each day's samples. For seasons 1945–46 and 1946–47, when sampling was on a weekly basis, the total weekly poundage was divided by the average weight of all fish in each week's samples. These daily or weekly computed numbers of fish were summed to give the estimated total number in the catch for each lunar month at each port as recorded in Tables 88–93. Samples were not collected at San Diego, and the data for this port were calculated by applying the San Pedro average weights and age composition values to the tons of sardines landed at San Diego.

In the Pacific Northwest, according to Hart, fish in regular random samples were weighed individually and the average weight of all fish sampled during the entire season calculated by the Canadian investigators. In some seasons these unweighted averages were used to convert poundages taken in the whole season's catch in British Columbia into numbers of individual fish. In other seasons the sizes of sardines taken in the Pacific Northwest showed recognizable changes during the season. For these years data for landings and average weights were tabulated by 10-day periods during the season. Average weights of fish for each 10-day period were multiplied by the tons landed in that period and the figures so obtained summed and divided by the total season's tonnage. Use of this weighted average weight resulted in estimates of total numbers for the season that were within two percent of the estimates based on unweighted averages except in 1942. The numbers of fish given in Tables 88 to 93 are the estimates based on unweighted average weights in all seasons except 1941, 1942 and 1945. For 1942 the alternative number based on unweighted average weight was 391,000,000.

In the seasons 1941 through 1944 the tonnages landed in Washington and Oregon were converted to the numbers of fish by using the same ratio between tons and numbers as was calculated each season for the British Columbia fishery. In 1945 and 1946 the season's tonnage in Washington and Oregon was divided by the average weight of the fish taken in the Washington samples to estimate the total number of fish in the catch of the two states.

Tables 94–99 show, by seasons, the mean length (M.) and standard error (S. E.) of the mean, and the number (No.) of fish upon which these are based for each year-class in each of the major regional subdivisions.

This method of checking reader accuracy was utilized until 1945–46 when duplicate readings were made of all scale samples. In the 1943–44 season at San Francisco, however, the samples of fish as they were taken were ranked according to size and hence roughly by age as well. The scale samples dealt out to each reader were similarly stratified, and uniformity in age-composition among the several readers' portions was greater than would be expected due to chance. It is probable that real errors in readings were masked, since uniformity of the material artificially enhanced agreements, and high P values resulted from the stratified, non-random nature of samples rather than essential goodness of agreement in interpretation of ages by different readers.

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TABLE 1
 LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 1, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

Area.....	BRITISH COLUMBIA						WASHINGTON						OREGON																
	XIII		XI		Total		XI		VIII		VII		VIII		VII		Unrecorded		Total										
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T								
130.....																													
132.....																													
134.....																													
136.....																													
138.....																													
140.....																													
142.....																													
144.....																													
146.....																													
148.....																													
150.....																													
152.....																													
154.....																													
156.....																													
158.....																													
160.....																													
162.....																													
164.....																													
166.....																													
168.....																													
170.....																													
172.....																													
174.....																													
176.....																													
178.....																													
180.....																													
182.....																													
184.....																													
186.....																													
188.....																													
190.....																													
192.....																													
194.....																													
Total.....	2	1	3	2	5	7	4	6	10	1	1	2	2	1	4	1	3	13	4	5	19	2	2	3	3	1	1	3	6

* Includes some fish, sex unknown.

COMPOSITION OF THE SAMBINE CATFISH

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TABLE 1
 LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 1, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

TABLE 2
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 2, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

Area.....	BRITISH COLUMBIA															
	XIII			XII			XI			X			Total			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
Length mm.																
160								1	1							
162								2	2							
164																
166								1		1				1		
168								1	4	5				1	4	5
170						1		1		1				2		
172			1						2	2				1	2	3
174									4	1	5			4	1	5
176				1					4	2	6			4	3	7
178						2			4	1	5			7	1	8
180							1	1	1	4	5			2	5	7
182						1			4	3	7			6	4	10
184				1	2	3			3	6	10			4	8	13
186						2			3	7	10			5	7	12
188						1			2	6	8			3	7	10
190				1	1				3	9	10			14	2	16
192						1			1	2	5	3	10	1	4	13
194						1			1	1	2	8	10	2	10	12
196				4	3	7			3	1	4			9	10	19
198				3	4	7			1	3	4			11	12	25
200									1	2	3			6	6	13
202						1			1	3	4			8	8	17
204						3	3		2	2	6	3	9	6	8	14
206				1	1	2			2	1	3			4	5	10
208									1	1	2			3	4	7
210										1	1			1	4	5
212									1	1	2			3	3	6
214				1							1	1	4	2	1	5
216											1			2	1	3
218											1				1	1
220											1			1		1
222											1				1	1
224																
226																
228																
230																
232																
234																
236				1		1									1	1
Totals	17	18	35	21	19	40	80	88	178 ¹	1	1	2	119	126	255 ¹	

¹ Includes some fish, sex unknown.

TABLE 2
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 2, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

TABLE 2—Continued

LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 2, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

Area.....	OREGON											
	VIII			VII			Unrecorded			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
160.....												
162.....												
164.....												
165.....							1		1	1		1
168.....								1	1		1	1
170.....												
172.....												
174.....							1		1	1		1
176.....								1	1	1		1
178.....				1		1					2	2
180.....		1	1	1		1	3	1	4	4	2	6
182.....	1		1				5	4	9	6	4	10
184.....				1		1	3	5	8	4	5	9
186.....	3		3				11	7	18	14	7	21
188.....				2		2	9	1	10	9	3	12
190.....				2	1	3	4	8	12	6	9	15
192.....		1	1		1	1	5	5	10	5	7	12
194.....				1		1	8	10	18	9	10	19
196.....		1	1	1	1	2	2	6	8	3	8	11
198.....				2		2	2	7	9	4	7	11
200.....							2	5	7	2	5	7
202.....							3	6	9	3	6	9
204.....												
206.....	1		1		1	1		3	3	1	4	5
208.....							1	1	2	1	1	2
210.....							1		1	1		1
212.....												
214.....				1		1				1		1
216.....		1	1		1	1					2	2
218.....				1		1	1		1	2		2
220.....												
222.....												
224.....												
226.....												
228.....												
230.....												
232.....												
234.....												
236.....												
Totals.....	5	4	9	11	7	18	63	71	134	79	82	161

TABLE 2
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 2, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

TABLE 3
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

Area	BRITISH COLUMBIA																
	XIII			XII			XI			X			Total				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
164.....					1	1									1	1	
166.....																	
168.....																	
170.....																	
172.....					1	1									1	1	
174.....																	
176.....																	
178.....																	
180.....																	
182.....								2		2					2	2	
184.....								1		1					1	1	
186.....								2		2					2	2	
188.....																	
190.....									1	1					1	1	
192.....																	
194.....								2	1	3					2	1	3
196.....									2	2					1	2	3
198.....	1		1					1	3	4					1	3	4
200.....				1		1		2		2					3		3
202.....	1		1		1	1		3		3					4	1	5
204.....		1	1		1	1		1	1	2					2	2	4
206.....				1	1	2		3	3	6					4	4	8
208.....									1	1						1	1
210.....									1	2	3				2	2	4
212.....				2	2	4		2	2	4					4	4	8
214.....				1		1		1	1	2			1	1	2	2	4
216.....				2	2	4		2	3	5		1	1		5	5	10
218.....				2	1	3		5	2	7					7	3	10
220.....				2	1	3		4	2	6					6	4	10
222.....					3		3	3	3	6					6	3	9
224.....	1		1		2	4	6	6		6	1	1	2		10	5	15
226.....	1	1	2		3	3	6	4	3	7					8	7	15
228.....								3	1	4					3	1	4
230.....									1						1		1
232.....						1	1			2	2					3	3
234.....				1	1				1	1						2	2
236.....					1	1			1	1		1	1			3	3
238.....					1	1	2								1	1	2
240.....									1	1						1	1
242.....																	
244.....				1	1											1	1
246.....																	
248.....																	
250.....																	
252.....																	
254.....																	
256.....																	
258.....										1	1					1	1
260.....																	
Total.....	6	5	11	20	20	40	49	37	86	2	3	5	77	65	142		

2-90940

TABLE 3
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

TABLE 3—Continued
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

Area	WASHINGTON																	
	XI			IX			VIII			VII			Unrecorded			Total		
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
164.....																		
166.....																		
168.....																		
170.....																		
172.....																		
174.....																		
176.....																		
178.....									1	1	2					1	1	2
180.....																		
182.....												1						1
184.....																		
186.....																		
188.....							1		1							1		1
190.....							1		1							1		1
192.....																		
194.....	1		1				1	1	3							2	1	4
196.....								2	2								2	2
198.....							2		3							2		3
200.....																		
202.....							2	1	3							2	1	3
204.....		1	1														1	1
206.....							1		1							1		1
208.....									2									2
210.....	1		1			1	2	2	5							3	2	7
212.....							1	1	4							1	1	4
214.....	1		1				2	1	5			2				3	1	8
216.....							1	1	3							1	1	4
218.....			1				3	2	6							3	2	7
220.....							2		3							2		3
222.....							2	3	5			1				2	3	6
224.....		2	3				3	3	9			1		1		3	5	14
226.....			1			1	1	4	8			1				1	4	10
228.....	1		1			1		4	4							1	4	6
230.....		1	1	2				2	2							1	3	4
232.....		1					1		2							1		2
234.....								3	3								3	3
236.....								1	1								1	1
238.....																		
240.....																		
242.....								1	1								1	1
244.....																		
246.....																		
248.....																		
250.....																		
252.....																		
254.....																		
256.....																		
258.....																		
260.....																		
Total.....	5	4	13 ¹			2 ¹	26	32	77 ¹	1	1	8 ¹			1 ¹	32	37	101 ¹

¹ Includes some fish, sex unknown.

TABLE 3
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

TABLE 3—Continued
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

Area	OREGON								
	VII			Unrecorded			Total		
	M	F	T	M	F	T	M	F	T
164.....									
166.....									
168.....									
170.....									
172.....									
174.....									
176.....									
178.....									
180.....									
182.....									
184.....									
186.....									
188.....	1	--	1	2	--	2	3	--	3
190.....	--	2	2	1	1	2	1	3	4
192.....	1	2	3	--	2	2	1	4	5
194.....	1	--	1	--	1	1	1	1	2
196.....	1	--	1				1		1
198.....	1	--	1	1	1	2	2	1	3
200.....				1	--	1	1	--	1
202.....									
204.....	2	--	2				2	--	2
206.....				2	--	2	2	--	2
208.....				1	--	1	2	--	2
210.....	1	--	1	1	--	1	2	--	2
212.....	2	--	2				2	--	2
214.....									
216.....	3	--	3	1		1	4	--	4
218.....				--	1	1	--	1	1
220.....	--	1	1	--	2	2	--	3	3
222.....	1	2	3	1	--	1	2	2	4
224.....	1	1	2				1	1	2
226.....	--	2	2	--	1	1	--	3	3
228.....	2	--	2				2	--	2
230.....									
232.....	--	3	3	--	1	1	--	4	4
234.....									
236.....	1	--	1				1	--	1
238.....									
240.....									
242.....									
244.....									
246.....									
248.....									
250.....									
252.....									
254.....									
256.....									
258.....									
260.....									
Total.....	18	13	31	10	10	20	28	23	51

TABLE 3
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

TABLE 8
LENGTH COMPOSITION OF THE 1933 YEAR-CLASS, AGE 8, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

Area	Burrton Columns					Washrocks					Onton				
	XIII	XII	XI	X	Total	XI	VIII	VII	Total	VII					
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
226.....															
228.....															
230.....															
232.....															
234.....															
236.....															
238.....															
240.....															
242.....															
244.....															
246.....															
248.....															
250.....															
252.....															
254.....															
256.....															
258.....															
260.....															
262.....															
264.....															
266.....															
268.....															
270.....															
272.....															
274.....															
276.....															
278.....															
280.....															
Totals.....	5	2	7	5	2	7	--	2	2	2	--	2	12	6	18

¹ Includes some fish, sex unknown.

DIVISION OF FISH AND GAME

TABLE 8
LENGTH COMPOSITION OF THE 1933 YEAR-CLASS, AGE 8, BY AREAS IN THE PACIFIC NORTHWEST IN 1941

TABLE 10
LENGTH COMPOSITION OF THE 1941 AND 1940 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1942

Area	1941 Year-class, age 1		1940 Year-class, age 2																		
	BRITISH COLUMBIA		BRITISH COLUMBIA							WASHINGTON											
	XI		XIII		XII		XI		X		Total		IX								
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
186.....																					
188.....																					
190.....																					
192.....																					
194.....																					
196.....																					
198.....																					
200.....																					
202.....																					
204.....																					
206.....																					
208.....																					
210.....																					
212.....																					
214.....																					
216.....																					
218.....																					
220.....																					
222.....																					
224.....																					
226.....																					
Totals.....	4	2	6	1	2	3	27	37	64	5	6	11	5	1	6	38	46	84	3	3	7 ¹

¹ Includes one fish, sex unknown.

TABLE 10
LENGTH COMPOSITION OF THE 1941 AND 1940 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST
IN 1942

TABLE 11
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1942

Area	BRITISH COLUMBIA															WASHINGTON										
	XIII			XII			XI			X			Total			X			IX			Total				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
178	--	2	2																							
180																										
182	--	1	1																							
184	--	2	2																							
186	1	--	1		1																					
188	2	--	2																							
190	1	6	7																							
192	--	3	3																							
194	2	2	4		1	2	3																			
196	--	2	2		2	--	2			1	1									1	1				1	1
198	2	4	6		2	2	4																			
200	4	1	5		3	1	4		1	--	1															
202	2	1	3		2	--	2					2	--	2												
204	3	4	7		2	--	2		1	--	1															
206	2	--	2		1	5	6																			
208	--	2	2		5	2	7		2	--	2		--	1	1											
210	2	4	6		5	3	8		2	--	2															
212	1	2	3		4	11	15		4	2	6		1	--	1											
214	--	3	3		7	2	9		2	2	4		1	--	1											
216					4	7	11		--	1	1		1	3	4											
218	--	2	2		9	5	14		4	6	10		1	--	1											
220	2	--	2		7	10	17		3	3	6															
222	1	1	2		5	9	14		3	1	4															
224	1	1	2		6	4	10		2	1	3		1	--	1											
226	1	--	1		5	1	6		--	4	4															
228					4	3	7																			
230					3	3	6																			
232	--	1	1		4	--	4		1	--	1															
234					3	3	6																			
236					3	1	4		--	1	1															
238					--	4	4																			
240					2	--	2																			
242									2	1	3															
244					1	1	2		1	--	1															
246																										
248																										
250																										
252																										
254																										
256																										
258					1	--	1		--	1	1		1	1	2											
Totals	27	44	71		92	79	171		29	29	58		7	6	13											

TABLE 11
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1942

TABLE 12
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 4, BY AREAS IN THE PACIFIC NORTHWEST IN 1942

Area	BRITISH COLUMBIA										WASHINGTON														
	XIII			XII			XI			X			Total			X			IX			Total			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
200				1	1																				
202																									
204																									
206																									
208																									
210				1	1					1	1	2	1	2	3										
212				1	1		2		2				2	1	3										
214				1		1	1	1	2			2		2	4	1	5								
216							2	1	3					2	1	3									
218				1	1																				
220										1		1		1		1									
222				3		3	2	1	3			1	1	5	2	7									
224				2	1	3	4		4			1	1	6	2	8			1	1			1	1	
226					4	4	2	1	3			1	1	2	6	8									
228					4	4	1	2	3					1	6	7									
230				2	1	3	3	1	4					5	2	7									
232				1	1	2	2	2	4			1	1	3	4	7									
234	2		2	3	1	4	4		4					9	1	10									
236				1	2	3		4	4			2	2	1	8	9									
238				1	2	3								1	2	3									
240				2		2	2	1	3			1	1	4	2	6									
242				2	1	3	1		1			1	1	3	2	5									
244					2	2									2	2									
246				1	1		1		1					1	1	2			1	1	2		1	1	
248				1	1										1	1									
250																									
252				1	1									1	1				1	1		1	1		
254				1	1									1	1										
256				1	1		1	1						2	2										
258							1		1					1		1									
Totals	2		2	18	28	46	28	15	43	4	9	13	52	52	104			1	1	3	3	6	3	4	7

TABLE 12
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 4, BY AREAS IN THE PACIFIC NORTHWEST IN 1942

TABLE 13
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 5, BY AREAS IN THE PACIFIC NORTHWEST IN 1942

Area	BRITISH COLUMBIA												WASHINGTON					
	XIII			XII			XI			X			Total			IX		
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
196.....				1	1									1	1			
198.....																		
200.....																		
202.....																		
204.....																		
206.....																		
208.....																		
210.....										1	1			1	1			
212.....							1		1					1		1		
214.....																		
216.....																		
218.....							1		1					1		1		
220.....																		
222.....							1		1					1		1		
224.....							1		1					1		1		
226.....				1		1								1		1		
228.....		1	1							1	1	2		1	2	3		
230.....				1	1	2		2	1	3				3	2	5		
232.....							2		2			1	1	2	1	3		
234.....				1		1	1	1	2	1	3	4		3	4	7		1
236.....				6	1	7								6	1	7		
238.....		1	1	3	3	6		1	1					3	5	8		
240.....				2	5	7		1	2	3				3	7	10		
242.....				3	2	5		1	3	4				4	5	9		1
244.....				1	1	2		2	3	5				3	4	7		
246.....				1	6	7					1	1		1	7	8		
248.....				3	3	6		1	1	1				3	4	7		
250.....							1		1		1	1		1	1	2		1
252.....					2	2		2	2			1	1		5	5		
254.....		1	1												1	1		
256.....					1	1									1	1		
258.....																		
260.....				1	1	2								1	1	2		
Totals.....		3	3	23	27	50	14	14	28	2	9	11	39	53	92	1	2	3

TABLE 13
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 5, BY AREAS IN THE PACIFIC NORTHWEST IN 1942

TABLE 14
 LENGTH COMPOSITION OF THE 1936 AND 1935 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1942

Area	1936 Year-class, age 6										1935 Year-class, age 7															
	BRITISH COLUMBIA									WASHINGTON	BRITISH COLUMBIA															
	XIII			XII			XI				X		Total	IX			XII		XI		Total					
M	F	T	M	F	T	M	F	T	M	F	T	M		F	T	M	F	T	M	F		T				
224.....																										
225.....																										
226.....																										
227.....																										
228.....																										
229.....																										
230.....																										
231.....																										
232.....																										
233.....																										
234.....																										
235.....																										
236.....																										
237.....																										
238.....																										
239.....																										
240.....																										
241.....																										
242.....																										
243.....																										
244.....																										
245.....																										
246.....																										
247.....																										
248.....																										
249.....																										
250.....																										
251.....																										
252.....																										
253.....																										
254.....																										
255.....																										
256.....																										
257.....																										
258.....																										
259.....																										
260.....																										
261.....																										
262.....																										
263.....																										
264.....																										
265.....																										
266.....																										
267.....																										
268.....																										
269.....																										
270.....																										
Totals.....	1	1	19	18	27	3	5	8	2	3	5	24	27	51	1	1	2	5	5	10	..	2	2	5	7	12

DIVISION OF FISH AND GAME

TABLE 14
 LENGTH COMPOSITION OF THE 1936 AND 1935 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST
 IN 1942

TABLE 15
LENGTH COMPOSITION OF THE 1934, 1933, AND 1931 YEAR-CLASSES BY AREAS IN THE
PACIFIC NORTHWEST IN 1942
British Columbia

Area	1934 Year-class, age 8						1933 Year-class, age 9			1931 Year-class, age 11					
	XII			XI			Total			XI			XII		
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
246				1		1	1		1						
248															
250		1	1					1	1		1	1			
252		1	1					1	1						
254															
256															
258		1	1	1		1	1	1	2						
260														1	1
262															
264														1	1
266		1	1					1	1						
Totals		4	4	2		2	2	4	6		1	1		2	2

TABLE 15
LENGTH COMPOSITION OF THE 1934, 1933, AND 1931 YEAR-CLASSES BY AREAS IN THE PACIFIC
NORTHWEST IN 1942
British Columbia

TABLE 16
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 1, BY AREAS IN THE PACIFIC NORTHWEST IN 1943

Area	BRITISH COLUMBIA									WASHINGTON			
	XIII			XI			Total			IX			
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	
116			1						1				
118													
120													
122													
124													
126													
128													
130													
132													
134													
136													
138													
140													
142													
144													
146													
148												1	
150					1	1	2	1	1	2			
Totals			1 ¹	1	1	2	1	1	3 ¹			1 ¹	

¹ Includes one fish, sex unknown.

TABLE 16
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 1, BY AREAS IN THE PACIFIC NORTHWEST IN
1943

TABLE 17
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1943

Area	BRITISH COLUMBIA												WASHINGTON								
	XIII			XII			XI			Total			IX		VIII		Total				
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
196							1		1	1		1									
198																					
200																					
202				1		1	1		1	2		2									
204																					
206		1	1		2	2					3	3									
208				1		1				1		1									
210				1		1	1		1	2		2			1		1	1			
212	1		1	2		2	1		1	4		4									
214				1		1				1		1		1	1			1			
216	1	1	2	1	1	2	1		1	3	2	5		2	2		2	2			
218	1	1	2	3		3	1		1	5	1	6		1		1	1	1			
220				2		2				2		2		3		3		3			
222	1	1	2	3		3	4		4	8	1	9		1		1		1			
224	1		1	1	1	2	1	1	2	3	2	5		1		1		1			
226	1		1	1	3	4		1	1	2	4	6		1	1			1			
228				5		5	2	1	3	7	1	8									
230	1		1	1		1	2	1	3	4	1	5									
232				4		4	3	2	5	7	2	9									
234					2	2					2	2									
236				3	2	5				3	2	5									
238		1	1	1	2	3	1		1	2	3	5									
240				1		1		1	1	1	1	2									
242								1	1		1	1									
244																					
246					1	1		1	1		2	2									
248					2	2					2	2									
250																					
252																					
254																					
256					1	1					1	1									
Totals	7	5	12	32	17	49	19	9	28	58	31	89	4	4	8	4		4	8	4	12

TABLE 17
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1943

TABLE 18
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 4, BY AREAS IN THE PACIFIC NORTHWEST IN 1943

Area	BRITISH COLUMBIA								WASHINGTON															
	XIII			XII			XI		Total	X			IX		VIII		Total							
L'th mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T						
208				1		1				1		1												
210										1		1						1						
212							1		1	1		1						1						
214							1		1	1		1						1						
216	2	1	3	1	1	2	1		1	4	2	6	1		1			1						
218				1	1	2	3		3	4	1	5	1		1			1						
220				2	1	3		1	1	2	2	4		1	1			1						
222	3	1	4	3	3	6	4	2	6	10	6	16		1	1			1						
224	4	2	6	8	1	9	4	1	5	16	4	20		1	1			1						
226	1	2	3	5	2	7	3	3	6	9	7	16		1	1			1						
228	1	4	5	2	1	3	7	1	8	10	6	16		4	3	7	1	5						
230	3	2	5	7	1	8	9	1	10	19	4	23		1	1			1						
232	1	3	4	7	6	13	5	4	9	13	13	26		2				2						
234		1	1	14	6	20	5	1	6	19	8	27		2	1	3		2						
236	2	2	4	7	5	12	2	1	3	11	8	19		1	1			1						
238		2	2	8	4	12	5	3	8	13	9	22						1						
240				2	6	8	1	3	4	3	9	12			1	1		1						
242	1	2	3	1	7	8	4	3	7	6	12	18		1				1						
244				8	7	15	1	4	5	9	11	20						1						
246				3	8	11		3	3	3	11	14			1	1		1						
248				1	6	7		2	2	1	8	9						1						
250				1	1	2		1	1	1	2	3						1						
252					1	1		1	1		2	2		1	1			1						
254				1	1	2			1	1	1	2						1						
256					2	2		1	1		3	3						1						
258								1	1		1	1						1						
Totals	18	22	40	83	71	154	56	37	93	157	130	287	2	4	6	13	13	26	2	1	3	17	18	35

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TABLE 18
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 4, BY AREAS IN THE PACIFIC NORTHWEST IN 1943

TABLE 19
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 5, BY AREAS IN THE PACIFIC NORTHWEST IN 1943

Area	BRITISH COLUMBIA								WASHINGTON															
	XIII			XII			XI		Total	X			IX		VIII		Total							
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T						
214				1		1			1		1													
216																								
218				2		2	1		1	3														
220	2		2							2														
222	2		2	2		2	1		1	5			1		1			1						
224	4		4				1		1	5			1		1			1						
226	2		2	2		2	1		1	5			1		1			1						
228	2		2	2		2	2		1	3	6			1	1			1						
230	1	1	2	4		4	1		1	6	1	7		1	1	1		1						
232	1		1	3		3	1		1	5				1	1			1						
234	1		1	3	3	6	1		1	5	3	8	1		1			1						
236				6	4	10	5	3	8	11	7	18		1	1			2						
238	1		1	4	2	6	2		2	7	2	9		1	1			1						
240	1		1	2	3	5	3	2	5	6	5	11		1	1	2	1	1						
242				3	1	4	1	2	3	4	3	7												
244	1		1	2	6	8	2	1	3	5	7	12												
246				2	4	6	2	2	4	4	6	10												
248				1	1	2		1	1	1	2	3		1	1			1						
250				2	2	4	1	2	3	3	4	7												
252					3	3				3	3			1	1			1						
254				3	4	7	2	1	3	5	5	10												
256					2	2		1	1		3	3												
258					2	2					2	2												
260					2	2					2	2												
262																								
264					1	1	1		1	1	1	2												
Totals	18	1	19	44	40	84	28	17	45	90	58	148	1	2	3	4	7	11	1	1	2	6	10	16

TABLE 19
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 5, BY AREAS IN THE PACIFIC NORTHWEST IN 1943

TABLE 22
LENGTH COMPOSITION OF THE 1934, 1933 AND 1932 YEAR-CLASSES BY AREAS
IN THE PACIFIC NORTHWEST IN 1943
British Columbia

Area	1934 Year-class, age 9						1933 Year-class, age 10			1932 Year-class, age 11					
	XII			XI			Total			XIII			XI		
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
232.....															
234.....	1		1				1		1						
236.....															
238.....															
240.....															
242.....															
244.....															
246.....															
248.....															
250.....	1		1				1		1						
252.....															
254.....															
256.....					1	1		1	1						
258.....															
260.....										1		1			
262.....															
264.....															
266.....															
268.....					1		1		1			1			1
270.....															
Totals.....	2		2	1	1	2	3	1	4	1		1	1		1

TABLE 22
LENGTH COMPOSITION OF THE 1934, 1933 AND 1932 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTH-
WEST IN 1943
British Columbia

TABLE 23
LENGTH COMPOSITION OF THE 1943 AND 1942 YEAR-CLASSES BY AREAS IN THE
PACIFIC NORTHWEST IN 1944
 (Samples From British Columbia Only)

Area	1943 Year-class, age 1						1942 Year-class, age 2											
	XII			XI			Total			XII			XI			Total		
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
152				1	1		1	1										
154																		
156																		
158																		
160																		
162																		
164																		
166										1		1	1		1			
168				1	1		1	1										
170	1	1		3	3		4	4		2	1	3	2	1	3			
172				1	1		1	1										
174																		
176																		
178										2	2		2	2				
180										1	1		1	1				
182										1	1	2	1	1	2			
184				1		1	1		1				1		1		1	
186										1		1	1		1		1	
188				1		1	1		1		1		1		1		1	
190				1		1	1		1		1		1		1		1	
192				1	1		1	1										
194										2	1	3	2	1	3			
196										3	3		3	3				
198										2	1	3	2	1	3			
200				1		1	1		1		1		1		1		1	
202										2	1	3	2	1	3			
204										1	1	2	1	1	2			
206				1		1	1		1		1		1		1		1	
208																		
210										2		2	2		2		2	
212										2	2		2	2				
214											1	1		1	1			
216									1		1		1		1		1	
218																		
220										1		1	1		1		1	
222																		
224																		
226																		
228																		
230				1	1		1	1										
232																		
Totals	1	1		5	8	13	5	9	14	2	2		16	19	35	18	19	37

TABLE 23
LENGTH COMPOSITION OF THE 1943 AND 1942 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST
IN 1944
 (Samples From British Columbia Only)

TABLE 24
LENGTH COMPOSITION OF THE 1941 AND 1940 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1944
 (Samples From British Columbia Only)

Area	1941 Year-class, age 3						1940 Year-class, age 4																	
	XII			XI			Total			XII			XI			X			Total					
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
202				--	1	1	--	1	1															
204																								
206																								
208																								
210																								
212																								
214				--	1	1	--	1	1															
216																								
218																								
220													1	--	1					1	--	1		
222													2	--	2					2	--	2		
224				1	--	1	1	--	1				1	--	1					1	--	1		
226				2	--	2	2	--	2				--	1	1				--	1	1			
228				1	1	2	1	1	2				3	2	5				3	2	5			
230				1	--	1	1	--	1				1	3	4				1	3	4			
232				1	--	1	2	--	2	3	--	3	1	--	1	5	5	10	6	5	11			
234				1	1	2	1	1	2				1	--	1	5	3	8	1	1	2	7	4	11
236				1	1	2	1	1	2				6	7	13				6	7	13			
238				1	1	2	1	1	2				2	5	7				3	6	9			
240							1	--	1				1	--	1	7	4	11			8	4	12	
242				--	2	2	--	2	2				3	5	8				3	5	8			
244							--	2	2				3	6	9	--	1	1	3	9	12			
246													4	3	7				4	3	7			
248													2	4	6				2	4	6			
250				--	1	1	--	1	1				1	5	6				1	5	6			
252													1	2	3				1	2	3			
254													--	1	1				--	1	1			
256													1	1	2				1	1	2			
258																								
260																								
262																								
264																								
266													--	2	2				--	2	2			
268																								
270																								
Totals	1	--	1	10	9	19	11	9	20	4	3	7	48	59	107	1	2	3	53	64	117			

TABLE 24
LENGTH COMPOSITION OF THE 1941 AND 1940 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST
IN 1944
 (Samples From British Columbia Only)

TABLE 25
LENGTH COMPOSITION OF THE 1939 AND 1938 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1944
 (Samples From British Columbia Only)

Area	1939 Year-class, age 5								1938 Year-class, age 6															
	XII			XI			X		Total		XII			XI			X		Total					
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
224				1	--	1				1	--	1												
226				1	1	2				1	1	2												
228				3	--	3				3	--	3												
230	1	1	2	4	--	4				5	1	6												
232	1	--	1	10	4	14	1	1	2	12	5	17												
234	1	--	1	7	3	10				8	3	11												
236	1	2	3	13	6	19	1	--	1	15	8	23	--	1	1									
238	1	--	1	6	4	10	1	--	1	8	4	12	1	--	1	4	1	5						
240	--	2	2	9	9	18	2	--	2	11	11	22	1	--	1	2	2	4						
242	1	--	1	6	13	19				7	13	20	--	1	1	5	3	8	1	--	1			
244				5	11	16				5	11	16				3	4	7						
246	2	--	2	8	7	15				10	7	17	1	2	3	3	1	4	1	--	1			
248	--	1	1	5	7	12				5	8	13				6	3	9						
250				2	7	9	1	2	3	3	9	12	1	--	1	1	2	3						
252				2	7	9				2	7	9				1	6	7						
254				3	3	6				3	3	6				2	2							
256				2	5	7				2	5	7	--	1	1	1	1	2						
258				1	2	3				1	2	3				2	4	6						
260																--	1	1						
262	--	1	1	--	2	2				--	3	3				1	1	2						
264	--	1	1							--	1	1				1	1	2						
266																--	1	1						
268																								
270																								
272																								
274																								
276																								
278																								
280																--	1	1	--	1	1			
Totals	8	8	16	88	91	179	6	3	9	102	102	204	4	5	9	42	36	78	3	3	6	49	44	93

TABLE 25
LENGTH COMPOSITION OF THE 1939 AND 1938 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST
IN 1944
(Samples From British Columbia Only)

TABLE 26
LENGTH COMPOSITION OF THE 1937 AND 1936 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1944
(Samples From British Columbia Only)

Area	1937 Year-class, age 7									1936 Year-class, age 8													
	XII			XI			X			Total			XII			XI			Total				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
228	1		1							1		1											
230		1	1								1	1											
232					1	1					1	1			2		2		2		2		
234				1		1					1		1										
236				1		1					1		1										
238				1	1	2					1	1	2			1		1		1		1	
240																							
242				2	1	3					2	1	3			1		1		1		1	
244	1		1	1	1	2					2	1	3			1		4		1		1	
246					1	1						1	1										
248								1	1			1	1										
250				1		1					1		1										
252				1	3	4					1	3	4				1	1		1	1	1	
254					2	2						2	2			1		1		1		1	
256				1	1	2					1	1	2			1		1		1		1	
258																2	2		2		2	2	
260					1	1						1	1										
262																							
264																							
266					1	1						1	1										
268					1	1						1	1										
270																1	1				2	2	
Totals	2	1	3	9	14	23			1	1	11	16	27			1	1	7	4	11	7	5	12

TABLE 26
LENGTH COMPOSITION OF THE 1937 AND 1936 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST
IN 1944
(Samples From British Columbia Only)

TABLE 27
LENGTH COMPOSITION OF THE 1935 AND 1933 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1944
(Samples From British Columbia Only)

Area	1935 Year-class, age 9									1933 Year-class, age 11													
	XI			X			Total			XI													
	M	F	T	M	F	T	M	F	T	M	F	T											
232												1		1									
234																							
236																							
238																							
240																							
242																							
244																							
246																							
248																							
250																							
252																							
254																							
256																							
258															1		1		1		1		1
260															1		1		1		1		1
262																							
264																							
266																							
268																							
270																							
Totals															1	1	2		1		1		1

TABLE 27
LENGTH COMPOSITION OF THE 1935 AND 1933 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST
IN 1944
(Samples From British Columbia Only)

TABLE 28
LENGTH COMPOSITION OF THE 1944 AND 1943 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1945
British Columbia

Area	1944 Year-class, age 1			1943 Year-class, age 2											
	XI			XII			XI			VIII			Total		
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
176	--	1	1												
178															
180															
182															
184								1	1					1	1
186															
188								1	1					1	1
190															
192															
194	2	--	2	1	--	1							1	--	1
196															
198							1	--	1				1	--	1
200															
202															
204							2	--	2				2	--	2
206															
208							3	--	3				3	--	3
210							3	--	3				3	--	3
212							3	1	4				3	1	4
214							--	1	1	--	1	1	--	2	2
216							3	2	5				3	2	5
218							1	1	2				1	1	2
220															
222							--	3	3				--	3	3
224															
226							--	1	1				--	1	1
228															
230															
232															
234															
236															
238	1	--	1												
240															
Totals	3	1	4	1	--	1	16	11	27	--	1	1	17	12	29

TABLE 28
LENGTH COMPOSITION OF THE 1944 AND 1943 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST
IN 1945
British Columbia

TABLE 29
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1945

Area	BRITISH COLUMBIA					WASHINGTON																		
	XII			XI		X		VIII		Total	IX			VIII		Total								
L'th mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T						
205				--	1	1				1	--	1												
208																								
210																								
212				1	--	1							1	--	1									
214																								
216				2	2	4	--	1	1				2	3	5									
218				--	1	1							--	1	1									
220				2	--	2				2	--	2												
222				5	--	5				5	--	5												
224				1	4	5				1	4	5												
226	--	1	1	--	3	3			1	--	1		1	4	5	--	1	1						
228				--	3	3				--	3	3												
230																								
232				1	1	2				1	1	2			1	--	1							
234				1	--	1			1	--	1		2	--	2	--	1	1						
236				--	1	1				--	1	1	1	--	1		1	1						
238				--	1	1				--	1	1					1	--	1					
240																								
242																								
244							1	--	1				1	--	1									
246				--	1	1				--	1	1												
248																								
250																								
252																								
254				--	1	1				--	1	1												
256													--	1	1			1	1					
258																								
260																								
262																								
264																								
266																								
Totals	--	1	1	13	19	32	1	1	2	3	--	3	17	21	38	1	1	2	1	3	4	2	4	6

TABLE 29
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 3, BY AREAS IN THE PACIFIC NORTHWEST IN 1945

TABLE 30
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 4, BY AREAS IN THE PACIFIC NORTHWEST IN 1945

Area	BRITISH COLUMBIA						WASHINGTON																
	XI			X			Total	IX			VII			Total									
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T								
234				1	--	1	--	1	1	1	1	2											
236																							
238				--	1	1				--	1	1			1	--	1		1	--	1		
240																							
242																							
244																							
246																							
248				--	1	1				--	1	1											
250													--	1	1			--	1	1			
252																							
254																							
256				--	1	1				--	1	1	--	1	1			--	1	1			
Totals				1	3	4	--	1	1	1	4	5	--	1	1	1	1	2	1	2	3		

TABLE 30
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 4, BY AREAS IN THE PACIFIC NORTHWEST IN 1945

TABLE 32
 LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 6, BY AREAS IN THE PACIFIC NORTHWEST IN 1945

Area	BRITISH COLUMBIA										WASHINGTON																
	XII			XI			X			VIII			Total	IX			VIII			VII			Total				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
234.....		1	1	3		3							3	1	4												
235.....		1		1		2		2		7												1		1			
236.....					2		2		7													1		1			
240.....					7		7															1		1			
241.....					7		7															1		1			
242.....					5		5		10																		
243.....					4		4		3		7			4	3	7											
244.....					1		1		3		7			2	3	7											
245.....					4		4		7		6			4	3	6											
246.....					3		3		4		7			1	1	3						1		1			
247.....					4		4		7		6			1	1	3						1		1			
248.....					2		2		3		5			1	1	3						1		1			
249.....					5		5		11					1	1	3						1		1			
250.....					2		2		4		6			1	1	3						1		1			
251.....					2		2		4		6			1	1	3						1		1			
252.....					2		2		4		6			1	1	3						1		1			
253.....					2		2		4		6			1	1	3						1		1			
254.....					2		2		4		6			1	1	3						1		1			
255.....					1		1		3		6			1	1	3						1		1			
256.....					1		1		3		6			1	1	3						1		1			
257.....					1		1		3		6			1	1	3						1		1			
258.....					1		1		3		6			1	1	3						1		1			
259.....					1		1		3		6			1	1	3						1		1			
260.....					1		1		3		6			1	1	3						1		1			
261.....					1		1		3		6			1	1	3						1		1			
Total.....	1	3	3	48	30	87	1	1	2	1	2	3	51	44	95	6	2	10	8	5	13	2	2	4	18	9	27

COMPOSITION OF THE SABLEFISH CATCH

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TABLE 32
 LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 6, BY AREAS IN THE PACIFIC NORTHWEST IN 1945

TABLE 33
 LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 7, BY AREAS IN THE PACIFIC NORTHWEST IN 1945

Area	OREGON										WASHINGTON														
	Baiting					Columbia					Total	IK		VIII		VII		Total							
	M	F	T	M	F	T	M	F	T	M		F	T	M	F	T	M		F	T					
234.....				1	1	2						1	1												
235.....				2	1	3						2	1												
236.....				1	1	2						1	1												
240.....				1	1	2						1	1												
242.....				1	1	2						1	1												
244.....				1	1	2						1	1												
246.....				2	1	3						2	1												
248.....				1	2	3						1	2												
250.....				1	3	4						1	3												
252.....				1	1	2						1	1												
254.....				4	4	8						4	4												
256.....				2	2	4						2	2												
258.....				2	6	8						2	6												
260.....				1	1	2						1	1												
262.....				1	1	2						1	1												
264.....				1	1	2						1	1												
266.....				1	1	2						1	1												
268.....				1	1	2						1	1												
270.....				1	1	2						1	1												
272.....				1	1	2						1	1												
274.....				1	1	2						1	1												
276.....				1	1	2						1	1												
278.....				1	1	2						1	1												
280.....				1	1	2						1	1												
282.....				1	1	2						1	1												
284.....				1	1	2						1	1												
286.....				1	1	2						1	1												
288.....				1	1	2						1	1												
290.....				1	1	2						1	1												
292.....				1	1	2						1	1												
294.....				1	1	2						1	1												
296.....				1	1	2						1	1												
298.....				1	1	2						1	1												
300.....				1	1	2						1	1												
Total.....	3	1	4	20	18	38	2	1	3	1	1	2	20	45	1	1	2	3	5	1	1	2	4	4	8

DIVISION OF FISH AND GAME

TABLE 33
 LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 7, BY AREAS IN THE PACIFIC NORTHWEST IN 1945

TABLE 34
LENGTH COMPOSITION OF THE 1937 AND 1936 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1945

Area	1937 Year-class, age 8									1936 Year-class, age 9					
	BRITISH COLUMBIA			WASHINGTON						BRITISH COLUMBIA					
	XI			IX		VIII		Total		XI					
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
232														1	1
234															
236															
238															
240															
242															
244	1		1												
246		1	1												
248															
250	3	1	4				1	1	1	1	1	1	1		1
252	1		1				1		1		1		1		
254															
256		1	1												
258	1		1												
260															
262	1		1		1	1					1	1			
264															
266		1	1												
268															
270		1	1												
272															
274															
276														1	1
Totals	7	5	12		1	1	1	1	2	1	2	3	2	1	3

TABLE 34
LENGTH COMPOSITION OF THE 1937 AND 1936 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1945

TABLE 35
LENGTH COMPOSITION OF THE 1943 AND 1942 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1946

Area	1943 Year-class, age 3						1942 Year-class, age 4											
	BRITISH COLUMBIA			WASHINGTON			BRITISH COLUMBIA					WASHINGTON						
	XI			VIII			XI		VIII		Total	VIII						
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
222	1	1	2															
224																		
226																		
228										1		1	1		1			
230				1		1												
232					1	1												
234																		
236	1	1	2								1	1		1		1		1
238		1	1	1		1			1	1	1	1	1	1	1	1		1
240								1	1	1	1		1	1	2	1		1
242								1	1	1			1	1	1	1		2
244								1	1	2			1	1	2		3	3
246																1		1
248											1	1		1		1		1
250		1	1					1	1				1	1		1		1
252				1		1							1	1		1	1	2
254																		
256																		
258																1		1
Totals	2	4	6	3	1	4	1	5	6	2	2	4	3	7	10	5	7	12

TABLE 35
LENGTH COMPOSITION OF THE 1943 AND 1942 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1946

Area	1941 Year-class, age 5						1940 Year-class, age 6																	
	BRITISH COLUMBIA			WASHINGTON			BRITISH COLUMBIA			WASHINGTON														
	XI		VIII		Total		VIII		XI		VIII		Total		VIII									
L'th mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
	230	1		1																				
232																								
234																								
236													1		1	1		1						
238													2		2	2		2						
240					1	1		1	1					2	2									
242														2	1	3		2	1	3				
244													1		1		1		1	4				
246													2		2		1	1	2	2				
248	1		1										2		2		3		3	3				
250														1	1	2		1	1	2				
252													1	1	2		1	1	2	4				
254		1	1											1	1	2		1	1	4				
256														1	2	3		1	2	3				
258	1		1											1		1		2		2				
260															1	1				8				
262															1	1		1	1	3				
264																				1				
266																				2				
268																				1				
270														1	1			1	1	1				
272														1	1			1	1	1				
274																				1				
Totals	3	1	4		1	1	3	2	5	8	6	14	8	6	14	6	6	12	14	12	26	24	33	57

TABLE 36
LENGTH COMPOSITION OF THE 1941 AND 1940 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1946

Area	1939 Year-class, age 7						1938 Year-class, age 8				1937 Year-class, age 9											
	BRITISH COLUMBIA			WASHINGTON			BRITISH COLUMBIA		WASHINGTON		WASHINGTON											
	XI		VIII		Total		VIII		XI		VIII		VIII									
Length mm.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
238	1		1																			
240					2	2																
242					1	1																
244	2		2																			
246					1	1																
248					1	1																
250																						
252		1	1																			
254	1		1																			
256	1	3	4																			
258		1	1																			
260	1	2	3																			
262		3	3																			
264		1	1																			
266																						
268	1		1																			
270																						
272		1	1																			
Totals	7	12	19		3	10	13	10	22	32	18	10	29		1	1	2	4	6	2	2	4

¹ Includes one fish, sex unknown.

TABLE 37
LENGTH COMPOSITION OF THE 1939, 1938 AND 1937 YEAR-CLASSES BY AREAS IN THE PACIFIC NORTHWEST IN 1946

TABLE 38
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 1, IN 1941-42

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
130.....	--	1	1													--	1	1	
132.....																			
134.....																			
136.....																			
138.....																			
140.....			1															1	
142.....																			
144.....																			
146.....	1	--	1				2	2				2	2		1	2	3		
148.....							3	--	3				3	--	3	3	--	3	
150.....																			
152.....										2	--	2			2	--	2	--	2
154.....							4	--	4	4	--	4	8	--	8	8	--	8	
156.....	1	--	1				2	2	4			2	2	4	3	2	5		
158.....	--	1	2				2	2	4			2	2	4	2	3	6		
160.....	1	1	5				--	9	9			--	9	9	1	10	14		
162.....	--	1	2				8	3	11	6	--	6	14	3	17	14	4	19	
164.....	--	--	1	2	--	2	1	16	17			3	16	19	3	16	20		
166.....	--	2	3				4	11	15	6	3	9	10	14	24	10	16	27	
168.....	1	4	6				9	12	21	12	12	24	21	24	45	22	28	51	
170.....	1	--	1				14	16	30	15	10	25	29	25	55	30	25	56	
172.....	2	--	2				20	21	41	15	6	21	35	27	62	37	27	64	
174.....	--	--	1	2	2	4	11	27	38	20	14	34	33	43	76	33	43	77	
176.....	2	2	4	2	--	2	30	12	42	33	16	49	65	28	93	67	30	97	
178.....	--	2	2	2	2	4	39	20	59	15	13	28	56	35	91	56	37	93	
180.....				2	--	2	24	21	45	26	26	52	52	47	99	52	47	99	
182.....				2	--	2	14	21	35	29	18	47	45	39	84	45	39	84	
184.....							14	16	30	21	14	35	35	30	65	35	30	65	
186.....							6	7	13	13	11	24	19	18	37	19	18	37	
188.....							1	4	5	14	7	21	15	11	29	15	11	29	
190.....	1	--	1	1	--	1	3	5	8	7	6	13	11	11	22	12	11	23	
192.....				--	1	1	1	4	5	3	6	9	4	11	15	4	11	15	
194.....	1	--	1	2	1	3	1	2	3	1	3	4	4	6	10	5	6	11	
196.....				--	1	1	3	1	4	3	2	5	3	2	5	3	2	5	
198.....							1	--	1	2	1	3	3	1	4	3	1	4	
200.....										1	2	3	1	2	3	1	2	3	
202.....										--	1	1	--	1	1	--	1	1	
204.....							1	--	1	--	1	1	1	1	2	1	1	2	
Totals.....	11	14	35 ¹	15	6	21	213	234	447	248	171	419	476	411	887	487	425	922 ¹	

¹ Includes some fish, sex unknown.

4-00340

TABLE 38
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 1, IN 1941-42

TABLE 39
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 2, IN 1941-42

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
160			2					1	1			2			2		1	5
162		1	3			2									2		1	5
164		2	2					4				5	5		4	5	9	4
166	4		5					2	2			2	2		4	4	4	9
168	2	5	9					3	2	5		2	2		3	4	7	5
170	3		6					9	6	15		3	6	9	12	12	24	15
172	2	3	9		2	2		5	10	15		4	4		5	16	21	7
174	8	2	18		3	4	7	9	11	20		3	3	6	15	18	33	23
176	4	4	10		2	2	4	19	25	44		5	4	9	26	31	57	30
178	11	1	24		3	4	7	24	13	37		13	8	21	40	25	65	51
180	7	8	27		6	3	9	39	23	62		23	15	38	68	41	109	75
182	15	9	43		10	5	15	41	18	59		25	10	35	76	33	109	91
184	10	15	47		15	5	20	48	49	97		30	36	66	93	90	183	103
186	21	17	57		15	16	31	58	69	127		43	25	68	116	110	226	137
188	15	12	43		25	19	44	91	58	149		72	63	135	188	140	328	203
190	23	13	46		40	15	55	105	57	162		90	50	140	235	122	357	258
192	13	12	40		47	34	81	87	90	177		104	87	191	238	211	449	251
194	14	24	49		45	42	87	112	93	205		119	102	221	276	237	513	290
196	15	18	37		72	39	111	124	99	223		123	108	231	319	246	565	334
198	16	20	42		56	41	97	134	111	245		60	78	138	250	230	480	266
200	9	12	28		78	54	132	109	88	197		58	83	141	245	225	470	254
202	12	17	33		64	49	113	83	99	182		34	71	105	181	219	400	193
204	9	9	20		40	65	105	74	82	156		22	51	73	136	198	334	145
206	9	14	25		44	38	82	39	54	93		22	25	47	105	117	222	114
208	4	7	14		30	37	67	28	45	73		9	14	23	67	96	163	71
210	2	6	9		14	27	41	15	41	56		7	13	20	36	81	117	38
212	4	3	7		10	17	27	11	26	37		2	8	10	23	51	74	27
214	4	2	8		10	8	18	6	15	21		4	5	9	20	28	48	24
216	2	3	6		2	8	10	5	11	16			2	2	7	21	28	9
218	2	1	4		3	5	8		3	3			1	1	3	9	12	5
220	1		1		2	3	5	2	1	3					4	4	8	5
222		1	2		2		2						1	1	2	1	3	2
224	1	1	3		1	1									1	1	1	1
226					1	1									1	1		1
228																		
230																		
232					1	1		1	1			1	1		3	3		3
234																		
236		1	1		1	1									1	1		2
Totals	242	243	680 ¹	640	546	1186	1284	1203	2487	873	883	1756	2797	2632	5429	3039	2875	6109 ¹

¹ Includes some fish, sex unknown.

TABLE 39
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 2, IN 1941-42

TABLE 40
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 3, IN 1941-42

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
164.....	--	1	1													--	1	1
166.....																		
168.....																		
170.....																		
172.....	--	1	1													--	1	1
174.....							--	2	2				--	2	2	--	2	2
176.....							--	3	3				--	3	3	--	3	3
178.....	1	1	2				1	2	3	3	2	5	4	2	6	5	3	8
180.....							1	2	3	3	--	3	4	2	6	4	2	6
182.....	2	--	2				2	1	3	1	2	3	3	3	6	5	3	8
184.....	1	--	2				--	4	4	8	3	11	8	7	15	9	7	17
186.....	2	--	2	2	--	2	--	3	3	7	3	10	9	6	15	11	6	17
188.....	4	--	4	1	1	2	4	4	8	12	11	23	17	16	33	21	16	37
190.....	2	4	6	--	3	3	6	1	7	23	11	34	29	15	44	31	19	50
192.....	1	4	5	5	1	6	7	1	8	39	26	65	51	28	79	52	32	84
194.....	5	3	9	4	1	5	12	6	18	29	27	56	45	34	79	50	37	88
196.....	2	4	6	10	4	14	20	15	35	51	31	82	81	50	131	83	54	137
198.....	5	4	10	27	15	42	38	20	58	70	57	127	135	92	227	140	96	237
200.....	4	--	4	27	17	44	58	32	90	69	59	128	154	108	262	158	108	266
202.....	6	2	8	48	25	73	54	40	94	46	43	80	148	108	256	154	110	264
204.....	4	3	7	49	31	80	48	53	101	45	49	94	142	133	275	146	136	282
206.....	5	4	9	47	32	79	45	43	88	42	51	93	134	126	260	139	130	269
208.....	2	1	5	42	49	91	47	39	86	28	33	61	117	121	238	119	122	243
210.....	7	4	13	37	46	83	28	33	61	14	30	44	79	109	188	86	113	201
212.....	7	5	14	28	36	64	24	40	64	17	21	38	69	97	166	76	102	180
214.....	5	3	12	42	25	67	22	18	40	11	23	34	75	66	141	80	69	153
216.....	10	6	18	24	25	49	14	17	31	7	16	23	45	58	103	55	64	121
218.....	10	6	18	23	36	59	12	19	31	8	12	20	43	67	110	53	73	128
220.....	8	7	16	11	21	32	12	15	27	9	5	14	32	41	73	40	48	89
222.....	10	8	19	11	22	33	3	6	9	--	11	11	14	39	53	24	47	72
224.....	14	11	31	5	11	16	2	7	9	2	3	5	9	21	30	23	32	61
226.....	9	14	28	5	4	9	5	8	13	3	2	5	13	14	27	22	28	55
228.....	6	5	12	1	3	4	--	3	3	1	2	3	2	8	10	8	13	22
230.....	2	3	5	1	--	1	--	1	1	1	3	4	2	4	6	4	7	11
232.....	1	7	9	--	3	3	--	1	1	1	--	1	1	4	5	2	11	14
234.....	--	5	5	--	1	1	--	2	2	--	2	2	--	3	3	--	8	8
236.....	1	4	5							--	1	1	--	1	1	1	5	6
238.....	1	1	2				1	--	1				1	--	1	2	1	3
240.....	--	1	1							1	--	1	1	--	1	1	1	2
242.....	--	1	1													--	1	1
244.....	--	1	1													--	1	1
246.....																		
248.....																		
250.....																		
252.....																		
254.....																		
256.....																		
258.....																--	1	1
260.....	--	1	1													--	1	1
Totals...	137	125	294 ¹	450	412	862	466	437	903	551	539	1090	1467	1388	2855	1604	1513	3149 ¹

¹ Includes some fish, sex unknown.

TABLE 40
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 3, IN 1941-42

TABLE 41
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 4, IN 1941-42

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL							
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T					
186.....										1	--	1			1	--	1			1	--	1	
188.....																							
190.....										1	--	1			1	--	1			1	--	1	
192.....										1	1	2			2	1	3			2	1	3	
194.....										4	1	5			5	3	8			5	3	8	
196.....										5	1	6			9	1	10			9	1	10	
198.....										3	3	6			9	4	13			9	4	13	
200.....	1	--	1							5	4	9			13	7	20			14	7	21	
202.....	--	--	1							2	2	4			2	4	6			9	8	17	
204.....	--	--	1							2	3	5			4	2	6			9	8	17	
206.....	--	--	1							3	2	5			10	2	12			15	11	26	
208.....	--	--	2							4	3	7			13	6	19			22	11	35	
210.....	2	--	3							5	1	6			10	5	15			22	10	33	
212.....	1	--	1							12	5	17			7	6	13			24	16	40	
214.....	5	1	10							11	5	16			4	5	9			6	3	9	
216.....	8	2	10							11	7	18			1	6	7			7	2	9	
218.....	10	3	16							7	10	17			6	4	10			3	5	8	
220.....	9	2	14							6	7	13			8	7	15			2	4	6	
222.....	19	7	30							10	10	20			1	4	5			5	4	9	
224.....	25	10	39							5	6	11			1	6	7			3	2	5	
226.....	26	17	47							5	6	11			3	7	10			1	2	3	
228.....	31	13	49							3	2	5			4	2	6			1	3	4	
230.....	26	22	50							2	2	4			1	4	5			--	2	2	
232.....	21	34	58							--	3	3			1	1	2			--	2	2	
234.....	17	27	47							1	2	3			1	3	4			--	1	1	
236.....	12	16	30							--	1	1			1	--	1			--	1	1	
238.....	6	16	24							--	1	1			--	1	1			--	2	2	
240.....	5	9	17												--	1	1			--	1	1	
242.....	2	12	15							--	1	1			--	1	1			--	1	1	
244.....	1	5	6							--	1	1			--	1	1			--	1	1	
246.....	1	1	6												--	1	1			--	1	1	
248.....	1	2	3																				
250.....	--	2	2							--	1	1			--	1	1			--	1	1	
Totals.....	229	201	483							101	85	186			80	75	164			70	70	140	
															260	230	490			489	431	973	

¹ Includes some fish, sex unknown.

TABLE 41
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 4, IN 1941-42

TABLE 42
LENGTH COMPOSITION OF THE 1936 YEAR-CLASS, AGE 5, IN 1941-42

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
190.....										1	1			1	1			1	1	
192.....																				
194.....					1	1					1	1			2	2			2	2
196.....					1		1				2		2	3		3		3		3
198.....					1			1		1		1		4		4		4		4
200.....										1	1	2		1	1	2		1	1	2
202.....					1		1			2	2	4		3	2	5		3	2	5
204.....					1		1		1		1	3		4	1	5		4	1	5
206.....								1	1	2	2	3	5	3	4	7		3	4	7
208.....					1	1	2		1		1	1	2	3	2	5		3	2	5
210.....								3		3	1			4		4		4		4
212.....		1	2		5		5	1	1	2		1	1	6	2	8		6	3	10
214.....					1	1	1	1	1	2		2	2	1	4	5		1	4	5
216.....	2		3		3		3	4	2	6		1	1	7	3	10		9	3	13
218.....	1		2		2	1	3	1	2	3	1		1	4	3	7		5	3	9
220.....	4	3	9		2	2	1	1	2	2		2	3	3	6		7	6	15	
222.....	6	1	9		3	2	5	3	1	4		1	1	6	4	10		12	5	19
224.....	14	1	17		5	5	1	2	3	1	1	2	2	8	10		16	9	27	
226.....	12	8	20		1	1	1	1	2	2	1	3	3	3	6		15	11	26	
228.....	11	9	22		1	1							1	1			11	10	23	
230.....	8	12	22		2	3	5		2	2		1	1	2	6	8		10	18	30
232.....	15	10	26		2	2		1	1		1	1		4	4		15	14	30	
234.....	10	8	21														10	8	21	
236.....	11	14	27								1	1		1	1		11	15	28	
238.....	14	14	30		1	1								1	1		14	15	31	
240.....	13	15	29		2	2								2	2		13	17	31	
242.....	4	16	20								2	2		2	2		4	18	22	
244.....	5	10	17														5	10	17	
246.....	6	10	20								1	1		1	1		6	11	21	
248.....	1	4	5						1	1				1	1		1	5	6	
250.....	2	7	9														2	7	9	
252.....		7	8															7	8	
254.....	2	2	6														2	2	6	
256.....	1	3	4														1	3	4	
258.....		1	1		1	1								1	1			2	2	
260.....		1	1															1	1	
262.....		1	1															1	1	
Totals.....	142	158	331 ¹	20	24	44	20	16	36	19	24	43	59	64	123	201	222	454 ¹		

¹ Includes some fish, sex unknown.

TABLE 42
LENGTH COMPOSITION OF THE 1936 YEAR-CLASS, AGE 5, IN 1941-42

TABLE 43
LENGTH COMPOSITION OF THE 1935 YEAR-CLASS, AGE 6, IN 1941-42

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL							
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T					
204.....								1	1					1	1			1	1				
206.....				1		1								1		1			1	1			
208.....								1	1					1	1				1	1			
210.....			1																1				
212.....				1		1				1	1	2	2	1	3	2	1	3	2	1	3		
214.....								1	1	2	1		1	2	1	3	2	1	3	2	1	3	
216.....					1	1	1		1		1		1	1	2	1	1	2	1	1	2		
218.....						1					1		1		1	1		1	1		2		
220.....											1	1	1		1	1		1	1		1	1	
222.....				1		1	1			1		1	1	2	2	2	4	2	2	4	2	4	
224.....				2	1	3			1	1			1	1	2	2	3	5	2	3	5		
226.....				2	1	3					1		1		1		1	4	3	1	4		
228.....				2	1	3						1	1		1	1	2	2	4	2	2	4	
230.....					1	1												1	1		1	1	
232.....				4		4	1		1					1		1	5		5		5	5	
234.....				3	3	6										3	3	6	3	3	6		
236.....				4	4	8							1	1		1	1	4	5	9	4	5	9
238.....				6	3	9										6	3	9	6	3	9		
240.....				4	2	6										4	2	6	4	2	6		
242.....				6	5	11				1		1	1		1	7	5	12	7	5	12		
244.....				8	6	15										8	6	15	8	6	15		
246.....				6	5	12										6	5	12	6	5	12		
248.....				2	2	5										2	2	5	2	2	5		
250.....					5	5											5	5		5	5		
252.....				3	3	6										3	3	6	3	3	6		
254.....				3	3	6										3	3	6	3	3	6		
256.....					1	1											1	1		1	1		
258.....																							
260.....						1															1		
262.....																							
264.....						1															1		
266.....						1															1		
268.....						1															1		
Totals.....	56	47	112 ¹	3	2	5	2	4	6	6	5	11	11	11	22	67	58	134 ¹					

¹ Includes some fish, sex unknown.

TABLE 43
LENGTH COMPOSITION OF THE 1935 YEAR-CLASS, AGE 6, IN 1941-42

TABLE 44
LENGTH COMPOSITION OF THE 1934 YEAR-CLASS, AGE 7, IN 1941-42

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
204.....	--	1	1													--	1	1
206.....																		
208.....																		
210.....																		
212.....																		
214.....																		
216.....																		
218.....																		
220.....				1	1	2						1	1	2	1	1	2	
222.....	1	--	1												1	--	1	
224.....	1	--	1	1	--	1						1	--	1	2	--	2	
226.....	1	--	1				--	1	1			--	1	1	1	1	2	
228.....	1	1	2												1	1	2	
230.....	3	--	3												3	--	3	
232.....	1	1	2												1	1	2	
234.....	1	1	2												1	1	2	
236.....																		
238.....	1	--	1												1	--	1	
240.....	1	1	2												1	1	2	
242.....	2	1	4												2	1	4	
244.....	1	3	5												1	3	5	
246.....	3	--	4												3	--	4	
248.....	1	2	3						--	1	1	--	1	1	1	3	4	
250.....	1	2	4									--	1	1	1	2	4	
252.....	1	4	5												1	4	5	
254.....	1	3	5												1	3	5	
256.....	2	1	3												2	1	3	
258.....	--	1	1												--	1	1	
260.....	--	4	5												--	4	5	
262.....	--	--	1				--	1	1			--	1	1	--	--	1	2
264.....	--	2	3												--	2	3	
266.....	--	1	1												--	1	1	
268.....	--	1	1												--	1	1	
270.....	--	1	1												--	1	1	
Totals.....	23	31	62 ¹	2	1	3	--	2	2	--	1	1	2	4	6	25	35	68 ¹

¹ Includes some fish, sex unknown.

TABLE 44
LENGTH COMPOSITION OF THE 1934 YEAR-CLASS, AGE 7, IN 1941-42

TABLE 45
LENGTH COMPOSITION OF THE 1933, 1932, 1931, AND 1930 YEAR-CLASSES IN 1941-42

Length mm.	1933 Year-class, age 8						1932 Year-class, age 9			1931 Year-class, age 10			1930 Year-class, age 11					
	PACIFIC NORTHWEST			CALIFORNIA ¹			GRAND TOTAL ¹			GRAND TOTAL ²			GRAND TOTAL ³					
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
212				1	--	1	1	--	1									
214																		
216																		
218																		
220																		
222																		
224																		
226																		
228																		
230																		
232																		
234																		
236	1	--	1				1	--	1									
238	1	1	2				1	1	2									
240	1	--	1				1	--	1			1	--	1				
242																		
244	--	1	2				--	1	2	2	--	2						
246	1	--	2				1	--	2									
248	3	--	3				3	--	3	2	--	2						
250	3	--	3				3	--	3									
252	2	--	2				2	--	2	--	1	1						
254	--	2	3				--	2	3	1	--	1	--	1				
256	1	2	4				1	2	4									
258	--	1	2				--	1	2			1	--	1	1			
260	1	1	3				1	1	3	--	1	1	--	1	1			
262	--	2	2				--	2	2	1	--	1	--	1	1			
264																		
266	--	1	1				--	1	1	1	1	2	--	1	1			
268																		
270																		
272																		
274																		
276																		
278	--	1	1				--	1	1									
280																		
Totals	14	12	32 ³	1	--	1	15	12	33 ³	7	3	10	2	2	4	1	3	5 ³

¹ Year-class represented in California only at San Francisco.
² Year-class represented in Pacific Northwest only.
³ Includes some fish, sex unknown.

TABLE 45
LENGTH COMPOSITION OF THE 1933, 1932, 1931, AND 1930 YEAR-CLASSES IN 1941-42

TABLE 46
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 1, IN 1942-43

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
146							2	4	6				2	4	6	2	4	6
148							4		4				4		4	4		4
150							6	2	8				6	2	8	6	2	8
152																		
154							2	7	9				2	7	9	2	7	9
156							2	4	6				2	4	6	2	4	6
158							9		9		2	2	9	2	11	9	2	11
160							5	5	10				5	5	10	5	5	10
162							6	9	15		1	1	7	9	16	7	9	16
164							10	8	18		3	3	10	11	21	10	11	21
166							8	2	10		6	6	14	2	16	14	2	16
168							3	3	6		7	4	11	7	17	10	7	17
170							1	4	5		13	2	15	14	6	14	6	20
172							1	7	8		18	8	26	19	15	19	15	34
174				2		2	6	2	8		22	17	39	30	19	30	19	49
176							2	2	4		23	22	45	25	24	25	24	49
178							1		1		26	25	51	27	25	27	25	52
180											30	22	52	30	22	30	22	52
182				2		2	2		2		26	24	50	30	24	30	24	54
184							1	2	3		22	23	45	23	25	23	25	48
186							11	20	31		11	20	31	11	20	11	20	31
188							2	2	2		11	14	25	11	16	11	16	27
190							2		2		8	13	21	10	13	10	13	23
192											6	13	19	6	13	6	13	19
194											5	9	14	5	9	5	9	14
196											2	3	5	2	3	2	3	5
198											2	10	12	2	10	2	10	12
200								1	1		1	1	2	1	2	1	2	3
202											1	1		1	1		1	1
204			1			1										1		1
206																		
208			1			1										1		1
210																		
212																		
214																		
216				1		1											1	1
218			2			2										2		2
220				1		1											1	1
Totals	4	2	6	4		4	73	64	137	240	236	476	317	300	617	321	302	623

TABLE 46
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 1, IN 1942-43

TABLE 47
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 2, IN 1942-43

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
154								2	2					2	2			2	2	
156																				
158																				
160																				
162																				
164																				
166								2	2		1	1		3	3			3	3	
168								1	1		1	1		1	1			1	1	
170											1	1		1	1			1	1	
172											1	3	4	1	3	4		1	3	4
174											4	3	7	4	3	7		4	3	7
176								1	1		7	4	11	7	5	12		7	5	12
178											17	13	30	17	13	30		17	13	30
180											13	17	30	15	17	32		15	17	32
182								2	2		28	17	45	28	19	47		28	19	47
184								5	5	10	17	17	34	22	22	44		22	22	44
186								2	1	3	28	26	54	30	27	57		30	28	58
188	2	1	2		2	2					27	26	53	27	30	57		29	30	59
190	2	1	3		1	1		6	4	10	32	34	66	39	38	77		41	39	80
192	1	2	3		2	2		8	4	12	32	36	68	42	40	82		43	42	85
194					4	4		6	6	12	45	42	87	55	48	103		55	48	103
196	4	4	8		8	8		14	13	27	47	43	90	69	56	125		73	60	133
198	7	4	11		6	5	11	22	20	42	31	44	75	59	69	128		66	73	139
200	4	7	12		5	3	8	34	14	48	70	57	127	109	74	183		113	81	195
202	5	3	8		8	8	16	35	22	57	43	33	96	86	83	169		91	86	177
204	1	3	4		5	8	13	42	30	72	43	48	91	90	86	176		91	89	180
206	4	8	12		10	12	22	29	20	49	51	49	100	90	81	171		94	89	183
208	2	5	7		13	9	22	31	28	59	37	42	79	81	79	160		83	84	167
210	3	2	5		6	11	17	26	35	61	37	41	78	69	87	156		72	89	161
212	4	2	6		7	14	21	20	25	45	23	37	60	50	76	126		54	78	132
214	1	2	3		5	11	16	17	27	44	13	27	40	35	65	100		36	67	103
216		1	1		7	9	16	7	22	29	4	19	23	18	50	68		18	51	69
218		2	2		2	9	11	7	15	22	4	7	11	13	31	44		13	33	46
220					2	6	8	3	10	13	1	6	7	6	22	28		6	22	28
222		1	1		2	2	4	4	4	8		2	2	6	8	14		6	9	15
224					1	1	2	1	1	2				2	2	4		2	2	4
226	1	1	2					1	1	2		2	2	1	3	4		2	4	6
228					1	1			2	2					3	3			3	3
Totals...	41	49	91 ¹	94	111	205	322	319	641	657	716	1373	1073	1146	2219	1114	1195	2310 ¹		

¹ Includes one fish, sex unknown.

TABLE 47
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 2, IN 1942-43

TABLE 48
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 3, IN 1942-43

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
174										1		1	1		1	1		1	
176										3	3	6	3	3	6	3	3	6	
178		2	2							5	1	6	5	1	6	5	3	8	
180										1	2	3	1	2	3	1	2	3	
182		1	1							4	8	12	4	8	12	4	8	12	
184		2	2							3	5	8	3	5	8	3	7	10	
186		2	2					1	1	7	4	11	7	5	12	9	5	14	
188		2	2							12	9	21	12	9	21	14	9	23	
190	1	6	7				1		1	10	12	22	11	12	23	12	18	30	
192		3	3		2		2		4	20	20	40	26	20	46	26	23	49	
194	3	4	7		1		1		4	16	18	34	18	22	40	21	26	47	
196	2	4	6		5	6	11		4	28	9	37	37	18	55	39	22	61	
198	4	6	10		8	2	10		13	29	21	50	50	29	79	54	35	89	
200	8	2	10		5	1	6		18	39	23	62	62	32	94	70	34	104	
202	7	1	8		8	7	15		34	54	36	90	96	58	154	103	59	162	
204	6	5	11		23	5	28		45	66	48	114	134	76	210	140	81	221	
206	6	12	18		36	33	69		51	79	61	140	166	134	300	172	146	318	
208	8	6	14		55	23	78		82	85	63	148	222	120	342	230	126	356	
210	10	9	19		67	39	106		94	56	57	113	217	167	384	227	176	403	
212	10	18	28		66	66	132		110	43	63	106	219	197	416	229	215	444	
214	14	10	24		77	64	141		109	46	64	110	232	220	452	246	230	476	
216	9	16	25		82	68	150		78	26	34	60	186	163	349	195	179	374	
218	19	18	37		70	63	133		79	15	23	38	164	185	349	183	203	386	
220	16	19	35		51	60	111		52	10	25	35	113	161	274	129	180	309	
222	12	16	28		43	62	105		44	3	11	14	90	122	212	102	138	240	
224	13	11	24		25	45	70		24	1	6	7	50	95	145	63	106	169	
226	7	10	17		21	35	56		20	2	3	5	43	64	107	50	74	124	
228	5	5	10		17	32	49		17		2	2	34	62	96	39	67	106	
230	3	4	7		10	13	23		8		1	1	18	31	49	21	35	56	
232	5	1	6		4	17	21		3	1	2	3	8	26	34	13	27	40	
234	3	4	7		1	7	8		3				4	11	15	7	15	22	
236	3	2	5		2	7	9		1				3	8	1	6	10	16	
238		4	4		3	4	7		7		1	1	3	12	15	3	16	19	
240		2	1	3		2	2		3		1		1	5	6	3	6	9	
242		2	1	3		1	1		1				1	2	3	3	3	6	
244		2	1	3										1	1	2	2	4	
246						1	1							1	1		1	1	
248																			
250																			
252																			
254																			
256																			
258		1	1	2													1	1	2
Totals...	185	205	390	682	664	1346	896	788	1684	666	635	1301	2244	2087	4331	9429	2292	4721	

TABLE 48
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 3, IN 1942-43

TABLE 49
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 4, IN 1942-43

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
186										2	--	2	2	--	2	2	--	2
188										2	2	4	2	2	4	2	2	4
190																		
192							1	--	1	3	1	4	4	1	5	4	1	5
194							1	--	1	3	4	7	4	4	8	4	4	8
196				2	--	2	--	1	1	9	3	12	11	4	15	11	4	15
198							2	--	2	5	5	10	7	5	12	7	5	12
200		1	1	2	--	2	3	--	3	13	7	20	18	7	25	18	8	26
202				3	--	3	7	1	8	14	10	24	24	11	35	24	11	35
204				5	2	7	13	3	16	20	6	26	38	11	49	38	11	49
206				11	2	13	20	3	23	26	17	43	57	22	79	57	22	79
208				6	7	13	15	18	33	29	11	40	50	36	86	50	36	86
210	1	2	3	12	5	17	20	11	31	21	16	37	53	32	85	54	34	88
212	2	1	3	23	11	34	22	17	39	32	23	55	77	51	128	79	52	131
214	4	1	5	31	22	53	32	34	66	19	32	51	82	88	170	86	89	175
218	2	1	3	34	29	63	41	19	60	16	21	37	91	69	160	93	70	163
218	--	1	1	47	20	67	37	25	62	12	11	23	96	56	152	96	57	153
220	1	--	1	47	26	73	35	26	61	11	12	23	93	64	157	94	64	158
222	5	2	7	36	38	74	26	26	52	3	8	11	65	72	137	70	74	144
224	6	3	9	31	36	67	33	27	60	1	1	2	65	64	129	71	67	138
226	2	6	8	27	27	54	11	19	30	2	8	10	40	54	94	42	60	102
228	1	6	7	26	25	51	17	23	40	1	1	2	44	49	93	45	55	100
230	5	2	7	20	33	53	15	9	24	--	2	2	35	44	79	40	46	86
232	3	4	7	11	17	28	8	13	21	--	1	1	19	31	50	22	35	57
234	9	1	10	3	12	15	10	15	25				13	27	40	22	28	50
236	3	8	11	8	9	17	7	7	14				15	16	31	18	24	42
238	1	2	3	5	6	11	2	6	8	--	1	1	7	13	20	8	15	23
240	4	2	6	3	5	8	2	5	7	--	1	1	5	11	16	9	13	22
242	3	2	5	4	1	5	--	4	4				4	5	9	7	7	14
244	--	2	2	1	2	3	1	3	4				2	5	7	2	7	9
246	2	2	4	--	2	2	--	3	3				--	5	5	2	7	9
248	--	1	1				--	1	1				--	1	1	--	2	2
250	--	1	1													--	1	1
252	--	2	2													--	2	2
254	--	1	1	--	1	1							--	1	1	--	2	2
256	--	2	2													--	2	2
258	1	--	1													1	--	1
Totals...	55	56	111	398	338	736	381	319	700	244	204	448	1023	861	1884	1078	917	1995

TABLE 49
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 4, IN 1942-43

TABLE 50
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 5, IN 1942-43

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
196.....	--	1	1							1	--	1	1	--	1	1	1	2
198.....									1	--	1				1	--	1	
200.....												2	--	2	2	--	2	
202.....												4	1	5	4	1	5	4
204.....												2	1	3	6	1	7	6
206.....				2	--	2	2	--	2	2	4	6	4	5	9	4	5	9
208.....				1	1	2	1	--	1	2	4	6	4	5	9	4	5	9
210.....		1	1	6	1	7	4	2	6			10	3	13	10	4	14	
212.....	1	--	1	4	1	5				6	1	7	10	2	12	11	2	13
214.....				7	2	9	2	2	4	3	3	6	12	7	19	12	7	19
216.....				10	2	12	3	--	3	8	3	11	21	5	26	21	5	26
218.....	1	--	1	12	4	16	3	3	6	4	2	6	19	9	28	20	9	29
220.....				10	4	14	4	4	8	1	--	1	15	8	23	15	8	23
222.....	1	--	1	12	13	25	6	2	8	2	3	5	20	18	38	21	18	39
224.....	1	--	1	10	4	14	6	5	11	--	3	3	16	12	28	17	12	29
226.....	1	--	1	16	7	23	11	4	15				27	11	38	28	11	39
228.....	1	2	3	10	7	17	5	3	8	1	--	1	16	10	26	17	12	29
230.....	3	2	5	9	7	16	8	9	17	--	1	1	17	17	34	20	19	39
232.....	2	1	3	8	12	20	6	9	15				14	21	35	16	22	38
234.....	3	5	8	7	14	21	7	6	13				14	20	34	17	25	42
236.....	6	1	7	7	13	20	3	6	9				10	19	29	16	20	36
238.....	3	5	8	2	5	7	6	5	11				8	10	18	11	15	26
240.....	3	7	10	--	6	6	3	4	7				3	10	13	6	17	23
242.....	4	6	10	1	4	5	4	2	6				5	6	11	9	12	21
244.....	3	4	7	1	3	4	--	2	2				1	5	6	4	9	13
246.....	1	7	8	1	1	2	--	1	1				1	2	3	2	9	11
248.....	3	4	7	4	1	5	2	2	4				6	3	9	9	7	16
250.....	2	1	3	--	3	3							--	3	3	2	4	6
252.....	--	5	5	--	1	1	--	2	2				--	3	3	--	8	8
254.....	--	1	1				--	1	1				--	1	1	--	2	2
256.....	--	1	1										--	1	1	--	1	1
258.....																		
260.....	1	1	2													1	1	2
Totals.....	40	55	95	140	116	256	87	74	161	36	22	58	263	212	475	803	267	570

TABLE 50
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 5, IN 1942-43

TABLE 51
LENGTH COMPOSITION OF THE 1936 YEAR-CLASS, AGE 6, IN 1942-43

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
196.....										1	1		1	1		1	1		
198.....																			
200.....																			
202.....										2	2		2	2		2	2		
204.....										1		1	1		1		1		
206.....																			
208.....								1	2	3		1	1	1	3	4	1	3	4
210.....										1		1		1	1	2	1	1	2
212.....																			
214.....					1	1			1	1				2	2		2	2	
216.....				2	1	3							2	1	3	2	1	3	
218.....				3		3	2		2	2	4	7	2	9	7	2	9		
220.....				6	1	7	1	2	3	1		1		8	3	11	8	3	11
222.....				5	1	6	2		2		1	1	7	2	9	7	2	9	
224.....				4	1	5	3		3		3	7	1	8	7	1	8		
226.....	2	1	3	3	1	4	2	3	5	1	1	2	6	5	11	8	6	14	
228.....		1	1	6	2	8	4	3	7				10	5	15	10	6	16	
230.....				6	3	9	1	1	2				7	4	11	7	4	11	
232.....	2	1	3	1	7	8			4	4			1	11	12	3	12	15	
234.....	3		3	2	3	5			4	4			2	7	9	5	7	12	
236.....	1	2	3	3	3	6	1	1	2		1	1	4	5	9	5	7	12	
238.....	3	1	4	1	1	2			5	5			1	6	7	4	7	11	
240.....	3	3	6	3	3	6	2		2	2			5	3	8	8	6	14	
242.....	3	1	4		4	4			2	2				6	6	3	7	10	
244.....		2	2		1	1			1	1				2	2		4	4	
246.....	1	3	4		1	1			1	1				2	2	1	5	6	
248.....	3	2	5		1	1								1	1	3	3	6	
250.....					3	3	1		1				1	3	4	1	3	4	
252.....	3	2	5		1	1								1	1	3	3	6	
254.....	1	3	4													1	3	4	
256.....		1	1		1	1								1	1		2	2	
258.....		1	1				1	1	2				1	1	2	1	2	3	
260.....		1	1														1	1	
262.....		1	1					1	1					1	1		2	2	
264.....		1	1														1	1	
266.....					1		1		1				2		2	2		2	
268.....																	1	1	
270.....		1	1																
Totals.....	25	28	53	46	40	86	23	32	55	5	10	15	74	82	156	99	110	209	

TABLE 51
LENGTH COMPOSITION OF THE 1936 YEAR-CLASS, AGE 6, IN 1942-43

TABLE 52
LENGTH COMPOSITION OF THE 1935 YEAR-CLASS, AGE 7, IN 1942-43

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
202										1	1		1	1		1	1	
204																		
206																		
208																		
210																		
212																		
214								1		1			1		1		1	
216																		
218								1		1			1		1		1	
220										1		1		1		1		1
222						2		2		2		2		4		4		4
224		1		1				2		2		2		2		2		3
226						1		1					1		1		1	
228			1		1			1		1			1		1		1	1
230			1		1								1		1		1	2
232																		
234		1		1		1	1	2		1	1		1	2	3	2	2	4
236																		
238			1		1					1		1		1		1		2
240										1		1		1		1		1
242							1	1					1	1		1		1
244		1	1	2		1	1	1					1	1	1	1	2	3
246		1	1	2		1		1					1		1	2	1	3
248			1	1														1
250			2	2														2
252						1		1					1		1		1	1
254		1		1											1		1	1
256																		
258						1	1		2	2				3	3		3	3
260																		
262																		
264																		
266																		
268							1	1						1	1		1	1
270																		
Totals	5	7	12	7	5	12	8	3	11	1	1	2	16	9	25	21	16	37

TABLE 52
LENGTH COMPOSITION OF THE 1935 YEAR-CLASS, AGE 7, IN 1942-43

TABLE 53
LENGTH COMPOSITION OF THE 1934, 1933 AND 1931 YEAR-CLASSES IN 1942-43

Length mm.	1934, Year-class, age 8						1933, Year-class, age 9			1931, Year-class, age 11					
	PACIFIC NORTHWEST			CALIFORNIA ¹			GRAND TOTAL			GRAND TOTAL ²			GRAND TOTAL ²		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
234				1		1	1		1						
236															
238															
240					1	1		1	1						
242															
244															
246	1		1				1		1						
248															
250		1	1					1	1		1	1			
252		1	1					1	1						
254															
256															
258	1	1	2				1	1	2						
260														1	1
262															
264														1	1
266		1	1					1	1						
268					1	1		1	1						
Totals	2	4	6	1	2	3	3	6	9		1	1		2	2

¹ Year-class represented in California only at San Francisco.

² Year-class represented in Pacific Northwest only.

TABLE 53
LENGTH COMPOSITION OF THE 1934, 1933 AND 1931 YEAR-CLASSES IN 1942-43

TABLE 54
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 1, IN 1943-44

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL						
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
116.....			1															1				
132.....							1		1				1		1	1		1				
134.....								1	1				1	1			1	1				
136.....								1	3	4			1	3	4		1	3	4			
138.....									3	3				3	3			3	3			
140.....									3	3				3	3			3	3			
142.....									2	4	6			2	4	6		2	4	6		
144.....									2	4	6			2	4	6		2	4	6		
146.....									7	4	11			7	4	11		7	4	12		
148.....			1						7	5	12			8	5	13		9	6	15		
150.....		1	1	2		1			14	16	30		1	1	14	17	31	14	17	31		
152.....					1				18	13	31			19	13	32		19	13	32		
154.....									18	12	30		3	3	6		21	15	36	21	15	36
156.....									19	29	48		4	2	6		23	32	55	23	32	55
158.....									26	24	50		2	2	4		29	28	57	29	28	57
160.....					1	2	3		23	24	47		5	3	8		29	27	56	29	27	56
162.....					1				27	25	52		6	4	10		34	32	66	34	32	66
164.....					1	3	4		29	13	42		5	4	9		35	19	54	35	19	54
166.....					1	2	3		18	15	33		15	10	25		33	25	59	33	25	59
168.....						2	2		15	17	32		15	11	26		30	30	60	30	30	60
170.....						3	2	5	17	18	35		15	8	23		35	28	63	35	28	63
172.....						3	2	5	11	13	24		15	11	26		29	26	55	29	26	55
174.....						1	3	4	11	12	23		21	10	31		33	25	58	33	25	58
176.....						2	3	5	4	7	11		23	24	47		29	34	63	29	34	63
178.....						1	5	6	7	1	8		25	17	42		33	23	56	33	23	56
180.....						1			4		4		20	17	37		24	18	42	24	18	42
182.....						1			2	2	4		12	8	20		15	10	25	15	10	25
184.....						1			4	1	5		16	16	32		21	17	38	21	17	38
186.....									1	1	2		15	8	23		16	9	25	16	9	25
188.....										1	1		12	14	26		12	15	27	12	15	27
190.....										1	1		11	14	25		12	15	27	12	15	27
192.....										2	2		10	11	21		10	14	24	10	14	24
194.....						1	1			2	2		4	9	13		4	11	15	4	11	15
196.....													1	5	6		1	6	7	1	6	7
198.....										1			1	5	6		1	6	7	1	6	7
200.....													2	2			3	3		3	3	
202.....													1				2			2		
204.....										1			1				2			2		
206.....																						
208.....													1	1	1		1	1	1	1	1	1
210.....													1				1			1		
212.....													1				1			1		
214.....													1				1			1		
216.....																						
218.....																	1			1		
220.....																						
222.....																						
224.....																						
226.....																						
228.....																						
230.....																						
232.....																						
Totals...	1	1	4	18	30	48	292	278	570	261	224	485	571	532	1103	572	533	1107				

¹ Includes some fish, sex unknown.

TABLE 54
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 1, IN 1943-44

TABLE 55
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 2, IN 1943-44

Length mm.	SAN FRANCISCO			MONTEREY			SAN PEDRO			GRAND TOTAL ¹		
	M	F	T	M	F	T	M	F	T	M	F	T
152				1	1	2				1	1	2
154								1	1			
156										1	1	
158				3	1	4				3	1	4
160				1	1	2				1	1	2
162				1	1	2				1	1	2
164				3	3	6				4	3	7
166				2		2		1	2	3	3	2
168				2		2		3	3	3	2	6
170				2	3	5		3	3	6	5	6
172				2	2	4		8	3	11	10	5
174				5	3	8		5	7	12	11	10
176				1	1	2		15	6	21	16	7
178				1	1	2		8	7	15	10	9
180				2	1	3		7	9	16	9	10
182					1	1		11	6	17	11	7
184				2	2	2		2	5	18	15	7
186								13	5	18	13	5
188				1	6	7		28	20	48	29	26
190				4	1	5		39	26	65	43	27
192				3		3		51	28	79	54	28
194					1	9		69	40	109	77	41
196				2	1	3		8	7	15	69	40
198				11	8	19		47	60	107	58	68
200					1	1		12	8	20	55	63
202				1	1	2		13	9	22	32	49
204				2	1	3		7	7	14	38	45
206					1	1		12	12	24	24	35
208				2	3	5		4	10	14	12	24
210				1		1		4	3	7	8	16
212				2	2	4		7	5	12	6	8
214				1	2	3		7	4	11	8	7
216				2	1	3		3	3	6	2	10
218				4	3	7		3	3	6	1	4
220				2	3	5		2	1	3	3	3
222								2	3	5	1	1
224				1		1		2	2	4	1	
226					1	1					1	1
228					1	1			1	1		
230												
232												
234					1	1			1	1		
Totals	25	26	51	139	116	255	575	537	1112	739	679	1418

¹ Year-class represented in California only.

TABLE 55
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 2, IN 1943-44

TABLE 56
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 3, IN 1943-44

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
178.....										1	1								
180.....																			
182.....								1		1	3	2	5	4	2	6	4	2	6
184.....											1		1	1		1		1	
186.....											6		6	6		6	6		6
188.....											10	1	11	10	1	11	10	1	11
190.....											12	6	18	12	6	18	12	6	18
192.....					1	1		1	2	3	29	9	38	30	12	42	30	12	42
194.....											22	14	36	22	14	36	22	14	36
196.....	1		1	1		1	2	2	4	35	35	70	38	37	75	39	37	76	
198.....					1	1	2	1	3	28	27	55	30	29	59	30	29	59	
200.....							3	7	10	26	42	68	29	49	78	29	49	78	
202.....	2		2				5	5	10	37	24	61	42	29	71	44	29	73	
204.....				1	2	3	9	1	10	25	26	51	35	29	64	35	29	64	
206.....		3	3	2	1	3	10	5	15	24	38	62	36	44	80	36	47	83	
208.....	1		1	2	1	3	13	6	19	22	32	54	37	39	76	38	39	77	
210.....	3		3	7	5	12	13	5	18	21	30	51	41	40	81	44	40	84	
212.....	4		4	11	7	18	28	13	41	18	20	38	57	49	97	61	40	101	
214.....	1	1	2	12	9	21	31	22	53	10	18	28	53	49	102	54	50	104	
216.....	5	4	9	28	15	43	43	29	72	19	16	35	90	60	150	95	64	159	
218.....	6	1	7	28	23	51	68	28	96	16	19	35	112	70	182	118	71	189	
220.....	5		5	40	21	61	56	51	107	8	14	22	104	86	190	109	86	195	
222.....	9	1	10	41	29	70	45	60	105	10	11	21	96	100	196	105	101	206	
224.....	3	2	5	27	30	57	49	57	106	4	8	12	80	95	175	83	97	180	
226.....	2	5	7	22	46	68	31	43	74	7	8	15	60	97	157	62	102	164	
228.....	7	1	8	14	32	46	23	35	58	3	11	14	40	78	118	47	79	126	
230.....	4	1	5	18	27	45	10	29	39	3	6	9	31	62	93	35	63	98	
232.....	7	2	9	5	18	23	14	25	39	1	7	8	20	50	70	27	52	79	
234.....		2	2	3	13	16	11	13	24		4	4	14	30	44	14	32	46	
236.....	3	2	5	1	8	9	8	11	19	1		1	10	19	29	13	21	34	
238.....	2	3	5	4	11	15	1	7	8	2		2	7	18	25	9	21	30	
240.....	1	1	2	1	3	4	2	4	6		1	1	3	8	11	4	9	13	
242.....		1	1				1	5	6		1	1	1	6	7	1	7	8	
244.....								1	1					1	1		1	1	
246.....		2	2														2	2	
248.....		2	2		2	2	1	1	2				1	3	4	1	5	6	
250.....					1	1								1	1		1	1	
252.....																			
254.....																			
256.....		1	1														1	1	
Totals...	66	35	101	268	306	574	481	468	949	403	431	834	1152	1205	2357	1218	1240	2458	

TABLE 56
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 3, IN 1943-44

TABLE 57
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 4, IN 1943-44

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL					
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
188.....										3	1	4	3	1	4	3	1	4			
190.....								3		3			3		6		6				
192.....									1	1		2	2	4	2	3	5	2	3	5	
194.....												10		10			10			10	
196.....												10	7	17	10	7	17	10	7	17	
198.....				1	1	2		1	1	2		13	12	25	15	14	29	15	14	29	
200.....								2		2		15	8	23	17	8	25	17	8	25	
202.....								1	2	3		12	9	21	13	11	24	13	11	24	
204.....				2		2		3	2	5		13	13	26	18	15	33	18	15	33	
206.....				1		1		2	1	3		14	5	19	17	6	23	17	6	23	
208.....	1		1	2		2		8	2	10		12	7	19	22	9	31	23	9	32	
210.....	1		1	4		4		15	7	22		15	7	22	34	14	48	35	14	49	
212.....	1	1	2	11	3	14		16	8	24		16	7	23	43	18	61	44	19	63	
214.....	2		2	13	5	18		32	8	40		16	10	26	61	23	84	63	23	86	
216.....	5	2	7	26	6	32		31	23	54		14	19	33	71	48	119	76	50	126	
218.....	5	1	6	29	11	40		45	23	68		15	14	29	89	48	137	94	49	143	
220.....	2	3	5	34	31	65		52	30	82		15	13	28	101	74	175	103	77	180	
222.....	10	7	17	51	28	79		54	33	87		6	16	22	111	77	188	121	84	205	
224.....	17	5	22	47	40	87		72	48	120		11	6	17	130	94	224	147	99	246	
226.....	10	11	21	45	41	86		61	52	113		4	8	12	110	101	211	120	112	232	
228.....	15	9	24	50	65	115		68	48	116		7	11	18	125	124	249	140	133	273	
230.....	19	5	24	37	47	84		42	56	98		5	10	15	84	113	197	103	118	221	
232.....	15	13	28	37	47	84		25	45	70		1	7	8	63	99	162	78	112	190	
234.....	21	10	31	21	35	56		29	42	71		2	3	5	52	80	132	73	90	163	
236.....	12	9	21	18	31	49		23	36	59		1	2	3	42	69	111	54	78	132	
238.....	13	9	22	9	25	34		10	29	39			1	1	19	55	74	32	64	96	
240.....	3	10	13	13	27	40		6	18	24		2	3	5	21	48	69	24	58	82	
242.....	7	12	19	6	15	21		3	18	21			2	2	9	35	44	16	47	63	
244.....	9	11	20	3	14	17		2	10	12			2	2	5	26	31	14	37	51	
246.....	3	12	15	1	10	11		3	4	7					4	14	18	7	26	33	
248.....	1	8	9	1	9	10			5	5					1	14	15	2	22	24	
250.....	1	2	3	1	2	3		1	3	4					2	5	7	3	7	10	
252.....		3	3		2	2			1	1						3	3		6	6	
254.....	1	1	2										1	1		1	1	1	1	2	3
256.....		3	3					1		1					1		1	1	3	4	4
258.....		1	1		1	1										1	1			2	2
Totals...	174	148	322	463	496	959	611	556	1167	237	206	443	1311	1258	2569	1485	1406	2891			

TABLE 57
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 4, IN 1943-44

TABLE 58
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 5, IN 1943-44

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
196.....										2	1	3	2	1	3	2	1	3
198.....										2	--	2	2	--	2	2	--	2
200.....										1	--	1	1	--	1	1	--	1
202.....										--	1	1	--	1	1	--	1	1
204.....										--	1	1	--	1	1	--	1	1
206.....				1	--	1	--	1	1	3	1	4	4	2	6	4	2	6
208.....										2	1	3	3	--	3	5	1	6
210.....										3	--	3	1	1	2	4	1	5
212.....										4	--	4	2	2	4	6	2	8
214.....	1	--	1	6	1	7	7	2	9	10	2	12	23	5	28	24	5	29
216.....				5	--	5	8	4	12	6	2	8	19	6	25	19	6	25
218.....	3	--	3	6	1	7	9	7	16	6	5	11	21	13	34	24	13	37
220.....	2	--	2	10	1	11	17	4	21	4	3	7	31	8	39	33	8	41
222.....	6	--	6	14	8	22	15	11	26	5	5	8	32	24	56	38	24	62
224.....	6	--	6	22	14	36	15	16	31	5	2	7	42	32	74	48	32	80
226.....	5	1	6	9	7	16	11	9	20	3	3	6	23	19	42	28	20	48
228.....	6	2	8	10	15	25	24	14	38	--	5	5	34	34	68	40	36	76
230.....	8	2	10	13	13	26	14	19	33	1	--	1	28	32	60	36	34	70
232.....	5	1	6	10	22	32	10	14	24	1	3	4	21	39	60	25	40	65
234.....	6	3	9	13	22	35	15	12	27	--	1	1	28	35	63	34	38	72
236.....	11	9	20	11	9	20	13	6	19	--	2	2	24	17	41	35	26	61
238.....	7	3	10	8	15	23	4	13	17	1	1	2	13	29	42	20	32	52
240.....	7	7	14	6	16	22	5	9	14	1	1	2	12	26	38	19	33	52
242.....	4	3	7	6	13	19	5	13	18				11	26	37	15	29	44
244.....	5	7	12	--	8	8	4	7	11				4	15	19	9	22	31
246.....	4	6	10	5	7	12	3	1	4				8	8	16	12	14	26
248.....	1	3	4	2	3	5	--	4	4				2	7	9	3	10	13
250.....	3	4	7	2	6	8	--	5	5				2	11	13	5	15	20
252.....	--	4	4	1	3	4	--	2	2				1	5	6	1	9	10
254.....	5	5	10				--	3	3				--	3	3	5	8	13
256.....	--	3	3	1	--	1	--	1	1				1	--	1	1	3	4
258.....	--	2	2	--	2	2	--	1	1				--	3	3	--	5	5
260.....	--	2	2	--	1	1	--						--	1	1	--	3	3
262.....																		
264.....	1	1	2				--	1	1				--	1	1	1	2	3
Totals.....	96	68	164	161	187	348	188	179	367	55	42	97	404	408	812	900	476	976

TABLE 58
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 5, IN 1943-44

TABLE 59
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 6, IN 1943-44

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
206.....										1	1		1	1		1	1	
208.....										2		2	2		2		2	
210.....																		
212.....																		
214.....	1		1				2		2			2		2	3		3	
216.....				1		1	1		1	3	1	4	5	1	6	5	1	6
218.....					1	1	3		3	1	1	2	4	2	6	4	2	6
220.....	1		1				2		2				2	1	3	3	1	4
222.....				1		1	3	2	5	1	3	4	5	5	10	5	5	10
224.....	1	2	3		1	1	1	2	3	1		1	2	3	5	3	5	8
226.....	2	1	3	3		3	3	2	5	1	1	2	7	3	10	9	4	13
228.....	2		2	2	2	4	3	5	8	1		1	6	7	13	8	7	15
230.....	4		4	4	2	6	3	4	7				7	6	13	11	6	17
232.....	3	2	5	2	2	4	5	1	6	1		1	8	3	11	11	5	16
234.....	2	1	3	5	3	8	4	2	6		1	1	9	6	15	11	7	18
236.....	2	3	5	8	5	13	5	3	8				13	8	21	15	11	26
238.....	5	2	7	2	4	6	7	2	9	1		1	10	6	16	15	8	23
240.....	4	2	6	3	6	9	3	5	8		1	1	6	12	18	10	14	24
242.....	3	2	5	4	4	8	1	6	7		1	1	5	11	16	8	13	21
244.....	3	5	8	2	2	4	2	2	4				4	4	8	7	9	16
246.....	5	3	8	1	4	5	1	1	2				2	5	7	7	8	15
248.....	2	4	6	1	5	6	1	2	3				2	7	9	4	11	15
250.....		3	3		2	2	1	1	2				1	3	4	1	6	7
252.....	3	2	5	1	5	6		2	2				1	7	8	4	9	13
254.....	2	1	3				2		2				2		2	4	1	5
256.....	2	4	6		1	1	1		1				1	1	2	3	5	8
258.....					1	1								1	1		1	1
260.....	2	3	5					2	2					2	2	2	5	7
262.....		5	5		1	1								1	1		6	6
264.....	1	2	3		1	1								1	1	1	3	4
266.....		2	2														2	2
268.....	1	2	3													1	2	3
270.....		1	1														1	1
272.....		1	1														1	1
Totals.....	51	53	104	40	53	93	54	44	98	12	10	22	106	107	213	157	160	317

TABLE 59
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 6, IN 1943-44

TABLE 60
LENGTH COMPOSITION OF THE 1936 YEAR-CLASS, AGE 7, IN 1943-44

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
208.....							1		1				1		1	1		1
210.....																		
212.....																		
214.....																		
216.....																		
218.....				1		1	1		1				2		2	2		2
220.....																		
222.....																		
224.....							1		1			1		1	1	1		1
226.....				1	1	2	1		1	1	1	3	1	4	3	1	4	4
228.....					1	1							1	1			1	1
230.....	1		1	1	1	2						1	1	2	2	1	3	3
232.....	1		1	1	1	2		2	2			1	3	4	2	3	5	5
234.....	2		2		1	1							1	1	2	1	3	3
236.....	3		3	1		1	2	1	3			3	1	4	6	1	7	7
238.....	2	1	3	1	1	2	2		2			3	1	4	5	2	7	7
240.....	1		1	1	1	2	1		1	1	1	3	1	4	4	1	5	5
242.....	3		3	3	1	4	1		1			4	1	5	7	1	8	8
244.....	1	1	2		4	4							4	4	1	5	6	6
246.....	1	3	4	1	1	2		1	1			1	2	3	2	5	7	7
248.....	1		1	2	2	4		1	1			2	3	5	3	3	6	6
250.....	1	1	2	1	1	2						1	1	2	2	2	4	4
252.....	1		1												1		1	1
254.....	3	1	4	1		1		1	1			1	1	2	4	2	6	6
256.....																		
258.....	1		1					1	1				1	1	1	1	2	2
260.....		2	2		1	1							1	1		3	3	3
262.....	1	2	3	1		1		1	1			1	1	2	2	3	5	5
264.....		3	3													3	3	3
266.....	1		1												1		1	1
268.....																		
270.....		1	1													1	1	1
272.....																		
274.....																		
276.....		1	1													1	1	1
Totals.....	24	16	40	16	17	33	10	8	18	2		2	28	25	53	52	41	93

TABLE 60
LENGTH COMPOSITION OF THE 1936 YEAR-CLASS, AGE 7, IN 1943-44

TABLE 61
LENGTH COMPOSITION OF THE 1935 YEAR-CLASS, AGE 8, IN 1943-44

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
224	1	--	1	1	--	1	--	1	1	1	1	2	2	1	3
226															
228				--	1	1				--	1	1	--	1	1
230				1	--	1				1	--	1	1	--	1
232															
234															
236	1	--	1										1	--	1
238	1	--	1										1	--	1
240															
242	--	1	1										--	1	1
244							1	--	1	1	--	1	1	--	1
246															
248															
250	1	--	1										1	--	1
252				--	1	1				--	1	1	--	1	1
254	2	1	3										2	1	3
256															
258															
260															
262															
264	1	--	1										1	--	1
266															
268	1	--	1	--	1	1				--	1	1	1	1	2
270															
272	--	1	1										--	1	1
274															
276	--	1	1										--	1	1
278															
280															
Totals	8	4	12	2	3	5	1	1	2	3	4	7	11	8	19

TABLE 61
LENGTH COMPOSITION OF THE 1935 YEAR-CLASS, AGE 8, IN 1943-44

TABLE 62
LENGTH COMPOSITION OF THE 1934, 1933, AND 1932 YEAR-CLASSES IN 1943-44

Length mm.	1934 Year-class, age 9						1933 Year-class, age 10			1932 Year-class, age 11					
	PACIFIC NORTHWEST			CALIFORNIA ¹			GRAND TOTAL			GRAND TOTAL ²			GRAND TOTAL ²		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
234	1	--	1				1	--	1						
236															
238															
240															
242															
244				--	1	1	--	1	1						
246															
248															
250	1	--	1				1	--	1						
252				1	--	1	1	--	1						
254															
256	--	1	1				--	1	1						
258															
260										1	--	1			
262															
264															
266															
268															
270	1	--	1				1	--	1				1	--	1
Totals	3	1	4	1	1	2	4	2	6	1	--	1	1	--	1

¹ Year-class represented in California only at Monterey.
² Year-class represented in Pacific Northwest only.

TABLE 62
LENGTH COMPOSITION OF THE 1937, 1933, AND 1932 YEAR-CLASSES IN 1934-44

TABLE 63
LENGTH COMPOSITION OF THE 1943 YEAR-CLASS, AGE 1, IN 1944-45

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL						
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
140.....								2	2					2	2			2	2			
142.....								1	1					1	1			1	1			
144.....								1	1					1	1			1	1			
146.....								1	1	2				1	1	2		1	1	2		
148.....								1	1					1	1			1	1			
150.....								5	2	7				5	2	7		5	2	7		
152.....			1	1				4	8	12				4	8	12		4	8	12		
154.....								5	8	13				5	8	13		5	8	13		
156.....								6	7	13				6	7	13		6	7	13		
158.....								12	15	27				12	15	27		12	15	27		
160.....						1		8	9	17				9	9	18		9	9	18		
162.....								15	15	30		3	1	4	18	16	34		18	16	34	
164.....								8	16	24		3	5	8	11	21	32		11	21	32	
166.....								13	16	29			5	5	13	21	34		13	21	34	
168.....			1	1				19	21	40		6	5	11	27	27	54		27	28	55	
170.....			4	4				15	12	27		4	5	9	19	17	36		19	21	40	
172.....			1	1				11	15	26		6	4	10	18	22	40		18	23	41	
174.....						1	1	2	14	20	34		3	3	6	18	24	42		18	24	42
176.....						2	3	5	11	12	23		7	10	17	20	25	45		20	25	45
178.....						2	1	3	15	8	23		10	9	19	27	18	45		27	18	45
180.....								8	8	16		14	16	30	22	24	46		22	24	46	
182.....						1	2	3	10	12	22		16	15	31	27	29	56		27	29	56
184.....			1			1	4	5	8	7	15		11	19	30	20	30	50		21	30	51
186.....						3	3	6	5	6	11		34	24	58	42	33	75		42	33	75
188.....			1			1	1	1	5	4	9		30	26	56	35	31	66		36	31	67
190.....			1			3	1	4	2	3	5		25	25	50	30	29	59		31	29	60
192.....						2	1	3	4	1	5		26	20	46	32	22	54		32	23	55
194.....						4	4		3	2	5		19	17	36	22	23	45		22	23	45
196.....						1			1	2	3		26	21	47	28	23	51		28	23	51
198.....									1	1	2		11	15	26	12	16	28		12	16	28
200.....			1										12	13	25	12	13	25		13	13	26
202.....						1	1		1				2	8	10	3	9	12		3	9	12
204.....									1	1			1	2	3	1	3	4		1	3	4
206.....			1										3	3		3	3			3	3	
208.....									1	1			2	2		3	3			3	3	
210.....													1	2	3	1	2	3		1	2	3
212.....													1		1	1		1		1		1
214.....																						
216.....																						
218.....																						
220.....									1	1						1	1			1	1	
222.....																						
224.....																						
226.....																						
228.....																						
230.....																						
232.....			1	1																	1	1
Totals...	5	9	14	20	26	46	210	239	450 ¹	271	275	546	501	540	1042 ¹	506	549	1056 ¹				

¹ Includes one fish, length and sex unknown.

TABLE 63
LENGTH COMPOSITION OF THE 1943 YEAR-CLASS, AGE 1, IN 1944-45

TABLE 64
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 2, IN 1944-45

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
146							1		1				1		1	1		1	
148																			
150																			
152																			
154																			
156																			
158																			
160							1	2	3				1	2	3	1	2	3	
162								1	1					1	1		1	1	
164							2	1	3				2	1	3	2	1	3	
166	1		1													1	1	2	
168							5	1	6				5	1	6	5	1	6	
170		1	1			1	1	3	4				2	3	5	2	4	6	
172	2	1	3				2	3	5				2	3	5	4	4	8	
174							4	4	8		2		2	6	4	10	6	4	10
176							3	2	5			1	1	3	3	6	3	3	6
178		2	2			1	6	7	13		5	1	6	11	9	20	11	11	22
180		1	1				7	3	10		1	1	2	8	5	13	8	6	14
182	1	1	2				6	4	10		1	3	4	8	7	15	9	8	17
184							5	5	10		5	3	8	11	9	20	11	9	20
186	1		1				10	12	22		6	8	14	17	23	40	18	23	41
188		1	1				20	16	36		7	7	14	28	25	53	28	26	54
190							15	13	28		12	9	21	27	22	49	27	22	49
192							1	2	3										
194	2	1	3				38	14	52		29	22	51	68	37	105	70	38	108
196		3	3				4	3	7		51	28	79	33	23	56	88	57	145
198	2	1	3			3	48	40	88		49	34	83	100	74	174	102	75	177
200	1		1			2	46	56	102		50	47	97	98	109	207	99	109	208
202	2	1	3			6	46	36	82		56	57	113	108	99	207	110	100	210
204	1	1	2			14	61	44	105		55	38	93	130	94	224	131	95	226
206	1	2	3			3	42	55	98		49	55	104	94	119	214	95	121	217
208						18	48	59	108		43	41	84	109	110	220	109	110	220
210	2		2			14	45	47	92		26	50	76	85	106	191	87	106	193
212		2	2			10	42	40	82		31	29	60	83	90	173	83	92	175
214		1	1			10	27	36	63		18	31	49	55	81	136	55	82	137
216	1		1			12	22	35	57		14	21	35	48	67	115	49	67	116
218						6	18	30	48		9	13	22	33	64	97	33	64	97
220	1		1			4	11	15	26		3	11	14	22	48	70	23	48	71
222						5	7	12	11		1	5	6	17	23	40	17	23	40
224						5	4	6	10			5	5	9	20	29	9	20	29
226						4	5	10	15			2	2	9	15	24	9	15	24
228						4	8	4	12			5	5	12	12	24	12	12	24
230						4	6	6	6		1		1	5	9	14	5	9	14
232						2	2	3	5			1	1	4	4	8	4	4	8
234								3	3						3	3		3	3
236						2			2					2		2		2	
238						1		2	2					1	2	3	1	2	3
240							2		2						2	2		2	2
242																			
244						1		1	1						2	2		2	2
246																			
248																			
250						1		1	1						1	1		1	1
252																			
254							1	1	1						1	1		1	1
Totals...	18	19	37	140	173	313	693	684	1370 ¹	524	536	1060	1357	1393	2752 ¹	1375	1412	2789 ¹	

¹ Includes two fish, sex unknown.

TABLE 64
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 2, IN 1944-45

TABLE 65
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 3, IN 1944-45

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
172										1	1		1	1		1	1	1
174																		
176																		
178																		
180								1		1			1		1	1		1
182										1		1		1		1		1
184								1		1								
186										2		2		2		2		2
188								2		2		1		1		3		3
190								2	2	4		7	1	8		9	3	12
192									1	1		22		22		22	1	23
194										1		28	5	33		29	5	34
196										1		46	14	60		46	15	61
198										1		41	27	68		46	29	75
200										1		62	43	105		68	48	116
202										1		74	51	125		81	58	139
204										1		60	50	110		70	57	127
206										2		62	55	117		69	58	127
208										3		57	48	105		69	58	128
210										4		41	57	98		50	66	116
212										6		27	48	75		42	61	103
214										4		22	21	43		34	37	71
216										4		14	16	30		33	51	84
218										5		13	13	26		31	45	76
220										3		9	8	17		12	16	28
222										8		9	8	17		5	11	16
224										6		15	11	26		22	25	47
226										1		2	8	10		23	27	50
228										2		7	8	15		3	8	11
230										1		11	14	25		22	22	44
232										1		3	4	7		21	20	41
234										1		10	6	16		17	14	31
236										3		7	7	14		13	15	28
238										4		6	6	10		9	15	24
240										3		3	7	10		6	10	16
242										2		2	2	4		2	4	6
244										1		3	3			1	8	9
246										1		1	2	3		2	3	5
248										1		1	2	3		1	2	3
250										1		1	1			4	4	4
252										1		1	1			2	2	2
254										1		1	1			1	1	1
256										1		1	1			1	1	1
Totals...	11	9	20	91	94	185	172	179	352 ¹	609	531	1141 ²	872	804	1678 ²	883	813	1698 ²

¹ Includes one fish, sex unknown.
² Includes one fish, length and sex unknown.

TABLE 65
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 3, IN 1944-45

TABLE 66
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 4, IN 1944-45

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
190.....							1		1	1	1	2	2	1	3	2	1	3	
192.....																			
194.....								1		1	1	2	1	2	3	1	2	3	
196.....											6	2	8	6	2	8	6	2	8
198.....				1		1	1		1	9	4	13	11	4	15	11	4	15	
200.....				1		1				21	6	27	22	6	28	22	6	28	
202.....										21	5	26	21	5	26	21	5	26	
204.....				1		1			1	21	10	31	22	11	33	22	11	33	
206.....				1	1	2	4		4	21	16	37	26	17	43	26	17	43	
208.....							3	1	4	18	15	33	21	16	37	21	16	37	
210.....				3	1	4				13	20	33	16	21	37	16	21	37	
212.....				3	3	6	5	2	7	15	20	35	23	25	48	23	25	48	
214.....				1		1	8	2	10	12	13	25	21	15	36	21	15	36	
216.....				6	3	9	6	5	11	13	9	22	25	17	42	25	17	42	
218.....				1	5	6	1	1	2	7	11	18	9	17	26	9	17	26	
220.....	1		1	1	2	3	4	5	9	7	9	16	12	16	28	13	16	29	
222.....	2		2	2	5	7	6	4	10	5	4	9	13	13	26	15	13	28	
224.....	1		1	11	3	14	6	5	11	6	4	10	23	12	35	24	12	36	
226.....		1	1	19	8	27	13	6	19	2	6	8	34	20	54	34	21	55	
228.....	3	2	5	23	13	36	16	12	28	2	5	7	41	30	71	44	32	76	
230.....	1	3	4	22	18	40	22	11	33	2	4	6	46	33	79	47	36	83	
232.....	6	5	11	27	17	44	18	19	37	8	3	11	53	39	92	59	44	103	
234.....	7	4	11	35	22	57	28	15	43	4	2	6	67	39	106	74	43	117	
236.....	6	7	13	32	24	56	19	17	37	2	6	8	53	47	101	59	54	114	
238.....	3	6	9	33	30	63	18	28	46		4	4	51	62	113	54	68	122	
240.....	8	4	12	41	38	79	18	21	39	2	1	3	61	60	121	69	64	133	
242.....	3	5	8	20	40	60	9	19	28	1	4	5	30	63	93	33	68	101	
244.....	3	9	12	16	37	53	8	17	25	2	2	4	26	56	82	29	65	94	
246.....	4	3	7	8	26	34	4	13	17		2	2	12	41	53	16	44	60	
248.....	2	4	6	3	19	22	4	9	13		2	2	7	30	37	9	34	43	
250.....	1	5	6	6	12	18	4	10	14		1	1	10	23	33	11	28	39	
252.....	1	2	3	2	11	13	5	5	10				7	16	23	8	18	26	
254.....		1	1		2	3		2	2				2	5	7	2	6	8	
256.....	1	1	2					5	5		1		1	1	5	2	6	8	
258.....					1	1		1	1					2	2		2	2	
260.....					1	1		1	1					2	2		2	2	
262.....				1		1							1		1	1		1	
264.....																			
266.....		2	2														2	2	
Totals...	53	64	117	322	343	665	231	238	470 ¹	223	192	415	776	773	1550 ¹	829	837	1667 ¹	

¹ Includes one fish, sex unknown.

TABLE 66
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 4, IN 1944-45

TABLE 67
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 5, IN 1944-45

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
190.....										1	--	1	1	--	1	1	--	1
192.....																		
194.....										2	--	2	2	--	2	2	--	2
196.....																		
198.....										3	--	3	3	--	3	3	--	3
200.....				1	--	1				1	--	1	2	--	2	2	--	2
202.....										5	2	7	5	2	7	5	2	7
204.....				1	--	1				7	1	8	8	1	9	8	1	9
206.....							2	--	2	4	2	6	6	2	8	6	2	8
208.....										3	8	11	3	8	11	3	8	11
210.....							2	--	2	1	--	1	3	--	3	3	--	3
212.....				2	1	3				5	4	9	7	5	12	7	5	12
214.....								3	3	3	4	7	3	7	10	3	7	10
216.....							3	--	3	3	3	6	6	3	9	6	3	9
218.....				2	--	2				3	3	6	5	3	8	5	3	8
220.....				1	1	2	2	1	3	2	3	5	5	5	10	5	5	10
222.....				4	--	4	7	1	8	2	3	5	13	4	17	13	4	17
224.....	1	--	1	3	4	7	5	2	7	3	3	6	11	9	20	12	9	21
226.....	1	1	2	9	2	11	15	2	17	7	5	12	31	9	40	32	10	42
228.....	3	--	3	20	1	21	14	4	18	2	4	6	36	9	45	39	9	48
230.....	5	1	6	25	6	31	22	4	26	6	2	8	53	12	65	58	13	71
232.....	12	5	17	36	14	50	27	3	30	4	3	7	67	20	87	79	25	104
234.....	8	3	11	53	10	63	21	14	35	4	3	7	78	27	105	86	30	116
236.....	15	8	23	47	36	83	32	16	48	4	5	9	83	57	140	98	65	163
238.....	8	4	12	47	35	82	31	32	64	3	6	9	81	73	155	89	77	167
240.....	11	11	22	51	25	76	27	25	52	3	7	10	81	57	138	92	68	160
242.....	7	13	20	42	46	88	24	27	51	3	5	8	69	78	147	76	91	167
244.....	5	11	16	40	33	73	16	27	43	2	2	4	58	62	120	63	73	136
246.....	10	7	17	30	56	86	13	15	28	1	4	5	44	75	119	54	82	136
248.....	5	8	13	28	43	71	11	18	29	--	1	1	39	62	101	44	70	114
250.....	3	9	12	14	32	46	3	21	24	1	2	3	18	55	73	21	64	85
252.....	2	7	9	9	25	34	8	11	19	--	1	1	17	37	54	19	44	63
254.....	3	3	6	7	21	28	1	10	11	--	1	1	8	32	40	11	35	46
256.....	2	5	7	5	11	16	1	6	7	--	2	2	6	19	25	8	24	32
258.....	1	2	3	1	7	8	--	2	2				1	9	10	2	11	13
260.....				--	3	3	--	2	2				--	5	5	--	5	5
262.....	--	3	3	1	2	3	--	2	2				1	4	5	1	7	8
264.....	--	1	1	1	2	3							1	2	3	1	3	4
266.....																		
268.....																		
270.....																		
272.....																		
274.....																		
276.....																		
278.....							1	--	1				1	--	1	1	--	1
Totals.....	102	102	204	480	416	896	288	248	537 ¹	88	89	178 ²	856	753	1611 ³	958	855	1815 ⁴

¹ Includes one fish, sex unknown.
² Includes one fish, length and sex unknown.

TABLE 67
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 5, IN 1944-45

TABLE 68
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 6, IN 1944-45

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
196.....										1		1	1		1			1
198.....																		
200.....																		
202.....				1		1							1		1			1
204.....											1	1		1	1			1
206.....										1		1		1				1
208.....								1		1								1
210.....										1	1			1	1			1
212.....								1		1		1		2		2		2
214.....																		
216.....										1	1		1	1				1
218.....				1		1							1		1			1
220.....				1		1							1		1			1
222.....							2		2	2		2	4		4		4	4
224.....				2		2			1	1	1	2	4		4		4	5
226.....		1	1		1	1		2		2		2	4		4		4	6
228.....		1		3		4		1		1			4		5		5	6
230.....		2	1	3	12	2	14	5		5		1	17	3	20	19	4	23
232.....		3	2	5	14	2	16	6		6		1	20	3	23	23	5	28
234.....		3		3	20	4	24	6	4	10	3		29	8	37	32	8	40
236.....		4	2	6	13	7	20	7	4	11	1	1	21	12	33	25	14	39
238.....		5	1	6	22	8	30	10	8	18		1	32	17	49	37	18	55
240.....		3	2	5	24	14	38	5	5	10	2	2	4	31	21	52	34	57
242.....		6	4	10	20	14	34	6	9	15		2	2	26	25	51	32	61
244.....		3	4	7	25	12	37	18	5	23			43	17	60	46	21	67
246.....		5	3	8	16	21	37	5	5	10			21	26	47	26	29	55
248.....		6	3	9	10	21	31	8	8	16	1		19	29	48	25	32	57
250.....		2	2	4	11	18	29	2	6	8	1	2	5	14	26	40	16	44
252.....		1	6	7	8	22	30		3	3			8	25	33	9	31	40
254.....			2	2	5	10	15		9	9			5	19	24	5	21	26
256.....		1	2	3	4	6	10	1	2	3		1	5	9	14	6	11	17
258.....		2	4	6	1	11	12		1	1			1	12	13	3	16	19
260.....			1	1	2	5	7		2	2			2	7	9	2	8	10
262.....			1	1	2	3			1	1			1	3	4	2	4	6
264.....			1	1	2	3			2	2			1	4	5	2	5	7
266.....			1	1														1
268.....				2	2									2	2			2
270.....				1	1									1	1			1
272.....								1	1					1	1			1
274.....								1	1					1	1			1
276.....																		
278.....																		
280.....			1	1														1
Totals.....	49	44	93	217	186	403	87	76	163	16	15	31	320	277	597	369	321	690

TABLE 68
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 6, IN 1944-45

TABLE 69
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 7, IN 1944-45

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
196.....				--	1	1							--	1	1	--	1	1
198.....																		
200.....																		
202.....																		
204.....																		
206.....																		
208.....																		
210.....																		
212.....																		
214.....																		
216.....																		
218.....																		
220.....																		
222.....																		
224.....							1	--	1				1	--	1	1	--	1
226.....																		
228.....	1	--	1	2	--	2	1	--	1	2	--	2	5	--	5	6	--	6
230.....	--	1	1	--	1	1	--	1	1				--	2	2	--	3	3
232.....	--	1	1	1	--	1	1	--	1				2	--	2	2	1	3
234.....	1	--	1										1	--	1	2	--	2
236.....	1	--	1	3	--	3	1	--	1	--	1	1	4	1	5	5	1	6
238.....	1	1	2	3	2	5	5	1	6	1	--	1	9	3	12	10	4	14
240.....				8	2	10	1	--	1	1	1	2	10	3	13	10	3	13
242.....	2	1	3	7	2	9	3	--	3	1	1	2	11	3	14	13	4	17
244.....	2	1	3	9	8	17	--	7	7				9	15	24	11	16	27
246.....	--	1	1	8	4	12	2	5	7	--	2	2	10	11	21	10	12	22
248.....	--	1	1	5	8	13	2	--	2				7	8	15	7	9	16
250.....	1	--	1	4	7	11	--	2	2				4	9	13	5	9	14
252.....	1	3	4	5	9	14	--	1	1				5	10	15	6	13	19
254.....	--	2	2	4	4	8	1	3	4				5	7	12	5	9	14
256.....	1	1	2	3	4	7	--	4	4				3	8	11	4	9	13
258.....				2	2	4	--	1	1				2	3	5	2	3	5
260.....	--	1	1	1	1	2	1	--	1				2	1	3	2	2	4
262.....				2	3	5							2	3	5	2	3	5
264.....				--	3	3							--	3	3	--	3	3
266.....	--	1	1	--	1	1							--	1	1	--	2	2
268.....	--	1	1										--	1	1	--	1	1
270.....																		
272.....				1	1	2							1	1	2	1	1	2
274.....																		
Totals.....	11	16	27	69	63	132	19	25	44	5	5	10	93	93	186	104	109	213

TABLE 69
LENGTH COMPOSITION OF THE 1937 YEAR-CLASS, AGE 7, IN 1944-45

TABLE 70
LENGTH COMPOSITION OF THE 1936, 1935 AND 1933 YEAR-CLASSES IN 1944-45

L'th mm.	1936 Year-class, age 8						1935 Year-	1933 Year-															
	PACIFIC NORTHWEST		SAN FRANCISCO		MONTEREY	SAN PEDRO	CALIFORNIA	GRAND TOTAL	GRAND TOTAL ¹	GRAND TOTAL ¹													
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
228				1		1				1		1											
230							1		1			1		1									
232	2		2										2		2						1	1	
234				1		1	2		2			3		3									
236								1	1						1	1							
238	1		1				1		1			1		1	2		2						
240				3		3						3		3		3							
242	1		1					1	1					1	1	2							
244	1		1	1		1	1		1		2	1	3	3	1	4							
246					1	1						1	1		1	1							
248																1	1						
250				1	3	4					1	3	4	1	3	4							
252		1	1	1	4	5					1	4	5	1	5	6							
254	1		1	1	2	3					1	2	3	2	2	4							
256	1		1	1	2	3					1	2	3	2	2	4							
258		2	2	1		1					1		1	1	2	3			1		1		
260				1		1							1		1					1		1	
262					1	1	1		1				1	1	2								
264											1	1	2	1	1	2							
266																							
268																							
270		2	2												2	2							
272					1	1						1	1		1	1							
Totals	7	5	12	12	14	26	6	2	8		1	1	18	17	35	25	22	47	2	1	3	1	1

¹ Year-class represented in Pacific Northwest only.

TABLE 70
LENGTH COMPOSITION OF THE 1936, 1935 AND 1933 YEAR-CLASS IN 1944-45

TABLE 71
LENGTH COMPOSITION OF THE 1944 YEAR-CLASS, AGE 1, IN 1945-46

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL						
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
152								1	1					1	1			1	1			
154								1	2	3				1	2	3			1	2	3	
156								1	1	1		1		1	1	2			1	1	2	
158								1	3	4		1	1	2	2	4	6			2	4	6
160								1	1	1		1	2	3	2	2	4			2	2	4
162								1	2	3		1	1	1	2	2	4			2	2	4
164								2	2	2		3	3	2	3	5			2	3	5	
166								5	5	5		4	4	9	9	9			9	9	9	
168								1	3	4		3	2	2	3	5			2	3	5	
170								3	4	7		3	2	5	6	6	12			6	6	12
172								1	4	5		2	3	5	3	7	10			3	7	10
174								7	1	8		1	1	1	7	2	9			7	2	9
176								5	1	6		3	2	5	9	3	12			9	4	13
178								2	2	3		3	2	5	3	4	7			6	8	14
180								1	1	1		1	5	6	5	1	6			6	7	13
182								1	2	3		6	8	14	7	10	17			7	10	17
184								3	3	3		3	2	5	3	5	8			3	5	8
186								1	1	2		3	5	8	4	7	11			4	7	11
188								1	1	1		3	3	6	3	3	6			3	3	6
190								1	1	2		6	2	8	7	3	10			7	3	10
192								1	1	1		3	2	5	4	2	6			4	2	6
194								2	2	2		2	3	5	3	3	6			5	3	8
196								1	1	2		1	1	2	1	1	2			1	1	2
198								1	1	1		3	1	4	4	1	5			4	1	5
200								1	1	1		4	4	1	4	5			1	4	5	
202												1	1		1	1				1	1	
204																						
206																						
208																						
210																						
212																						
214																						
216																						
218																						
220																						
222																						
224																						
226																						
228																						
230																						
232																						
234																						
236																						
238																						
240																						
Totals	3	1	4	4	4	8	37	36	73	54	51	105	95	91	186	98	92	190				

6-90940

TABLE 71
LENGTH COMPOSITION OF THE 1944 YEAR-CLASS, AGE 1, IN 1945-46

TABLE 72
LENGTH COMPOSITION OF THE 1943 YEAR-CLASS, AGE 2, IN 1945-46

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
162.....				1		1							1		1	1		1
164.....																		
166.....																		
168.....																		
170.....																		
172.....																		
174.....																		
176.....										1		1	1		1	1		1
178.....							1	1	2				1	1	2	1	1	2
180.....				1		1							1		1	1		1
182.....									1		1		1		1	1		1
184.....		1	1						3	1	4		3	1	4	3	2	5
186.....				3		3	1	2	3	10	2	12	14	4	18	14	4	18
188.....		1	1	1	1	2	1	1	2	6	1	7	8	3	11	8	4	12
190.....					2	2	2		2	9	5	14	11	7	18	11	7	18
192.....				1		1	3	2	5	20	6	26	24	8	32	24	8	32
194.....	1		1	2	2	4	1	3	4	21	14	35	24	19	43	25	19	44
196.....					2	2	4	6	10	18	17	35	22	25	47	22	25	47
198.....	1		1	2		2	6	3	9	16	17	33	24	20	44	25	20	45
200.....				3	2	5	5	9	14	18	18	36	26	29	55	26	29	55
202.....				7	4	11	8	6	14	10	10	20	25	20	45	25	20	45
204.....	2		2	9	5	14	4	5	9	8	16	24	21	26	47	23	26	49
206.....				2	2	4	11	7	18	5	8	13	18	17	35	18	17	35
208.....	3		3	5	4	9	12	8	20	8	16	24	25	28	53	28	28	56
210.....	3		3	7	4	11	14	7	21	3	5	8	24	16	40	27	16	43
212.....	3	1	4	5	4	9	10	12	22	4	4	8	19	20	39	22	21	43
214.....		2	2	7	6	13	9	8	17	5	10	15	21	24	45	21	26	47
216.....	3	2	5	3	6	9	6	17	23	3	5	8	12	28	40	15	30	45
218.....	1	1	2	10	4	14	16	6	22		1	1	26	11	37	27	12	39
220.....				6	5	11	8	10	18		5	5	14	20	34	14	20	34
222.....		3	3	3	4	7	1	5	6	1	1	2	5	10	15	5	13	18
224.....				2	2	4	2	2	4		1	1	4	5	9	4	5	9
226.....		1	1	1	5	6	1		1		2	2	2	7	9	2	8	10
228.....							2	3	5	1	2	3	3	5	8	3	5	8
230.....								2	2					2	2		2	2
232.....								1	1					1	1		1	1
234.....																		
236.....																		
238.....					1	1								1	1		1	1
240.....																		
242.....																		
244.....																		
246.....																		
248.....				1		1							1		1	1		1
250.....																		
Totals.....	17	12	29	82	65	147	129	126	255	170	167	337	381	358	739	398	370	768

TABLE 72
LENGTH COMPOSITION OF THE 1943 YEAR-CLASS, AGE 2, IN 1945-46

TABLE 73
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 3, IN 1945-46

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
180										1	--	1	1	--	1	1	--	1
182																		
184								1	1		1	1	2	1	2	2	--	2
186										1	2	3	2	3	5	2	3	5
188						1	1	2					4	2	6	4	3	7
190				--	1	1												
192				--	1	1				12	2	14	12	3	15	12	3	15
194							1	1	2	4	7	11	5	8	13	5	8	13
196				1	--	1	1	--	1	11	6	17	13	6	19	13	6	19
198				--	1	1	1	2	3	7	6	13	8	9	17	8	9	17
200				--	1	1	2	2	4	5	3	8	7	6	13	7	6	13
202				1	--	1	5	4	9	13	8	21	19	12	31	19	12	31
204				3	1	4	3	2	5	12	11	23	18	14	32	18	14	32
206				2	--	2	8	3	11	14	7	21	24	10	34	25	11	36
208				3	--	3	7	7	14	8	9	17	18	16	34	18	16	34
210							6	2	8	14	4	18	12	5	17	32	11	43
212				1	--	1	4	4	8	5	6	11	4	6	10	13	16	29
214							5	9	14	12	5	17	2	6	8	19	20	39
216				2	3	5	5	8	13	16	8	24	--	3	3	21	19	40
218				--	1	1	4	6	10	14	15	29	3	4	7	21	25	45
220				2	--	2	4	14	18	13	20	33	2	9	11	19	43	62
222				5	--	5	7	6	13	15	14	29	1	7	8	23	27	50
224				1	4	5	6	16	22	11	12	23	3	2	5	20	30	50
226				1	5	6	7	6	13	7	16	23	1	3	4	15	25	40
228				--	3	3	6	3	9	2	8	10	1	3	4	9	14	23
230							6	9	15	8	7	15	--	2	2	14	18	32
232				2	1	3	3	8	11	3	6	9	--	1	1	6	15	21
234				2	1	3	3	6	9	3	9	12	1	2	3	7	17	24
236				1	1	2	2	3	5	--	2	2	1	--	1	3	5	8
238				--	1	1	2	1	3	3	5	8			5	6	11	5
240										1	--	1			1	--	1	--
242							--	1	1						--	1	1	--
244				1	--	1	--	1	1	--	3	3			--	4	4	1
246				--	1	1	1	1	2						1	1	2	3
248																		
250							--	1	1						--	1	1	--
252																		
254				--	1	1									--	1	1	--
256				--	1	1									--	1	1	--
258																		
260																		
262																		
264																		
266				--	1	1									--	1	1	--
268																		
270																		
Totals	19	25	44	81	110	191	156	164	320	124	118	242	361	392	753	380	417	797

TABLE 73
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 3, IN 1945-46

TABLE 74
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 4, IN 1945-46

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
192																			
194																			
196																			
198										3		3	3		3	3		3	
200								1	1	4	1	5	4	2	6	4	2	6	
202								3	1	4	5	2	7	8	3	11	8	3	11
204				2		2	5	3	8	9	6	15	16	9	25	16	9	25	
206				2	1	3	1	1	2	1	4	5	4	6	10	4	6	10	
208				2		2	4	5	9	11	3	14	17	8	25	17	8	25	
210				1	1	2	6	3	9	7	9	16	14	13	27	14	13	27	
212				1	4	5	8	3	11	7	11	18	16	18	34	16	18	34	
214				3	2	5	9	4	13	5	6	11	17	12	29	17	12	29	
216				4	1	5	8	8	16	5	5	10	17	14	31	17	14	31	
218				6	3	9	8	7	15	5	1	6	19	11	30	19	11	30	
220				2	5	7	3	5	8	4	7	11	9	17	26	9	17	26	
222				8	4	12	7	4	11	4	7	11	19	15	34	19	15	34	
224				2	2	4	2	5	7	1	5	6	5	12	17	5	12	17	
226				2	3	5	1	7	8		3	3	3	13	16	3	13	16	
228				--	1	1	--	6	6	2	4	6	2	11	13	2	11	13	
230				--	3	3	1	3	4	1	--	1	2	6	8	2	6	8	
232				--	3	3	1	1	2	--	1	1	1	5	6	1	5	6	
234				1	1	2	2	--	2	--	1	1	2	1	3	3	2	5	
236				--	1	1	3	1	4				3	2	5	3	2	5	
238				1	1	2	--	1	1	--	1	1	1	2	2	2	2	4	
240				--	2	2	1	--	1	1	--	1	2	2	4	2	2	4	
242				1	--	1	3	--	3	--	1	1	4	1	5	4	1	5	
244				--	2	2	--	1	1				--	3	3	--	3	3	
246				1	--	1	1	1	2				2	1	3	2	1	3	
248				--	1	1	1	--	1				1	--	1	1	1	2	
250				--	1	1	--	1	1	--	2	2	--	3	3	--	4	4	
252																			
254								--	1	1			--	1	1	--	1	1	
256				--	2	2										--	2	2	
258																			
260																			
Totals	2	6	8	40	40	80	76	74	150	75	76	151	191	190	381	193	196	389	

TABLE 74
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 4, IN 1945-46

TABLE 75
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 5, IN 1945-46

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
192																		
194																		
196																		
198										1	--	1	1	--	1	1	--	1
200										--	1	1	1	1	1	1	--	1
202								1	--	1	--	1	2	--	2	2	--	2
204										2	1	3	2	--	3	2	--	3
206								1	--	1	--	1	1	1	2	1	--	2
208				1	--	1		2	--	2	4	3	7	7	3	10	7	3
210										1	--	1	1	--	1	1	--	1
212				1	--	1		1	1	3	3	6	4	4	8	4	4	8
214								3	1	4	--	1	1	3	2	5	3	2
216				--	3	3		1	1	1	3	1	4	3	5	8	3	5
218				--	1	1		3	1	4	--	1	1	3	3	6	3	3
220				2	1	3		--	1	1	1	2	3	3	4	7	3	4
222												2	2	2	2	2	--	2
224												2	2	2	2	2	--	2
226	1	--	1	3	1	4	1	1	2	1	1	2	4	2	6	5	2	7
228	1	--	1	3	1	4	2	1	3	--	2	2	5	4	9	6	4	10
230	1	--	1	1	3	4	--	2	2	1	1	2	2	6	8	3	6	9
232	1	--	1				2	1	3				2	1	3	3	1	4
234	3	2	5	2	1	3	2	2	4				4	3	7	7	5	12
236	3	--	3	2	1	3	3	1	4	1	--	1	6	2	8	9	2	11
238	3	--	3	2	1	3	--	3	3	1	--	1	3	4	7	6	4	10
240	2	4	6	2	1	3	1	1	2	--	1	1	3	3	6	5	7	12
242	4	2	6	2	2	4	1	3	4				3	5	8	7	7	14
244	4	1	5	4	3	7	3	1	4				7	4	11	11	5	16
246	8	6	14	2	3	5	4	2	6				6	5	11	14	11	25
248	2	1	3	1	3	4	2	1	3				3	4	7	5	5	10
250	4	5	9	1	4	5	2	2	4	--	1	1	3	7	10	7	12	19
252	1	4	5	1	2	3	--	5	5				1	7	8	2	11	13
254	7	--	7	1	2	3	--	4	4				1	6	7	8	6	14
256	1	6	7	1	3	4	--	3	3	--	1	1	1	7	8	2	13	15
258	2	2	4	--	3	3							3	3	2	5	7	
260	1	1	2	1	2	3							1	2	3	2	3	5
262																		
264				--	1	1							--	1	1	--	1	1
266				1	--	1							1	--	1	--	1	1
268										--	1	1	--	1	1	--	1	1
270	1	--	1													1	--	1
272	--	1	1													--	1	1
274	--	1	1													--	1	1
276																		
278																		
280																		
Totals	50	36	86	36	42	78	33	38	71	20	24	44	89	104	193	139	140	279

TABLE 75
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 5, IN 1945-46

TABLE 76
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 6, IN 1945-46

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
192																		
194																		
196																		
198										1		1	1		1		1	
202										1	1		1	1		1	1	
204																		
206																		
208										1		1	1		1		1	
210																		
212					1	1				2		2	2	1	3	2	1	3
214							1		1	1	1	1	1	1	2	1	1	2
216					1	1	1	1	2	1	1	2	2	3	5	2	3	5
218					1		1						1		1		1	
220					1		1						1		1		1	
222										1		1	1		1		1	
224								1	1				1	1		1	1	
226																		
228					2	2							2	2		2	2	
230																		
232																		
234	3	1	4				1		1			1		1	4	1	5	
236	7	2	9				1		1			1		1	7	3	10	
238	2	3	5	2	1	3	1	1	2		1	1	3	3	6	5	6	11
240	8		8	2	3	5	1		1				3	3	6	11	3	14
242	5	5	10	3	4	7	2	1	3				5	5	10	10	10	20
244	4	3	7	1	2	3	3		3		1	1	4	3	7	8	6	14
246	3	4	7	1	3	4	3	4	7				4	7	11	7	11	18
248	4	6	10	1	1	2	3	5	8	1	1	2	5	7	12	9	13	22
250	6	4	10	3	1	4	3	4	7				6	5	11	12	9	21
252	3	4	7	1	3	4	1	6	7				2	9	11	5	13	18
254	8	8	16	2	2	4	1	5	6	1		1	4	7	11	12	15	27
256	4	6	10	1	1	2		1	1				1	2	3	5	8	13
258	2	4	6	1	3	4		3	3				1	6	7	3	10	13
260	2		2		2	2		2	2					4	4	2	4	6
262	5	1	6			1		1	1					1	1	5	2	7
264	1		1			1		1	1					1	1	1	1	2
266	2	1	3												2	1	3	
268		1	1		1	1		1	1					2	2		3	3
270					2	2								2	2		2	2
272																		
274																		
276																		
278					1	1								1	1		1	1
280																		
Totals	69	53	122	20	35	55	21	37	58	8	6	14	49	78	127	118	131	249

TABLE 76
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 6, IN 1945-46

TABLE 77
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 7, IN 1945-46

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY			SAN PEDRO			CALIFORNIA			GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
232							1	--	1				1	--	1	1	--	1
234	1	1	2				--	1	1				--	1	1	1	2	3
236	2	--	2													2	--	2
238	1	1	2										1	--	1	2	1	3
240	3	--	3													3	--	3
242	1	2	3	1	1	2	--	1	1				1	2	3	2	4	6
244	1	1	2	2	1	3	1	--	1				3	1	4	4	2	6
246	5	1	6	1	1	2	1	1	2				2	2	4	7	3	10
248	2	2	4	1	2	3	1	--	1	--	1	1	2	3	5	4	5	9
250	1	4	5	--	1	1	2	--	2				2	1	3	3	5	8
252	1	--	1	1	6	7	1	2	3				2	8	10	3	8	11
254	4	--	4	1	--	1							1	--	1	5	--	5
256	5	1	6	--	2	2	--	1	1				--	3	3	5	4	9
258	2	6	8	--	2	2	--	1	1				--	3	3	2	9	11
260	--	1	1										--	2	2	--	1	1
262	--	1	1	--	2	2							--	2	2	--	3	3
264				--	1	1							--	1	1	--	1	1
266	--	3	3	--	1	1							--	1	1	--	4	4
268																		
270																		
272				--	1	1							--	1	1	--	1	1
274																		
276																		
278																		
280																		
Totals	29	24	53	7	21	28	8	7	15	--	1	1	15	29	44	44	53	97

TABLE 77
LENGTH COMPOSITION OF THE 1938 YEAR-CLASS, AGE 7, IN 1945-46

TABLE 79
LENGTH COMPOSITION OF THE 1946 YEAR-CLASS, AGE 0, IN 1946-47

Length mm.	MONTEREY ¹			MONTEREY ²			SAN PEDRO			CALIFORNIA			GRAND TOTAL ³		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
102.....															
104.....	--	1	1	--	1	1				--	1	1	--	1	1
106.....															
108.....	1	3	4	1	3	4				1	3	4	1	3	4
110.....	1	2	3	1	2	3				1	2	3	1	2	3
112.....	6	6	12	6	6	12				6	6	12	6	6	12
114.....	2	2	4	2	2	4				2	2	4	2	2	4
116.....	4	2	6	4	2	6				4	2	6	4	2	6
118.....	3	3	6	3	3	6				3	3	6	3	3	6
120.....	2	3	5	2	3	5				2	3	5	2	3	5
122.....	--	1	1	--	1	1				--	1	1	--	1	1
124.....															
126.....	--	1	1	--	1	1				--	1	1	--	1	1
128.....	--	1	1	--	1	1				--	1	1	--	1	1
130.....															
132.....															
134.....															
136.....	--	1	1	--	1	1				--	1	1	--	1	1
138.....															
140.....															
142.....															
144.....															
146.....															
148.....															
150.....							1	--	1	1	--	1	1	--	1
152.....															
Totals.....	10	26	45	19	26	45	1	--	1	20	26	46	20	26	46

¹ Includes samples of fish caught locally; excludes six samples from boats which fished in Southern California waters and made deliveries in Monterey.
² Combined total of samples of local and Southern California fish taken in Monterey.
³ Year-class not represented in Pacific Northwest or at San Francisco.

TABLE 79
LENGTH COMPOSITION OF THE 1946 YEAR-CLASS, AGE 0, IN 1946-47

TABLE 80
LENGTH COMPOSITION OF THE 1945 YEAR-CLASS, AGE 1, IN 1946-47

Length mm.	SAN FRANCISCO			MONTEREY ¹			MONTEREY ²			MONTEREY ³			SAN PEDRO			CALIFORNIA			GRAND TOTAL ⁴			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
148.....				1	--	1				1	--	1				1	--	1	1	--	1	
150.....																						
152.....																						
154.....				1	--	1				1	--	1				1	--	1	1	--	1	
156.....																						
158.....																						
160.....	1	3	4	1	--	1				1	--	1				2	3	5	2	3	5	
162.....	2	2	4	2	2	4				2	2	4				4	4	8	4	4	8	
164.....				1	3	4				1	3	4				1	3	4	1	3	4	
166.....				4	4	8				4	4	8				4	4	8	4	4	8	
168.....	1	1	2	5	4	9				5	4	9		2	--	2	8	5	13	8	5	13
170.....	1	--	1	2	8	10				2	8	10				3	8	11	3	8	11	
172.....	2	--	2	7	5	12				7	5	12				9	5	14	9	5	14	
174.....	1	--	1	8	12	20	1	--	1	9	12	21		1	1	10	13	23	10	13	23	
176.....	1	2	3	9	7	16				9	7	16		2	4	6	12	13	25	12	13	25
178.....				8	15	23				8	15	23		2	2	4	10	17	27	10	17	27
180.....				14	14	28				14	14	28		4	2	6	18	16	34	18	16	34
182.....				12	6	18				12	6	18		6	4	10	18	10	28	18	10	28
184.....				7	12	19	2	--	2	9	12	21	7	3	10	16	15	31	16	15	31	
186.....				10	12	22	1	--	1	11	12	23	7	4	11	18	16	34	18	16	34	
188.....				12	6	18	3	1	4	15	7	22	12	8	20	27	15	42	27	15	42	
190.....				7	17	24	2	--	2	9	17	26	21	23	44	30	40	70	30	40	70	
192.....	1	--	1	8	14	22	2	3	5	10	17	27	22	16	38	33	33	66	33	33	66	
194.....				8	4	12	2	3	5	10	7	17	22	16	38	32	23	55	32	23	55	
196.....				8	4	12	4	5	9	12	9	21	17	20	37	29	29	58	29	29	58	
198.....				4	9	13	--	2	2	4	11	15	28	22	50	32	33	65	32	33	65	
200.....				4	7	11	1	3	4	5	10	15	11	27	38	16	37	53	16	37	53	
202.....				4	1	5	--	2	2	4	3	7	12	13	25	16	16	32	16	16	32	
204.....				1	4	5	--	2	2	1	6	7	4	13	17	5	19	24	5	19	24	
206.....				1	2	3				1	2	3	5	6	11	6	8	14	6	8	14	
208.....													3	9	12	3	9	12	3	9	12	
210.....				--	2	2				--	2	2	4	8	12	4	10	14	4	10	14	
212.....													--	2	2	--	2	2	--	2	2	
214.....													--	2	2	--	2	2	--	2	2	
216.....																						
218.....				1	--	1				1	--	1	1	--	1	2	--	2	2	--	2	
Totals.....	10	8	18	150	174	324	18	21	39	168	195	363	192	205	397	370	408	778	370	408	778	

¹ Includes samples of fish caught locally; excludes six samples from boats which fished in Southern California waters and made deliveries in Monterey.
² Samples of Southern California fish delivered in Monterey.
³ Combined total of samples of local and Southern California fish taken in Monterey.
⁴ Year-class not represented in Pacific Northwest.

TABLE 80
LENGTH COMPOSITION OF THE 1945 YEAR-CLASS, AGE 1, IN 1946-47

TABLE 81
LENGTH COMPOSITION OF THE 1944 YEAR-CLASS, AGE 2, IN 1946-47

Length mm.	SAN FRANCISCO			MONTEREY ¹			MONTEREY ²			MONTEREY ³			SAN PEDRO			CALIFORNIA			GRAND TOTAL ⁴		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
166				1	--	1				1	--	1				1	--	1	1	--	1
168																					
170																					
172																					
174																					
176																					
178																					
180				1	--	1				1	--	1				1	--	1	1	--	1
182				--	1	1				--	1	1	2	--	2	2	1	3	2	1	3
184	1	--	1										--	1	1	1	1	2	1	1	2
186				--	2	2				--	2	2				--	2	2	--	2	2
188				1	1	2				1	1	2	1	1	2	2	2	4	2	2	4
190				2	2	4				2	2	4	7	4	11	9	6	15	9	6	15
192				1	2	3	--	1	1	1	3	4	8	4	12	9	7	16	9	7	16
194				1	1	2				1	1	2	8	12	20	9	13	22	9	13	22
196				2	2	4	1	1	2	3	3	6	10	6	16	13	9	22	13	9	22
198				1	1	2				1	1	2	15	7	22	16	8	24	16	8	24
200				2	1	3	2	--	2	4	1	5	12	8	20	16	9	25	16	9	25
202	2	--	2	2	2	4				2	2	4	15	8	23	19	10	29	19	10	29
204	1	--	1	3	1	4	2	1	3	5	2	7	4	16	20	10	18	28	10	18	28
206				5	3	8	1	--	1	6	3	9	11	11	22	17	14	31	17	14	31
208				--	1	1	4	4	8	--	1	1	4	5	9	10	15	25	14	21	35
210	1	--	1	3	1	4				3	1	4	8	12	20	12	13	25	12	13	25
212	--	2	2	1	--	1				1	--	1	6	7	13	7	9	16	7	9	16
214	1	1	2	2	4	6	--	1	1	2	5	7	5	10	15	8	16	24	8	16	24
216	1	1	2	1	2	3				1	2	3	1	6	7	3	9	12	3	9	12
218	1	--	1	1	2	3				1	2	3	1	8	9	3	10	13	3	10	13
220	1	--	1	--	1	1				--	1	1	3	5	8	4	6	10	4	6	10
222				1	2	3				1	2	3	--	2	2	1	4	5	1	4	5
224				2	2	4				2	2	4	2	4	6	4	6	10	4	6	10
226				1	1	2				1	1	2	--	1	1	1	2	3	1	2	3
228				1	1	2				1	1	2	1	3	4	2	4	6	2	4	6
230				--	2	2				--	2	2				--	2	2	--	2	2
232				1	--	1				1	--	1				1	--	1	1	--	1
234																					
236				--	1	1				--	1	1	1	--	1	1	1	2	1	1	2
238																					
240																					
242				--	1	1				--	1	1	--	1	1	--	2	2	--	2	2
Totals	9	5	14	40	43	83	6	5	11	46	48	94	131	152	283	186	205	391	186	205	391

¹ Includes samples of fish caught locally; excludes six samples from boats which fished in Southern California waters and made deliveries in Monterey.
² Samples of Southern California fish delivered in Monterey.
³ Combined total of samples of local and Southern California fish taken in Monterey.
⁴ Year-class not represented in Pacific Northwest.

TABLE 81
LENGTH COMPOSITION OF THE 1944 YEAR-CLASS, AGE 2, IN 1946-47

TABLE 83
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 4, IN 1946-47

L th mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY ¹			MONTEREY ²			MONTEREY ³			SAN PEDRO			CALIFORNIA			GRAND TOTAL				
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
200																										
202																										
204																										
206																										
208																										
210																										
212																										
214																										
216																										
218																										
220																										
222																										
224																										
226																										
228																										
230																										
232																										
234																										
236																										
238																										
240																										
242																										
244																										
246																										
248																										
250																										
252																										
254																										
256																										
258																										
Totals	8	14	22	12	6	18	47	30	77	--	4	4	47	34	81	35	24	59	94	64	158	102	78	180		

¹ Includes samples of fish caught locally; excludes six samples from boats which fished in Southern California waters and made deliveries in Monterey.
² Samples of Southern California fish delivered in Monterey.
³ Combined total of samples of local and Southern California fish taken in Monterey.

TABLE 83
LENGTH COMPOSITION OF THE 1942 YEAR-CLASS, AGE 4, IN 1946-47

TABLE 84
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 5, IN 1946-47

L th mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY ¹			MONTEREY ²			MONTEREY ³			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
202																									
204															1	--	1			1	--	1		1	
206																									
208															1	--	1			1	--	1		1	
210															3	1	4			3	1	4		3	
212															1	1	2			1	1	2		1	
214								1	--	1					1	--	1			1	--	1		1	
216																									
218								1	--	1					1	--	1			1	1	2		1	
220								1	--	1					2	1	3			3	1	4		3	
222								2	--	2					2	1	3			3	1	4		3	
224								2	--	2					2	--	2			3	--	3		3	
226								1	1	1					1	1	1			--	2	2		--	
228								2	2	4					2	2	4			3	3	6		3	
230	1	--	1					2	1	3					2	1	3			3	2	5		4	
232								2	1	3					2	1	3			4	4	8		4	
234								2	2	4					2	2	4			2	2	4		2	
236								1	2	3					1	2	3			1	2	3		1	
238	1	--	1					2	--	2					--	1	1			2	2	4		3	
240	1	1	2					1	2	3					1	2	3			3	2	5		4	
242								2	1	3					2	1	3			2	2	4		2	
244								1	1	1					--	1	1			1	1	2		1	
246								--	1	1					--	1	1			--	1	1		--	
248								1	--	1					1	--	1			1	--	1		1	
250	1	1	2					1	--	1					1	--	1			1	--	1		2	
252																									
254	--	2	2					--	1	1					--	1	1			--	1	1		--	
256	1	--	1					--	3	3					--	3	3			--	3	3		--	
258	3	3	0					--	1	1					--	1	1			--	1	1		--	
260	--	1	1					--	2	2					--	2	2			--	2	2		--	
262																									
264	1	--	1					--	1	1					--	1	1			--	1	1		--	
266																									
268																									
270																									
272																									
274	1	--	1																						
Totals	11	8	19					2	3	5				22	21	43			--	1	1			22	
																									15
																									11
																									26
																									39
																									36
																									75
																									50
																									44
																									94

¹ Includes samples of fish caught locally; excludes six samples from beats which fished in Southern California waters and made deliveries in Monterey.
² Samples of Southern California fish delivered in Monterey.
³ Combined total of samples of local and Southern California fish taken in Monterey.

TABLE 84
LENGTH COMPOSITION OF THE 1941 YEAR-CLASS, AGE 5, IN 1946-47

TABLE 85
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 6, IN 1946-47

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY ¹			MONTEREY ²			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
222							1	--	1	1	--	1				1	--	1	1	--	1	
224																						
226													1	--	1	1	--	1	1	--	1	
228																						
230							3	--	3	3	--	3				3	--	3	3	--	3	
232							1	--	1	1	--	1	--	1	1	1	1	2	1	1	2	
234																						
236	1	--	1				1	1	2	1	1	2				1	1	2	2	1	3	
238	2	--	2										1	--	1	1	--	1	3	--	3	
240	--	2	2				2	--	2	2	--	2				2	--	2	2	--	2	
242	3	1	4				1	1	2	1	1	2				1	1	2	4	2	6	
244	5	2	7				2	2	4	2	2	4				2	2	4	7	4	11	
246	4	1	5																4	1	5	
248	5	--	5				1	--	1				--	1	1	1	1	2	6	1	7	
250	2	4	6				--	1	1							--	1	1	2	5	7	
252	5	5	10				1	2	3	1	1	2				2	3	5	7	8	15	
254	3	5	8																3	5	8	
256	3	3	6																3	3	6	
258	4	2	6																4	2	6	
260	--	8	8																--	8	8	
262	1	4	5																1	4	5	
264	--	1	1				--	1	1	--	1	1				--	1	1	--	2	2	
266	--	2	2				--	1	1	--	1	1				--	1	1	--	3	3	
268	--	1	1																--	1	1	
270	--	2	2																--	2	2	
272	--	1	1																--	1	1	
274	--	1	1																--	1	1	
Totals	38	45	83	2	3	5	13	8	21	13	8	21	2	2	4	17	13	30	55	58	113	

¹ Includes samples of fish caught locally; excludes six samples from boats which fished in Southern California waters and made deliveries in Monterey.

² Combined total of samples of local and Southern California fish taken in Monterey.

TABLE 85
LENGTH COMPOSITION OF THE 1940 YEAR-CLASS, AGE 6, IN 1946-47

TABLE 86
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 7, IN 1946-47

Length mm.	PACIFIC NORTHWEST			SAN FRANCISCO			MONTEREY ¹			MONTEREY ²			SAN PEDRO			CALIFORNIA			GRAND TOTAL			
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
222																						
224																						
226							1		1	1		1			1		1		1		1	
228																						
230																						
232																						
234																						
236																						
238	1	1	2																1	1	2	
240	--	2	2	1	--	1									1	--	1		1	2	3	
242	--	1	1	1	--	1									1	--	1		1	1	2	
244	3	1	4															3	1	4		
246	2	--	2				2	--	2	2	--	2			2	--	2		4	--	4	
248	4	--	4				--	1	1	--	1	1			--	1	1		4	1	5	
250	1	--	1	--	2	2									--	2	2		1	2	3	
252	3	4	7				--	1	1	--	1	1	1	--	1	1	2	4	5	9		
254	4	4	8	1	1	2	1	3	4	1	3	4			2	4	6	6	8	14		
256	3	6	9	1	1	2	--	1	1	--	1	1			1	2	3	4	8	12		
258	2	1	3				1	1	2	1	1	2			1	1	2	3	2	5		
260	2	2	4	--	1	1	--	2	2	--	2	2			--	3	3	2	5	7		
262	--	5	5	--	2	2									--	2	2	--	7	7		
264	1	1	3															1	1	3		
266	1	1	2															1	1	2		
268	1	2	3				--	1	1	--	1	1			--	1	1	1	3	4		
270																						
272	--	1	1				1	--	1	1	--	1			1	--	1	1	1	2		
274				--	1	1									--	1	1	--	1	1		
Totals	28	32	61 ³	4	8	12	6	10	16	6	10	16	1	--	1	11	18	29	39	50	90 ³	

¹ Includes samples of fish caught locally; excludes six samples from boats which fished in Southern California waters and made deliveries in Monterey.
² Combined total of samples of local and Southern California fish taken in Monterey.
³ Includes one fish, sex unknown.

TABLE 86
LENGTH COMPOSITION OF THE 1939 YEAR-CLASS, AGE 7, IN 1946-47

TABLE 87
LENGTH COMPOSITION OF THE 1938 AND 1937 YEAR-CLASSES IN 1946-47

Length mm.	1938 Year-class, age 8									1937 Year-class, age 9												
	PACIFIC NORTHWEST			SAN FRANCISCO		MONTEREY ¹		MONTEREY ²		SAN PEDRO		CALIFORNIA		GRAND TOTAL		PACIFIC NORTHWEST		CALIFORNIA ³		GRAND TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
240.....	1	..	1							..	1	1	1	1	1							
242.....																			1	..	1	1
244.....																			1	..	1	1
246.....																						
248.....																						
250.....		2	2										2	2					1	..	1	1
252.....				1	1	2						1	1	2	1	1	2					
254.....		1	1										1	1					1	..	1	1
256.....																						
258.....		1	1										1	1								
260.....		..	1	1									..	1	1							
262.....							1	1	1				1	1					..	1	1	1
264.....																						
266.....																						
268.....		1	1																1	1	2	1
270.....		..	1	1									..	1	1				2	2	4	2
Totals.....	2	5	7	1	1	2	..	1	1	..	1	1	1	3	4	3	8	11	2	2	4	2
																						1

¹ Includes samples of fish caught locally; excludes six samples from boats which fished in Southern California waters and made deliveries in Monterey.
² Combined total of samples of local and Southern California fish taken in Monterey.
³ Year-class represented in California at San Francisco only.

COMPOSITION OF THE SAMBING CATCH

TABLE 87
LENGTH COMPOSITION OF THE 1938 AND 1937 YEAR-CLASSES IN 1946-47

TABLE 88
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1941-42 SEASON
 (Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

	Catch		Number of fish by age (year-class)											
	Tons	Number	0	1	2	3	4	5	6	7	8	9	10	11
			1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930
Pacific Northwest—														
British Columbia.....	60,460	496,000	3,895	94,273	52,406	118,318	87,655	29,507	14,413	6,658	2,994	.....	.....	231
Washington.....	17,092	131,000	4,287	59,670	22,951	32,759	16,711	6,772	4,287	2,712	455	909	.....	227
Oregon.....	16,800	187,200	3,179	85,243	27,011	16,415	10,554	1,000	1,000	.....	.....	.....	.....	1,060
Total, Pacific Northwest.....	94,352	704,700	11,361	239,116	102,368	167,492	114,950	37,429	20,290	10,430	3,419	909	.....	2,018
California—														
San Francisco														
July.....	38,381	327,314	3,656	214,218	93,219	14,143	1,047	.....	.....	.....	.....	.....	.....	.....
August.....	46,446	240,030	3,633	197,242	134,974	19,076	2,003	.....	.....	.....	.....	.....	.....	.....
September.....	31,963	352,533	.....	192,091	162,091	45,299	2,208	1,448	1,444	.....	.....	.....	.....	.....
October.....	49,193	370,916	3,238	124,991	194,493	52,707	19,366	1,749	889	.....	.....	.....	.....	.....
November.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
January.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total, San Francisco.....	183,945	1,439,392	12,559	699,552	555,369	132,363	32,719	3,908	2,533	889	.....	.....	.....	.....
Monterey														
July.....	39,098	405,429	62,401	244,617	80,324	11,584	2,563	.....	.....	.....	.....	.....	.....	.....
August.....	36,432	515,338	34,214	243,820	190,989	12,999	2,955	1,719	.....	.....	.....	.....	.....	.....
September.....	64,533	567,672	63,988	349,545	139,035	21,979	2,066	.....	.....	.....	.....	.....	.....	.....
October.....	62,339	580,506	59,136	309,025	153,750	28,741	6,359	897	897	.....	.....	.....	.....	.....
November.....	5,311	33,722	10,779	27,158	19,773	3,847	839	.....	.....	.....	.....	.....	.....	.....
December.....	16,499	189,323	19,671	102,245	34,329	10,895	2,843	.....	.....	.....	.....	.....	.....	.....
January.....	2,901	26,434	2,882	8,643	19,366	4,893	1,000	639	321	.....	.....	.....	.....	.....
February.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total, Monterey.....	249,156	2,362,148	252,464	1,462,555	531,852	91,889	19,324	3,046	1,018	.....	.....	.....	.....	.....

DIVISION OF FISH AND GAME

TABLE 88
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1941-42 SEASON
 (Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

TABLE 89
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1942-43 SEASON
 (Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

	Catch		Number of fish by age (year-class)											
	Tons	Number	0	1	2	3	4	5	6	7	8	9	10	11
			1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931
Pacific Northwest--														
British Columbia.....	65,980	365,000	3,248	45,694	179,373	56,875	50,642	27,740	6,534	3,248	548	.....	.....	1,095
Washington.....	570	3,150	.....	250	2,530	300	95	65	.....	.....	.....	.....	.....	.....
Oregon.....	1,850	10,429	.....	790	8,265	799	326	218	.....	.....	.....	.....	.....	.....
Totals, Pacific Northwest.	68,400	378,579	3,248	46,688	181,163	57,965	50,866	28,024	6,534	3,248	548	.....	.....	1,095
California--														
San Francisco														
July.....	24,833	175,688	.....	17,794	65,108	49,617	16,918	6,217	.....	.....	316	.....	.....	.....
August.....	31,211	197,140	.....	15,259	111,877	45,575	14,983	5,431	1,045	.....	.....	.....	.....	.....
September.....	19,664	119,080	607	3,118	66,365	39,436	17,555	3,518	295	.....	.....	.....	.....	.....
October.....	15,245	96,791	.....	7,027	45,037	32,338	8,024	3,269	503	.....	.....	.....	.....	.....
November.....	18,277	97,680	383	4,438	31,998	17,471	9,994	2,527	385	.....	.....	.....	.....	.....
December.....	10,727	70,577	.....	5,809	27,586	25,033	8,718	2,517	394	.....	.....	.....	.....	.....
January.....	504	3,296	.....	273	1,208	1,179	410	119	.....	.....	.....	.....	.....	.....
February.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals, San Francisco.	118,633	729,562	992	56,685	369,553	204,669	70,015	23,721	3,245	701	.....	.....	.....	.....
Monterey														
July.....	20,275	141,987	.....	39,132	75,309	29,033	3,563	.....	.....	.....	.....	.....	.....	.....
August.....	21,265	490,084	8,465	89,132	227,015	74,455	6,773	3,990	1,050	.....	.....	.....	.....	.....
September.....	14,159	108,613	.....	9,319	29,899	50,342	17,943	3,030	504	239	.....	.....	.....	.....
October.....	22,019	185,531	1,944	24,492	74,391	40,947	10,838	3,939	250	.....	.....	.....	.....	.....
November.....	23,301	188,823	21,850	34,057	87,034	39,469	10,789	1,908	333	.....	.....	.....	.....	.....
December.....	17,499	131,773	.....	12,323	54,729	36,739	11,167	3,442	1,617	.....	.....	.....	.....	.....
January.....	26,613	208,684	6,332	41,282	104,551	37,479	13,302	4,900	438	.....	.....	.....	.....	.....
February.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals, Monterey.	182,070	1,332,360	48,000	237,218	673,020	270,105	50,190	20,169	3,881	.....	.....	.....	.....	.....

DIVISION OF FISH AND GAME

TABLE 89
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1942-43 SEASON
 (Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

TABLE 90
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1943-44 SEASON
(Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

	Catch		Number of fish by age (year-class)											
	Tons	Number	0	1	2	3	4	5	6	7	8	9	10	11
			1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932
Pacific Northwest—														
British Columbia.....	53,740	423,000		1,370		55,292	178,330	91,570	62,135	24,235	7,437	2,465	638	638
Washington.....	10,540	34,022		792		9,355	27,401	12,528	3,133	783				
Oregon.....	1,820	9,210		135		1,019	4,722	2,169	640	135				
Totals, Pacific Northwest.....	66,100	466,232		2,788		65,666	210,453	106,267	65,908	25,143	7,437	2,465	638	638
California—														
San Francisco														
July.....	7,432	41,124		226	905	14,007	19,431	4,572	1,131	226	226			
August.....	43,954	231,358		2,236	9,253	25,428	113,145	41,728	8,368	3,007	671			
September.....	45,331	268,492		564	7,700	99,768	109,165	39,952	8,299	2,785	664			
October.....	3,238	18,860		1,234	4,900	9,238	3,944	571	571					
November.....	9,092	60,746		2,136	2,703	16,135	20,472	10,875	2,703	899				
December.....	2,100	13,201		1,165	660	4,280	3,283	828	485	408				
January.....	14,915	82,674		587	14,397	40,433	16,889	8,307	2,218	274				
February.....														
Totals, San Francisco.....	125,883	716,793		11,479	16,524	206,065	323,263	117,720	29,826	10,181	1,758			
Monterey														
July.....	6,861	45,933		3,404	3,874	18,949	17,183	5,108	1,020					
August.....	46,024	297,998		38,126	16,231	92,816	117,962	39,423	1,248	832				
September.....	25,987	174,201		39,031	21,491	83,496	33,774	17,749	4,598	1,238				
October.....	16,286	104,207		65,399	13,169	36,115	31,227	4,873	2,939	494				
November.....	35,296	491,240		99,137	23,989	109,699	123,190	41,649	8,235	1,164	602	1,364		
December.....	28,158	210,094		33,843	13,632	51,199	73,099	23,490	11,217	1,954				
January.....	30,577	199,463		10,613	12,828	29,461	88,668	36,852	14,942	2,519	499			
February.....	1,929	10,670		222	3,837	4,668	1,284	809						
Totals, Monterey.....	211,318	1,492,966		266,413	106,665	401,794	502,332	190,333	43,859	8,193	1,101	1,164		

DIVISION OF FISH AND GAME

TABLE 90
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1943-44 SEASON
(Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

TABLE 91
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1944-45 SEASON
 (Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

	Catch		Number of fish by age (year-class)											
	Tons	Number	0	1	2	3	4	5	6	7	8	9	10	11
			1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933
Pacific Northwest—														
British Columbia.....	53,380	208,100	7,905	18,794	10,141	50,411	100,504	47,312	13,700	6,088	1,528			500
Washington.....	29	63	2	4	2	4	24	11						
Oregon.....														
Total, Pacific Northwest.....	53,409	208,163	7,907	18,798	10,143	50,425	100,518	47,223	13,703	6,088	1,529			500
California—														
San Francisco														
July.....	247	1,366		34	91	443	526	202	69	19				
August.....	21,416	101,297		2,352	4,736	32,371	39,080	14,902	4,418	770				
September.....	28,313	138,070		22,187	11,094	35,916	39,701	39,731	7,876	1,163				
October.....	26,779	172,883		20,808	10,073	34,135	58,556	27,564	7,933	1,314				
November.....	21,199	104,799		11,810	8,334	30,362	32,770	15,248	4,192	1,520				
December.....	20,434	106,343		6,179	4,634	23,091	42,074	17,161	9,209	1,645				
January.....	7,203	37,444		7,222	9,738	1,662	12,851	17,090	2,252	1,018	627			
February.....	1,721	10,435		2,159	1,630		1,978	2,879	1,300	360	179			
Total, San Francisco.....	136,319	693,281		9,391	80,978	48,065	173,847	232,546	100,390	36,014	7,190			
Monterey														
July.....	23,730	201,873		43,019	83,010	22,269	22,630	21,520	9,292	384	747			
August.....	33,365	207,158		37,694	151,435	40,314	43,499	43,418	14,902	3,745	477			
September.....	82,664	626,071		102,200	339,467	41,318	50,639	71,685	18,319	3,882	1,941			
October.....	43,356	201,260		11,266	90,714	29,642	32,222	56,292	18,700	6,042	889			
November.....	11,745	72,730		10,400	9,455	7,031	10,068	21,405	8,569	1,934				
December.....	15,053	98,807		9,231	23,136	10,931	20,191	24,302	7,371	3,899				
January.....	3,093	20,303		5,415	2,631	1,015	4,767	6,076	2,031					
Total, Monterey.....	234,099	1,648,516		219,555	699,326	170,017	215,997	246,978	72,442	19,847	4,054			

TABLE 91
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1944-45 SEASON
 (Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

TABLE 92
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1945-46 SEASON
 (Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

	Catch		Number of fish by age (year-class)									
	Tons	Number	0	1	2	3	4	5	6	7	8	9
			1945	1944	1943	1942	1941	1940	1939	1938	1937	1936
Pacific Northwest—												
British Columbia.....	34,300	146,600		1,062	14,245	18,695	2,459	32,911	46,672	22,105	5,900	1,470
Washington.....	2,309	10,808				988	495	3,128	4,446	1,317	494	
Oregon.....	90	459				37	19	118	167	49	19	
Total, Pacific Northwest.....	36,799	157,877		1,062	14,245	19,691	2,973	36,157	51,285	23,472	6,413	1,479
California—												
San Francisco												
July.....	12,317	60,939			11,128	27,122	11,128	1,427	4,280	2,354		
August.....	29,556	143,939		1,016	46,116	55,239	29,275	18,443	10,249	7,181	1,016	1,016
September.....	35,275	174,650		5,845	49,792	49,621	19,508	27,473	18,093	7,982	1,704	
October.....	6,941	37,621		824	8,798	12,335	5,218	4,043	4,119	1,099	273	
November.....	622	3,264		74	793	1,115	471	446	371	99	25	
December.....	553	2,741		165	699	899	221	562	497	331	55	
January.....	837	4,241										
February.....	533	2,741										
Total, San Francisco.....	83,422	432,304		5,450	121,733	146,514	66,121	83,294	35,476	19,546	3,135	1,016
Monterey												
July.....	25,932	191,993		2,398	48,562	80,172	42,908	7,010	4,312	3,208	1,333	
August.....	32,297	196,300		13,794	63,790	26,909	33,371	11,774	7,332	1,983	932	
September.....	28,139	364,442		12,820	115,342	142,981	45,774	31,123	14,631	1,822		
October.....	11,449	21,028		15,294	19,978	21,998	9,904	3,551	4,571	410	610	
November.....	3,038	27,098		2,504	5,921	9,110	4,555	2,049	1,821	910	228	
December.....	7,167	30,544		499	3,465	8,488	7,893	5,488	5,988	1,498	499	
January.....												
February.....												
Total, Monterey.....	142,212	892,730		49,138	258,988	321,429	141,491	64,999	42,095	10,401	3,052	

DIVISION OF FISH AND GAME

TABLE 92
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1945-46 SEASON
 (Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

TABLE 93
AGE (YEAR CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1946-47 SEASON
(Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

	Catch		Number of fish by age (year-class)									
	Tons	Number	0	1	2	3	4	5	6	7	8	9
			1946	1945	1944	1943	1942	1941	1940	1939	1938	1937
Pacific Northwest—												
British Columbia.....	3,995	15,520				1,166	1,077	808	5,148	6,828	198	
Washington.....	4,145	28,108				861	2,679	3,123	12,716	6,170	1,233	891
Oregon.....	3,910	17,999				870	1,715	2,000	8,143	4,143	857	371
Totals, Pacific Northwest.....	14,040	61,927				2,947	6,371	6,112	20,001	15,941	2,393	1,462
California—												
San Francisco												
July.....												
August.....	463	4,331		2,278	874		219					
September.....		486	440	117								
October.....												
November.....												
December.....	2,122	13,388			1,706	3,416	1,708	1,139	509	1,208		1,139
January.....	219	1,181		21	166	166	311	71	94	213	47	34
February.....												
Totals, San Francisco.....	2,843	17,526		3,789	2,894	3,381	2,287	1,210	664	1,921	47	1,163
Monterey												
July.....												
August.....	9,027	47,448		6,831	6,365	15,964	10,665	5,566	2,121	1,058		
September.....	8,350	46,082		6,749	6,029	14,797	6,788	3,314	2,562	1,478		
October.....												
Land.....	4,515	21,527		41,699	7,861	938	469			469		
Southern California.....	1,430	12,516		8,395	2,368	1,079	881	219				
Totals, "October".....	5,965	64,443		30,083	10,329	2,014	1,330	216		469		

DIVISION OF FISH AND GAME

TABLE 93
AGE (YEAR-CLASS) COMPOSITION OF THE SARDINE CATCH IN THE 1946-47 SEASON
(Numbers of Fish Are Given in Thousands, i.e., 000 Omitted)

*November	83	916		303	229	92														
Local	220	1,883		1,235	346	127	126	31												
Southern California ¹																				
Totals, *November	303	2,801		1,820	575	249	126	21												
*December	2,069	16,793		9,551	1,844	2,179	1,309	670	168	838										
Local	68	374		273	105	48	38	10												
Southern California ¹																				
Totals, *December	2,137	17,167		9,824	1,949	2,227	1,347	680	168	838										
*January	357	4,493		2,301	311	242	191	69	83	31										
*February	243	3,879		1,474	2,172	78	78	77												
Totals, Monterey Local ²	21,904	171,989	2,371	72,384	21,896	34,193	13,532	11,979	5,310	3,878	31									
Southern California ¹	1,718	13,373	9,993	2,919	1,284	1,623	257													
Totals, combined	26,622	186,455	2,373	82,377	24,625	35,474	29,577	11,807	5,310	3,878	31									
San Diego																				
*September	15,391	138,328		41,258	37,351	47,035	5,534	4,159												
*October	81,756	664,172		272,313	219,177	112,609	66,492	13,283												
*November	47,666	492,315		117,031	123,903	39,697	31,819	5,143												
*December	28,928	239,319		122,923	51,429	35,128	17,504	8,779	1,203	1,239										
*January	9,111	67,993		18,697	26,737	13,113	2,657	1,282	846											
*February	11,383	99,088	643	34,408	20,478	13,441	4,484	1,277	643	634										
*March																				
Totals, San Diego	190,787	1,612,012	643	639,548	480,965	319,833	116,870	33,908	2,782	634	1,239									
San Diego ³	4,737	39,364	49	19,395	11,687	7,893	2,437	1,076	166	80	80									
Totals, California	228,009	1,851,537	3,095	762,109	520,171	366,371	133,871	50,091	8,892	6,473	1,360	1,163								
Grand totals, Pacific Coast	242,049	1,917,484	3,095	762,109	520,171	369,018	142,212	56,203	34,803	23,414	3,733	2,623								

¹ Fish caught south of Point Conception.
² Fish caught north of Point Conception.
³ All values for San Diego, except tons landed, were prorated from San Diego totals.

COMPOSITION OF THE SARDINE CATCH

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TABLE 93—Cont'd.

TABLE 94
 NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN 1941-42 BY REGION OF CATCH

Year-Class	PACIFIC NORTHWEST												CALIFORNIA									
	British Columbia			Washington			Oregon			Total			San Francisco			Monterey			San Pedro			
	No.	M.	S.E.	No.	M.	S.E.	No.	M.	S.E.	No.	M.	S.E.	No.	M.	S.E.	No.	M.	S.E.	No.	M.	S.E.	
1940																						
Male	4	184	4.73	4	158	4.61	3	171	2.71	11	174	4.17	15	179	2.30	213	176	.56	248	178	.55	
Female	6	189	2.50	5	180	7.50	3	189	4.81	14	186	3.29	6	182	3.68	224	175	.56	171	180	.60	
Total	10	175	3.60	19	190	2.50	6	170	2.24	25	186	2.60	21	180	1.92	447	175	.40	419	179	.39	
1939																						
Male	119	193	1.07	44	190	2.04	79	190	1.04	242	191	.74	640	198	.32	1284	194	.25	873	193	.24	
Female	129	194	1.14	35	195	1.99	82	193	.91	243	194	.72	545	200	.38	1303	196	.28	983	195	.28	
Total	255	193	.76	264	188	.73	161	192	.70	680	191	.45	1185	199	.26	2487	195	.19	1756	194	.19	
1938																						
Male	77	214	1.42	32	212	2.37	28	208	2.54	137	212	1.12	450	208	.36	496	205	.36	551	201	.37	
Female	63	217	1.98	37	220	2.24	23	212	3.54	123	217	1.40	412	211	.38	437	207	.46	539	204	.39	
Total	142	216	1.18	101	216	1.28	51	219	2.12	264	215	.82	862	209	.37	933	206	.29	1090	202	.17	
1937																						
Male	165	228	.52	47	227	1.03	17	224	2.15	229	227	.46	101	215	.80	89	212	.98	70	209	1.59	
Female	142	228	.56	45	232	1.00	14	225	1.27	201	232	.47	82	219	1.22	75	218	1.07	70	215	1.49	
Total	307	229	.40	145	228	.73	31	229	1.39	433	229	.36	186	217	.71	164	213	.75	140	212	.88	
1936																						
Male	112	233	.82	22	236	1.92	4	226	3.26	142	233	.69	20	214	2.04	20	214	1.00	10	209	3.64	
Female	125	229	.73	21	235	2.06	12	241	3.38	158	239	.70	24	228	2.46	16	222	2.44	24	216	3.22	
Total	237	236	.56	74	235	1.17	20	235	2.70	301	236	.51	44	229	1.86	36	218	1.55	43	212	2.16	
1935																						
Male	48	240	1.17	6	238	3.31	2	240	.....	56	240	1.05	3	217	7.93	2	215	1.00	6	222	4.48	
Female	32	243	1.54	15	242	1.82	.....	.....	.....	47	242	1.21	2	219	2.00	4	212	4.39	5	224	4.00	
Total	80	241	.94	20	243	2.16	2	240	.....	103	242	.93	5	218	4.40	6	213	2.95	11	223	2.91	
1934																						
Male	18	239	2.82	5	242	4.90	.....	.....	.....	23	240	2.22	2	222	2.00	.....	.....	.....	.....	.....	.....
Female	22	236	3.07	6	241	5.02	.....	.....	.....	31	239	2.13	1	220	.....	2	244	18.0	1	248	.....
Total	40	245	1.64	19	246	2.90	.....	.....	.....	54	240	1.63	3	221	.43	2	244	18.0	1	248	.....

DIVISION OF FISH AND GAME

TABLE 94
 NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN
 1941-42 BY REGION OF CATCH

1983								
Male	12	249	1.93	1	246	1.93	14	248
Female	6	252	3.55	5	252	3.30	12	258
Total ¹	18	255	2.25	12	252	2.65	22	253
1982								
Male	5	252	3.80	2	253	9.00	7	252
Female	3	239	4.10	2	253	9.00	3	239
Total	8	255	2.95	2	253	9.00	10	234
1981								
Male				2	249	9.00	2	249
Female				2	252	2.00	2	252
Total				4	256	5.31	4	256
1980								
Male				1	266	1.00	1	266
Female				2	269	1.00	3	265
Total ²				2	269	1.00	5	263

¹ Washington and Pacific Northwest totals include some fish, sex unknown.
² British Columbia, Washington and Pacific Northwest totals include some fish, sex unknown.

COMPOSITION OF THE SARDINE CATCH

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TABLE 94—Cont'd.

TABLE 95
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN 1942-43 BY REGION OF CATCH

Year-Class	Pacific Northwest ¹						California					
	British Columbia		Washington		Total		San Francisco		Monterey		San Pedro	
	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.
1941												
Male.....	4	212 2.58			4	212 2.58	4	178 2.30	73	163 1.18	249	179 .45
Female.....	2	214 2.06			2	214 2.06			43	164 1.34	216	142 .51
Total.....	6	214 2.50			6	214 2.50	4	178 2.30	117	164 .88	475	181 .35
1940												
Male.....	38	203 1.25	3	194 3.11	41	202 1.23	94	206 .81	322	204 .42	657	197 .30
Female.....	69	205 1.16	2	199 6.30	71	204 1.13	111	210 .67	319	206 .29	719	199 .40
Total.....	107	204 .86	5	197 2.94	112	203 .84	205	208 .53	641	205 .56	1376	198 .28
1939												
Male.....	155	216 1.03	30	217 1.11	185	216 .89	682	215 .28	896	213 .25	666	205 .33
Female.....	158	214 1.08	47	219 1.12	205	215 .88	664	218 .31	788	215 .28	635	207 .38
Total.....	313	215 .73	77	218 .80	390	215 .63	1346	216 .21	1684	214 .19	1301	209 .23
1938												
Male.....	52	229 1.40	3	239 3.39	55	229 1.36	308	220 .41	281	218 .45	244	209 .48
Female.....	52	232 1.55	4	243 5.46	56	232 1.62	338	224 .44	319	222 .53	294	212 .60
Total.....	104	230 1.08	7	241 3.78	111	231 1.67	646	222 .30	600	220 .51	538	210 .39
1937												
Male.....	39	227 1.49	1	230	40	227 1.47	140	224 .76	87	227 1.06	56	212 1.12
Female.....	53	241 1.44	2	238 4.08	55	241 1.39	116	231 .84	74	232 1.30	22	216 1.48
Total.....	92	239 1.07	3	242 4.66	95	239 1.03	256	227 .50	161	229 .78	78	214 .93
1936												
Male.....	24	241 1.54	1	238	25	241 1.56	46	228 1.34	23	229 2.94	5	217 3.60
Female.....	27	247 2.12	1	234	28	247 2.08	89	236 1.54	32	233 1.16	10	214 3.93
Total.....	51	244 1.36	2	240 14.6	53	244 1.33	135	231 1.08	55	231 1.72	15	215 2.83

DIVISION OF FISH AND GAME

TABLE 95
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN 1942-43 BY REGION OF CATCH

1915	Male	5	240	5.20	5	240	5.20	7	313	4.41	8	225	3.25	1	229
	Female	7	244	2.78	7	244	2.78	5	250	5.40	3	259	8.63	1	265
	Total	12	242	2.00	12	242	2.00	12	560	4.26	11	484	4.35	2	494	5.00
1914	Male	2	252	6.00	2	252	6.00	1	224	.....	.....	.....	.....	.....	.....
	Female	4	255	3.55	4	255	3.55	2	255	12.75	.....	.....	.....	.....	.....
	Total	6	255	2.95	6	255	2.95	3	248	19.3	.....	.....	.....	.....	.....
1913	Male	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Female	1	250	.....	1	250	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total	1	250	.....	1	250	.....	.....	.....	.....	.....	.....	.....	.....	.....
1911	Male	2	262	2.00	2	262	2.00	.....	.....	.....	.....	.....	.....	.....	.....
	Female	2	262	2.00	2	262	2.00	.....	.....	.....	.....	.....	.....	.....	.....
	Total	2	262	2.00	2	262	2.00	.....	.....	.....	.....	.....	.....	.....	.....

¹ Samples from British Columbia and Washington only.
² Washington and Pacific Northwest totals include one fish, sex unknown.

COMPOSITION OF THE SALMON CATCH

TABLE 95—Cont'd.

TABLE 96
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN 1943-44 BY REGION OF CATCH

Year-Class	PACIFIC NORTHWEST ¹						CALIFORNIA								
	British Columbia		Washington		Total		San Francisco		Monterey		San Pedro				
	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.			
1942															
Male	1	1.50			1	1.50	18	171	2.33	292	164	.59	261	179	.62
Female	1	1.50			1	1.50	20	175	1.93	278	163	.68	224	182	.72
Total ²	2	1.29	1	1.48	2	1.41	38	173	1.33	570	164	.45	485	180	.47
1941															
Male							25	203	3.68	139	197	1.35	575	185	.38
Female							26	209	2.34	116	199	1.56	527	198	.43
Total							51	206	2.32	255	198	1.03	1102	196	.29
1940															
Male	58	223	1.27	8	218	1.36	66	222	1.18	205	221	.39	483	204	.53
Female	31	230	2.39	4	218	2.69	35	222	2.16	309	225	.44	468	223	.39
Total	89	229	1.19	12	218	1.21	101	223	1.10	574	223	.31	949	221	.27
1939															
Male	157	231	.65	17	227	2.15	174	231	.62	463	226	.36	611	224	.34
Female	130	237	.81	18	230	2.23	148	236	.79	496	231	.36	556	228	.37
Total	287	234	.54	35	228	1.31	322	233	.51	959	228	.26	1167	226	.26
1938															
Male	90	235	1.06	6	230	2.68	96	233	1.01	161	229	.71	188	227	.63
Female	38	243	1.14	10	238	2.33	68	244	1.06	187	233	.62	179	232	.75
Total	148	239	.87	16	235	2.08	164	239	.82	348	232	.49	367	230	.39
1937															
Male	49	242	1.56	2	222	8.00	51	241	1.61	40	235	1.15	54	233	1.40
Female	51	250	1.67	2	237	13.05	53	250	1.69	33	241	1.23	44	237	1.43
Total	100	249	1.23	4	230	5.08	104	245	1.24	73	239	.96	98	235	1.01

DIVISION OF FISH AND GAME

TABLE 96
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN 1943-44 BY REGION OF CATCH

1930							
Male	23	245	2.04	1	234		
Female	15	257	2.64				
Total	39	502	1.85	1	234		
1931							
Male	8	248	5.29				
Female	4	252	5.33				
Total	12	500	4.65				
1934							
Male	3	251	10.5				
Female	1	256					
Total	4	507	7.50				
1933							
Male	1	260					
Female							
Total	1	260					
1932							
Male	1	270					
Female							
Total	1	270					

¹ Samples from British Columbia and Washington only.
² Pacific Northwest total includes two fish, sex unknown.

COMPOSITION OF THE SARDINE CATCH

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TABLE 96—Cont'd.

TABLE 97
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS
IN 1944-45 BY REGION OF CATCH

Year-Class	PACIFIC NORTHWEST ¹			CALIFORNIA								
				San Francisco			Monterey			San Pedro		
	No.	M.	S.E.	No.	M.	S.E.	No.	M.	S.E.	No.	M.	S.E.
1943												
Male.....	5	194	4.19	20	181	2.16	210	171	.76	271	187	.55
Female.....	9	177	7.64	26	193	1.68	220	170	.78	228	183	.59
Totals ²	14	185	5.44	46	192	1.37	430	170	.55	500	187	.60
1942												
Male.....	18	196	3.59	140	212	.55	608	202	.44	524	202	.36
Female.....	19	194	3.21	173	212	.84	604	205	.48	536	205	.39
Totals ²	37	195	2.35	313	212	.62	1,212	204	.32	1,060	204	.26
1941												
Male.....	11	231	1.33	91	222	1.04	172	217	.92	609	204	.32
Female.....	9	222	5.02	94	224	1.18	179	221	.94	531	209	.36
Totals ²	20	231	2.29	185	223	.89	352	219	.67	1,141	206	.23
1940												
Male.....	53	237	1.05	322	234	.49	251	232	.69	223	211	.75
Female.....	64	241	1.01	343	239	.46	228	237	.56	197	218	.90
Totals ²	117	239	.79	665	239	.35	479	234	.49	420	213	.58
1939												
Male.....	102	239	.79	480	239	.36	284	236	.51	88	220	1.59
Female.....	102	245	.74	416	244	.57	245	242	.51	89	228	1.51
Totals ²	204	242	.56	896	241	.57	529	239	.38	178	224	1.13
1938												
Male.....	49	243	1.18	217	241	.56	87	239	.88	16	229	3.67
Female.....	44	248	1.88	186	248	.57	76	247	.99	15	234	3.83
Totals ²	93	245	1.02	403	244	.49	163	242	.74	31	231	2.66

DIVISION OF FISH AND GAME

TABLE 97
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN
1944-45 BY REGION OF CATCH

1957												
Male.....	11	242	2.45	69	246	1.03	19	241	1.75	5	235	3.00
Female.....	16	259	2.69	63	250	1.39	25	248	1.31	5	242	1.00
Totals.....	27	501	2.00	132	508	.84	44	489	1.16	10	277	2.00
1956												
Male.....	7	243	3.67	12	246	3.19	6	241	5.01			
Female.....	6	282	3.40	14	254	1.77	2	239	3.00	1	244	
Totals.....	13	525	3.80	26	500	1.80	8	480	3.28	1	244	
1955												
Male.....	2	259	1.00									
Female.....	1	245										
Totals.....	3	504	3.08									
1953												
Male.....	1	212										
Female.....												
Totals.....	1	212										

¹ Samples from British Columbia only.
² Monterey totals include one or two fish, sex unknown.
³ Monterey and San Pedro totals include one fish, sex unknown.

COMPOSITION OF THE SARDINE CATCH

TABLE 97—Cont'd.

TABLE 98
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN 1945-46 BY REGION OF CATCH

Year-Class	PACIFIC NORTHWEST ¹						CALIFORNIA					
	British Columbia		Washington		Total		San Francisco		Monterey		San Pedro	
	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.
1944												
Male	3	209 14.7			3	209 14.7	4	184 7.16	37	173 1.83	54	181 1.48
Female	1	176			1	176	4	180 .58	26	172 1.72	51	182 1.12
Totals	4	200 13.2			4	200 13.2	8	182 3.48	73	172 1.15	105	182 1.68
1943												
Male	17	209 1.55			17	209 1.55	82	209 1.31	129	209 .83	170	188 .63
Female	12	213 3.80			12	213 3.80	65	212 1.27	126	210 .60	187	203 .68
Totals	29	211 1.81			29	211 1.81	147	210 .63	255	209 .61	357	200 .48
1942												
Male	17	223 2.20	2	204 2.00	19	223 2.20	81	221 1.37	155	217 .74	198	204 .88
Female	21	227 2.32	4	246 3.35	25	227 2.32	110	223 .82	164	220 .85	118	209 1.07
Totals	38	225 1.61	6	242 6.45	44	225 1.61	191	222 .71	320	219 .87	242	206 .71
1941												
Male	1	234	1	238	2	236 2.00	40	220 1.63	76	217 1.20	75	211 .95
Female	4	244 4.96	2	253 3.00	6	247 3.76	40	225 1.63	74	221 1.29	76	215 .95
Totals	5	242 4.30	3	245 5.22	8	244 3.32	80	222 1.17	150	219 .88	151	213 .68
1940												
Male	38	243 1.25	12	233 2.54	50	245 1.26	56	237 2.20	33	231 2.54	20	214 2.38
Female	29	247 1.29	7	260 2.43	36	250 1.45	42	245 2.05	38	240 2.10	24	222 3.45
Totals	67	245 .94	19	255 2.22	86	247 .89	78	240 1.56	71	239 1.72	44	218 2.22

DIVISION OF FISH AND GAME

TABLE 98
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN 1945-46 BY REGION OF CATCH

1936																		
Male	51	246	1.16	18	254	1.59	69	248	1.09	20	244	2.34	21	243	2.24	8	222	6.80
Female	44	249	1.06	9	256	1.91	53	250	1.03	33	249	2.40	37	250	1.87	6	227	7.70
Total	95	247	1.80	27	255	1.45	122	249	1.75	53	247	1.77	58	247	1.35	14	224	4.54
1938																		
Male	25	248	1.51	4	250	3.81	29	248	1.30	7	247	1.71	8	245	2.42			
Female	20	252	2.02	4	254	4.72	24	253	1.83	21	254	1.65	7	249	3.18	1	248	
Total	45	250	1.27	8	252	2.87	53	250	1.16	28	253	1.42	15	247	1.99	1	248	
1937																		
Male	7	252	2.28	1	252		8	252	1.95	1	242		2	241	9.00			
Female	5	256	4.69	2	256	6.00	7	257	3.43	4	251	5.54	4	249	3.45	1	254	
Total	12	254	2.53	3	255	3.68	15	255	1.92	5	249	4.70	6	246	3.88	1	254	
1939																		
Male	2	263	4.20				2	263	4.20	1	258							
Female	1	262					1	262										
Total	3	263	12.7				3	263	12.7	1	258							

* Samples from British Columbia and Washington only.

COMPOSITION OF THE SALMON CATCH

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TABLE 98—Cont'd.

TABLE 99
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN 1946-47 BY REGION OF CATCH

Year-Class	PACIFIC NORTHWEST*						CALIFORNIA							
	British Columbia		Washington		Total		San Francisco		Monterey †		San Pedro			
	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.	No.	M. S.E.		
1946														
Male									19	115	.24	1	152	
Female									26	116	.44			
Totals									45	115	.57			
1945														
Male							10	171	2.03	150	183	.91	192	194
Female							8	166	2.40	174	184	.51	205	196
Totals							18	168	1.99	324	184	.60	397	195
1944														
Male							9	238	2.74	40	206	2.40	131	202
Female							5	212	1.30	43	209	2.23	152	207
Totals							14	209	2.50	83	207	1.55	283	205
1943														
Male	2	229	7.00	3	240	6.36	5	236	5.00	8	231	1.80	65	229
Female	4	236	5.77	1	232	4.96	5	236	4.80	3	239	2.10	70	234
Totals	6	234	4.38	4	238	4.96	10	236	3.13	11	234	1.84	135	232
1942														
Male	3	217	4.80	5	244	2.90	8	241	2.57	12	236	1.63	47	232
Female	7	243	1.96	7	247	2.12	14	242	1.55	6	242	2.66	30	236
Totals	10	241	2.00	12	246	1.75	22	244	1.33	18	238	1.51	77	234
1941														
Male	3	245	2.20	8	255	4.34	11	252	2.79	2	242	2.00	22	231
Female	2	247	2.00	6	256	1.82	8	254	2.29	3	246	0.98	21	243
Totals	5	246	2.00	14	255	2.44	19	253	2.56	5	244	1.50	43	237

DIVISION OF FISH AND GAME

TABLE 99
NUMBER OF FISH, MEAN LENGTH AND STANDARD ERROR OF THE MEAN FOR EACH YEAR-CLASS IN 1946-47 BY REGION OF CATCH

1949									
Male	14	247	1.94	24	231	1.06	38	249	1.02
Female	17	233	1.08	33	238	1.29	45	237	1.24
Totals	26	250	1.88	57	235	.96	83	253	.91
1950									
Male	10	251	2.50	18	234	1.41	28	233	1.33
Female	22	233	1.70	10	238	2.94	32	236	1.44
Totals	32	234	1.47	29	236	1.40	61	233	1.01
1958									
Male				2	249	9.00			1
Female	1	250		4	238	4.38	5	237	2.80
Totals	1	250		6	233	4.11	7	233	3.39
1957									
Male				2	261	7.00			2
Female	2	263	5.00	1	263	5.00	1	252	
Totals	4	262	3.54	4	262	2.54	3	252	3.36

¹ Samples from British Columbia and Washington only.
² Includes samples of fish caught locally; excludes six samples from boats which fished in Southern California waters and made deliveries in Monterey.
³ Washington and Pacific Northwest totals include one fish, sex unknown.

COMPOSITION OF THE SALMON CATCH

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TABLE 99—Cont'd.

TABLE 100
CALENDAR DATES OF LUNAR MONTHS FOR SEASONS 1941-42 THROUGH 1946-47

	1941-42		1942-43		1943-44	
"July".....					July	17-August 15
"August".....	August	8-September 6	August	1-August 26	August	16-September 13
"September".....	September	6-October 5	August	27-September 24	September	14-October 13
"October".....	October	6-November 3	September	26-October 24	October	14-November 12
"November".....	November	4-December 3	October	25-November 22	November	13-December 11
"December".....	December	4-January 1	November	23-December 22	December	12-January 10
"January".....	January	2-January 31	December	23-January 20	January	11-February 8
"February".....	February	1-March 1	January	21-February 18		
"March".....	March	2-March 31				

	1944-45		1945-46		1946-47	
"July".....						
"August".....	August	4-September 1			August	12-September 10
"September".....	September	2-October 1	August	23-September 20	September	11-October 9
"October".....	October	2-October 31	September	21-October 20	October	10-November 8
"November".....	November	1-November 29	October	24-November 19	November	9-December 7
"December".....	November	30-December 29	November	20-December 18	December	8-January 6
"January".....	December	30-January 27	December	19-January 17	January	7-February 5
"February".....	January	28-February 26	January	18-February 16	February	6-March 7

TABLE 100
CALENDAR DATES OF LUNAR MONTHS FOR SEASONS 1941-42 THROUGH 1946-47