

PELAGIC FISHERIES INVESTIGATIONS

Albacore Progress Report

January 1969 through June 1970

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April 1972

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Pelagic Fisheries Investigations
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INTRODUCTION

This report summarizes albacore activities of the Pelagic Fisheries Investigations from January 1969 through June 1970.

PERSONNEL

There were no permanent personnel changes. Brent Forsberg was employed as a student trainee during the summer of 1969.

REPORTS

1. Oregon Albacore Tuna Fishery Statistics, 1961-67.
Fish Commission of Oregon, Data Report No. 1.
2. Fish Commission Exploratory and Oceanographic Cruises for Albacore, 1959-67.
Fish Commission of Oregon, Data Report No. 3.
3. Albacore Progress Report, July 1967 through December 1968.
4. Report of Cruise 69-1, Preseason Albacore.
5. Report of Cruise 69-3, Albacore Tagging.

MEETINGS

The 20th annual Pacific Tuna Conference at Lake Arrowhead, California, was attended in October 1969, and a report of the Oregon 1969 albacore season was presented.

CRUISES

During the report period we conducted two cruises aboard the chartered fishing vessel Sunrise. The first was a preseason cruise conducted to: (1) participate in a cooperative Pacific coast albacore prediction program with California and the National Marine Fisheries Service, (2) tag all albacore caught in suitable condition for migration studies, and (3) help locate the albacore early in the season. The second cruise was conducted

to tag albacore early in the season for migration studies along the Oregon-Washington coast, within a season. Descriptions of cruise tracks and station locations appear in the cruise reports.

1969 Preseason Cruise.

The vessel Sunrise left Astoria June 30 and returned July 11 after covering the area from 46 N Latitude to 42 N Latitude between 125 W and 127 W Longitude along a predetermined track. Data collected at each of 38 stations included temperature from the surface to 1,500 feet, surface salinity, weather and other environmental observations. Two days were spent in Coos Bay to repair radio equipment.

The surface water temperature ranged from 58.0 to 61.8 F, and the depth of the 57 F. isotherm ranged from 25 to 115 feet. The warm water layer with a temperature of 57 F and higher was at least 50 feet deep at 34 of the 38 stations, and was suitable for occupation by albacore.

Jigs were trolled, during daylight hours, along the entire trackline, and 14 albacore were caught, 8 of which were tagged. The albacore ranged in length from 63 to 82 cm. and averaged 75 cm. which was larger than usual.

Favorable water conditions were found but few albacore were caught which indicated that the main migration was not as early as in 1968, and that commercial catches would not likely be made until about mid-July.

1969 Tagging Cruise.

A tagging cruise was conducted from July 25 to August 1, aboard the vessel Sunrise. Standard commercial trolling techniques were used to catch albacore. Those albacore judged to be in suitable condition were placed in a tagging cradle, measured, and tagged with a Floy F-1 Dart

tag and released. We fished in an area about 100 miles offshore between Heceta head and Tillamook head.

During the cruise we caught 571 albacore, and tagged 403 of them. Only one of the tagged fish was recovered during the 1969 season and three were recovered in the 1970 season. Recoveries with catch location data all occurred off the Oregon coast.

During August of 1969, we also cooperated with Oregon State University and National Marine Fisheries Service by supplying them with tags for use on albacore during their cruises in Pacific Northwest waters. Oregon State University tagged 50 albacore from the vessel Cayuse August 26 to 28 off northern Oregon. The National Marine Fisheries Service tagged 33 albacore from the vessel David Starr Jordon from August 22 to 30 off Oregon. No recoveries of these tagged fish have been made.

1969 FISHERY

The preseason cruise forecast was good as the first commercial catches of 100 fish or more were made on July 14, about 100-150 miles off Coos Bay. The center of fishing moved rapidly northward and was located off Destruction Island by the end of the month. July landings were 2.9 million pounds (Table 1).

Fishing was spotty at the beginning of August as the fish and the fleet scattered between Coos Bay and northern Washington. No major production centers were located until mid-month when catches up to 1,000 fish per day were reported off Vancouver Island. Unfortunately, this concentrated fishery was short-lived. August landings totaled 18.2 million pounds, the highest for a single month in the history of the Oregon fishery.

Table 1. Oregon Albacore Landings by Month of Landing and by Port for 1969^{1/}

Port	June	July	August	September	Oct.	Nov.	Dec.	Total
Astoria	-	1,501,849	13,784,900	5,504,369	1,164,972	151,120	50,674	22,157,884
		114	766	308	45	9	3	1,245
Tillamook	-	29,162	183,792	41,212	5,231	-	-	259,397
		4	81	25	1			111
Pacific City	-	-	6,855	45	-	-	-	6,900
			47	1				48
Depoe Bay	-	5,647	60,705	4,764	-	-	-	71,116
		1	80	15				96
Newport	-	733,762	2,878,363	406,140	81,627	-	-	4,099,892
		95	486	117	21			719
Winchester Bay	-	36,318	46,181	380	-	-	-	82,879
		5	8	1				14
Coos Bay	494	602,649	1,095,102	756,068	217,080	-	15,375	2,686,768
	6	110	117	83	63		2	381
Bandon	-	-	-	-	127	-	-	127
					1			1
Port Orford	-	-	12,667	-	-	-	-	12,667
			2					2
Gold Beach	-	-	-	2,056	-	-	-	2,056
				5				5
Brookings	-	3,728	196,651	191,014	56,470	-	-	447,863
		4	74	71	8			157
Total	494	2,913,115	18,265,216	6,906,048	1,525,507	151,120	66,049	29,827,549
	6	333	1,661	626	139	9	5	2,779

^{1/} Top figures are pounds landed; bottom figures are number of landings.

Weather deteriorated during September, and jig boat success declined steadily. Most of this fleet either moved south to the California fishery or quit for the season. Bait boats, on the other hand, were quite successful for a short time. Catches up to 2,000 fish per day were reported 25 to 60 miles offshore between Newport and Astoria. September landings totaled 6.9 million pounds.

Fishing off Oregon ceased by mid-October and landings for the month totaled 1.5 million pounds. These landings were largely from Oregon and Washington boats returning to their home ports from California.

Length-frequency samples showed that the bulk of the catch in July and August was from a single size group with a modal length of 65 cm. Sampling in September, when the bulk of the catch was from bait boats, showed that the 73 cm. size group predominated. This is a typical seasonal size distribution.

Total albacore landings in Oregon were 29,817,549 pounds, making 1969 the second best season on record.