

ANNUAL OREGON ALBACORE TUNA (*THUNNUS ALALUNGA*) REPORT, 2012

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**ANNUAL PROGRESS REPORT
ALBACORE PORT SAMPLING PROGRAM**

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INTRODUCTION

Albacore is a highly migratory tuna species found worldwide in temperate seas. Albacore caught off Oregon belong to the North Pacific stock and are generally juvenile and sub-adult fish that have not spawned. During their trans-Pacific migrations, albacore are targeted at different times of the year by fisheries of several nations including the United States, Canada, Taiwan and Japan. The United States West Coast fishery harvests this stock during the summer and fall months.

Albacore has been fished commercially off Oregon since 1929 when the fishery expanded North from the traditional grounds off Southern California. For many years, both bait-boats and jig-boats fished for albacore off Oregon, but in recent years jig-caught (troll-caught) albacore have been predominantly landed. However, bait fishing with live anchovies is growing in popularity with an increasing number of vessels employing this technique with much success, especially late in the season for the past several years. The West Coast fleet consists primarily of 20 to 60 foot 'combination' boats with multiple permits to fish crab, salmon, or groundfish at other times of the year; also several large freezer boats (>60 ft.) that travel the North and South Pacific, fishing primarily albacore year-round.

Commercial albacore landings in Oregon were first recorded in 1929, and have been highly variable through the years, ranging from a low of 27,600 pounds in 1936 to a high of almost 38 million pounds in 1968. In the last decade, landings in Oregon have averaged 9.1 million pounds per year.

Beginning in 2005 under the Highly Migratory Species Fisheries Management Plan, the National Marine Fisheries Service (NMFS) required vessels to submit logbook data while fishing for albacore inside the 200 mile Economic Exclusive Zone (EEZ). Prior to this, the logbook program was voluntary and only vessels fishing outside the EEZ were required to submit logbooks under the High Seas Fishing Compliance Act.

Sampling of Oregon's commercial albacore fishery is a cooperative effort between the Oregon Department of Fish and Wildlife (ODFW), the NMFS's Southwest Fisheries Science Center, and the Pacific States Marine Fisheries Commission. This report documents the progress of the 2012 fishery off Oregon and associated sampling activities.

Recreational marine fisheries programs began focusing data collection on the recreational albacore fishery in 2000. Recreational fishing for albacore off Oregon has been growing in popularity during the past decade, and especially in the past six years. Catches have ranged from a low of 2,901 fish (approximately 57,000 pounds) in 2000 to a high of 63,167 fish (approximately 1,105,000 pounds) in 2012. Since 2000, catches have averaged 21,000 fish (approximately 410,000 pounds) per year.

2012 COMMERCIAL FISHERY

The 2012 Oregon albacore season began with one small landing on June 24th in Garibaldi. The number of deliveries made per week increased steadily until the peak of landings occurring the first week of August (Figure 1). The season mostly ended by the last week of October, and the final landing was made on November 14th in Astoria.

Favorable ocean conditions persisted for most of the peak season, with one hazardous storm in the second week of August causing total vessel trips and landings to decline by approximately 50%. Fishing effort resumed in force by the third week of August before steadily declining in to September.

Sea surface temperatures reached a high of 62°F very near the Oregon coastline in the final week of June for only four days before dissipating back to 58-60°F. The 62°F water returned by the first week of August and remained near the central and north Oregon coast through early September. These temperatures are much lower than 2011 when they reached 68-70°F. Very few subtropical pelagic species were reported in the 2012 Oregon albacore fishery.

Primary fishing locations for 2012 included the central to north Oregon seaboard for latitudes 44-46°N and longitudes 124-126°W. During July, August, and early September fishermen reported the most productive fishing grounds along longitudes 124-125°W; during late September and October reports indicated more distant fishing effort towards longitudes 126-128°W.

Albacore fishermen reported above average fishing success during the peak season, compared to past years. As catch rates declined in final weeks of September, many smaller 'combination' vessels switched to the Chinook salmon troll fishery with higher prices and fair catch rates.

The "Fishing Regime" under the U.S./Canada Albacore treaty was suspended for the 2012 fishing season. This treaty suspension disallowed any Canadian vessels in the U.S. EEZ, and any U.S. vessels in the Canadian EEZ. The treaty was originally signed in 1981 and expired after thirty years with U.S. officials declining an agreement for a treaty renewal in 2012. It is unclear when or if the treaty will be renewed.

- **2012 Albacore Landings**

A total of 447 vessels made at least one landing of albacore in Oregon ports for 2012, up from 444 vessels in 2011. These vessels made 1,608 total trip landings in 2012, up from 1,554 landings in 2011.

The peak month of August yielded 44% of the total landings for 2012 with 4,387,966 pounds (Figure 2). This amount proved to be the most productive August since 1997.

The preliminary total for 2012 commercial landings is 9,895,062 pounds. This is a 2% increase from the 9,697,690 total pounds landed in 2011, and is 2.7% higher than the ten-year (2003-2012) average of 9,630,333 pounds (Table 1). The standard deviation for ten years of total landings is ±932,465 pounds, or approximately ±9.3%.

Newport received the majority of Oregon's albacore landings in 2012 with 50.9% of total weight landed; followed by Charleston with 22.7%, Astoria with 20.4%, Garibaldi with 2.4%, and Winchester Bay with 1.5% (Table 2 & Figure 3). The remaining eight small ports landed a combined 2.1% of the total landings.

The port of Newport's albacore landings amounted to 5,035,596 pounds for the 2012 season; this is 17% higher than the ten-year (2003-2012) average port landing total, and a close second to the port record of 5,066,719 pounds in 2009.

The port of Astoria landed 2,006,921 total pounds of albacore in 2012, which is a 36% decrease in landings from 2011; and a 29% decrease from Astoria's ten-year (2003-2012) average. There is speculation that the absent Canadian fleet may have affected the landing totals in Astoria for 2012.

The dory fleet of Pacific City surpassed their ten-year average by 650% (2002-2011); landing a port record totaling 37,974 pounds. Vessel participation for the Pacific City albacore troll fishery was also a port record totaling twenty vessels, approximately double that of past years.

The average landing in Oregon in 2012 was 6,084 pounds, a 1% decrease from 6,155 pounds in 2011. Table 3 describes the quartile partition of landing size in the 2012 Oregon albacore fishery, which helps to explain the landing characteristics of the fishery. The average weight of a landing was 6,084 pounds, but for 50% of all vessel trips the landings consisted of $\leq 1,917$ pounds.

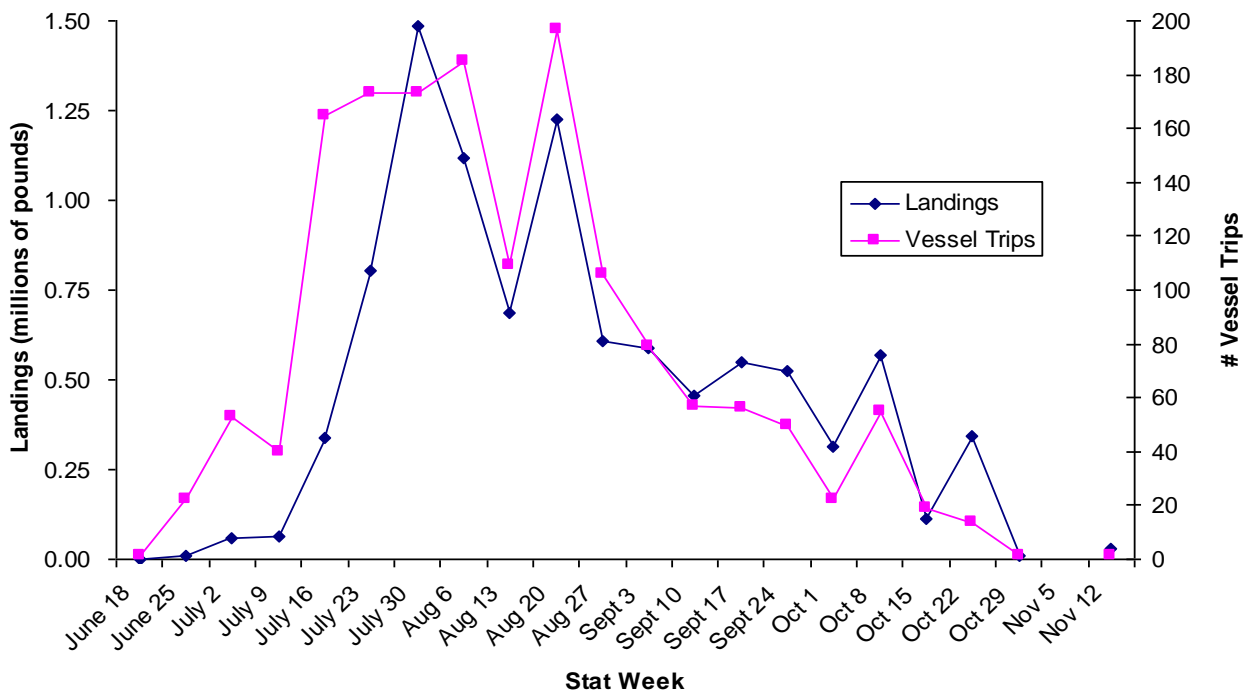


Figure 1 – Total albacore landings and number of vessel trips per week in 2012.

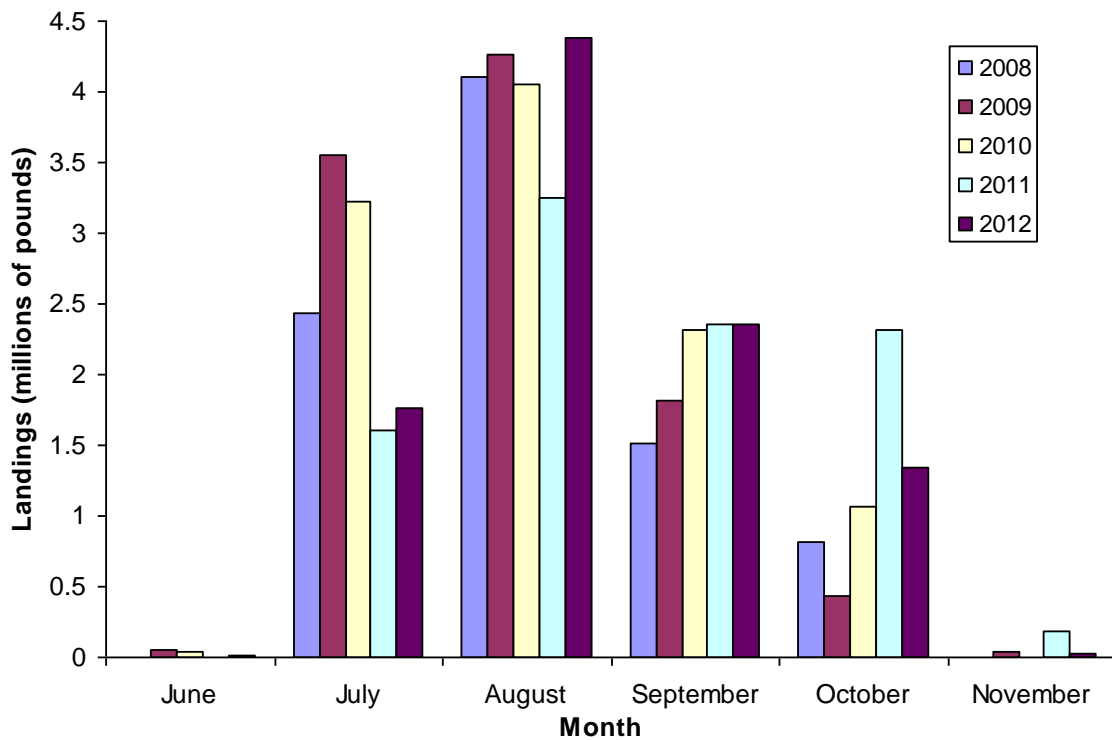


Figure 2 – Total albacore landings by month; 2008 through 2012.

Table 1 – Ten years of total landings with ten-year average, percent difference from average, and standard deviation.

Year	Total Landings (lbs)	% Difference from Average
2012	9,895,062	+2.7%
2011	9,697,690	+0.7%
2010	10,702,233	+10.1%
2009	10,156,183	+5.2%
2008	8,876,158	-7.8%
2007	10,447,567	+7.9%
2006	8,521,642	-11.5%
2005	8,087,413	-16%
2004	10,754,016	+10.5%
2003	9,165,362	-4.8%
Average	9,630,333	- 0.3%
Std Deviation	±932,465	±9.3%

Table 2 – Percentage of total landings for 2012 (preliminary) and 10-year (2003-2012) average.

2012			10-Year Average		
Port	Landings (lbs)	Landing %	Port	Landings (lbs)	Landing %
Newport	5,035,596	50.9%	Newport	4,166,928	43.27%
Charleston	2,234,699	22.7%	Astoria	2,835,288	29.44%
Astoria	2,006,921	20.4%	Charleston	2,107,467	21.88%
Garibaldi	248,195	2.4%	Garibaldi	231,151	2.40%
Winchester Bay	169,128	1.5%	Winchester Bay	145,989	1.52%
Brookings	80,168	0.88%	Brookings	53,247	0.55%
Pacific City	37,974	0.39%	Florence	42,531	0.44%
Florence	25,968	0.26%	Port Orford	21,259	0.22%
Port Orford	24,599	0.25%	Bandon & Gold Beach*	5,427	0.11%
Bandon & Gold Beach*	20,791	0.21%	Pacific City	8,783	0.09%
Gearhart-Seaside**	6,931	0.07%	Depoe Bay	7,346	0.08%
Depoe Bay	4,092	0.04%			

* For confidentiality these ports are combined

**Gearhart-Seaside only has landings for 2006, 2009, 2012.

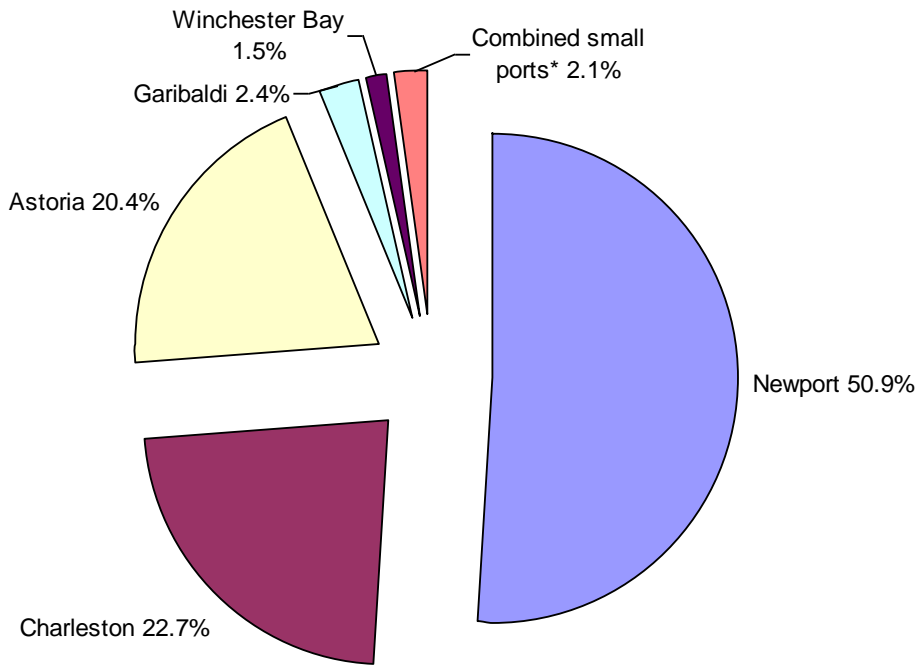


Figure 3 – Percentage of 2012 landings (pounds) by port. *Combined small ports include Brookings, Pacific City, Florence, Port Orford, Bandon, Gold Beach, Gearhart-Seaside, Depoe Bay.

Table 3 – Quartile partition of 2012 Oregon albacore landings.

Quartile		Pounds
100%	Max	151,654
75%	Quartile	4,898
50%	Median	1,917
25%	Quartile	565
0%	Min	9

- **2012 Albacore Revenue**

The West Coast's albacore market in 2012 was not quite as strong as the all-time record revenues for 2011, but remained well above average from past years. Ex-vessel revenue generated from albacore in 2012 totaled at \$15,089,164, a 20% decrease from 2011's value of \$18,800,634 (Figure 4). The average price for 2012 was \$1.53 per pound, down from the average \$1.94 per pound in 2011. The average price for the ten years before 2011 (2001-2010) was \$0.95 per pound. This phenomenon of sudden increased values began in 2011 after the tsunami in Japan destroyed their tuna fleet and the largest fish freezer in the world which contained millions of pounds of albacore; other world market factors may have also influenced the value spike.

Albacore deliveries in early July 2012 were rewarded with a peak of \$1.84 per pound average price before it declined to the season's lowest average price of \$1.41 per pound by the second week of August (Figure 5). The slump in price is likely due to the highest volume of landings in the first week of August. Average prices then rose steadily until the end of season finishing up to \$2.04 per pound. Many large deliveries of frozen albacore were made within the final two weeks of October, where blast frozen tuna sold for as high as \$2.18 per pound. Only one delivery was made in mid-November to conclude the season.

For the 2012 season, fresh-iced tuna average prices ranged \$1.25-1.50/lb; brine-frozen tuna average prices ranged \$1.35-1.55/lb; blast-frozen tuna average prices ranged \$1.60-1.85/lb; public sales of fresh-iced tuna ranged \$2.50-3.00/lb. Blast and brine-frozen tuna sales made up equal apportionments of treatment types each totaling to 38%, while fresh-iced tuna sales consisted of 24%. By port, Astoria tuna sales consisted of 65% blast-frozen treatment; Newport sales consisted of 50% brine-frozen treatment; all remaining smaller ports sales consisted of 70% fresh-iced tuna (Table 4).

The port of Newport netted \$7,696,622 for the 2012 albacore season, which is a state record for the highest tuna revenues in a single port. The previous record high was for Astoria in 2011 with \$6,942,548.

Albacore accounted for 13% of Oregon's marine fish revenue in 2012. Ex-vessel revenue generated from albacore landings in 2012 ranked third among all Oregon's marine fishery landings behind Dungeness crab and pink shrimp (Figure 6).

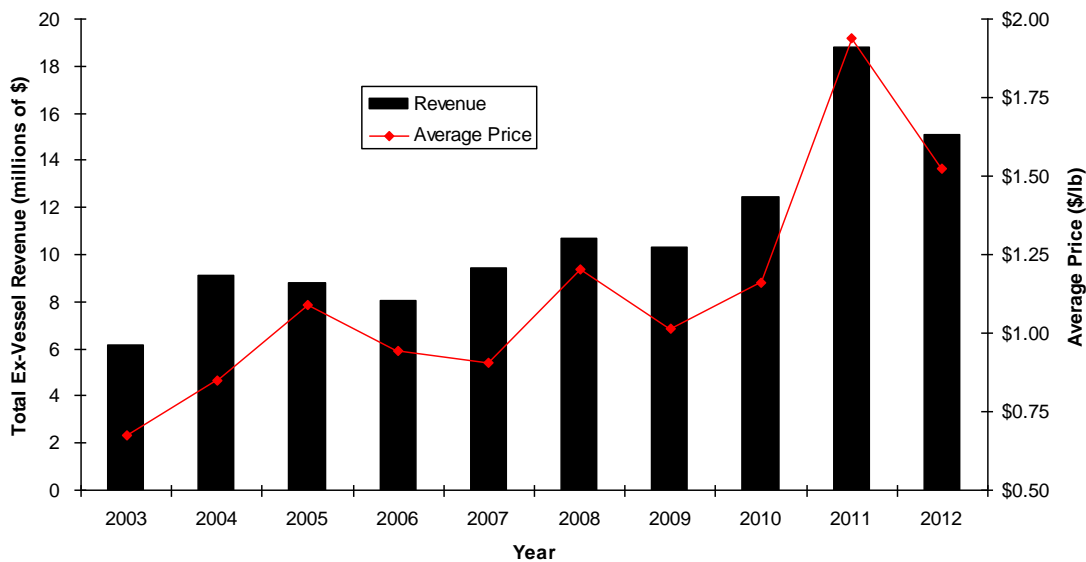


Figure 4 – Total revenue (ex-vessel) and average price by year for Oregon commercial albacore.

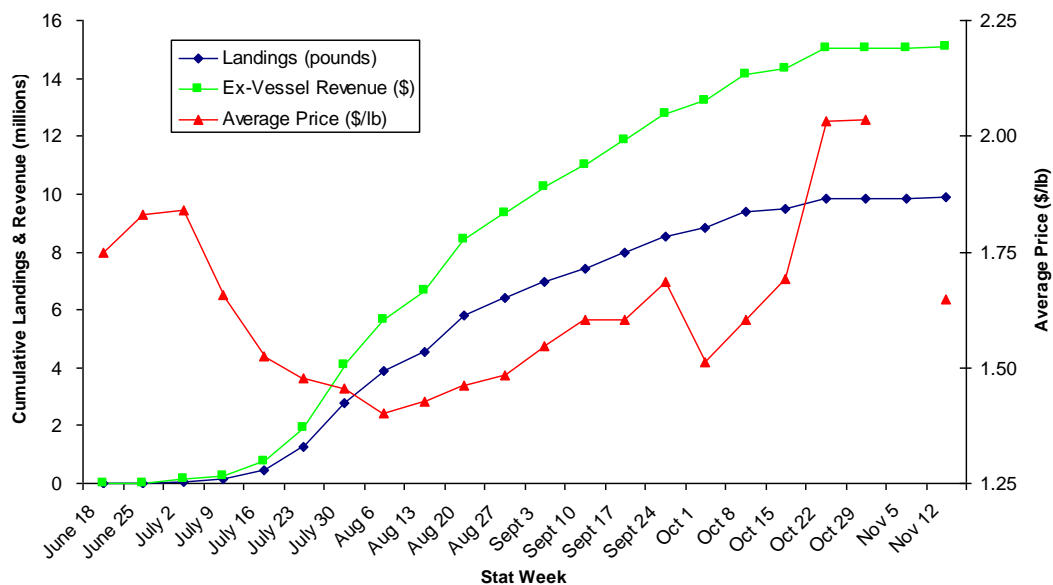


Figure 5 – Cumulative landings, cumulative ex-vessel revenue, and average price by week in 2012.

Table 4 – Treatment type by landings (pounds), port, and 2012 preliminary total percentage.

Port	Blast frozen	Blast%	Brine frozen	Brine%	Iced	Iced%	TOTAL
Astoria	1,295,787	64.6%	519,202	25.9%	191,932	9.6%	2,006,921
Newport	1,652,491	32.8%	2,509,782	49.8%	873,323	17.3%	5,035,596
Charleston	663,976	29.7%	725,500	32.5%	845,223	37.8%	2,234,699
Other Ports	158,335	25.6%	27,893	4.5%	431,618	69.9%	617,846
TOTAL	3,770,589	38.1%	3,782,377	38.2%	2,342,096	23.7%	9,895,062

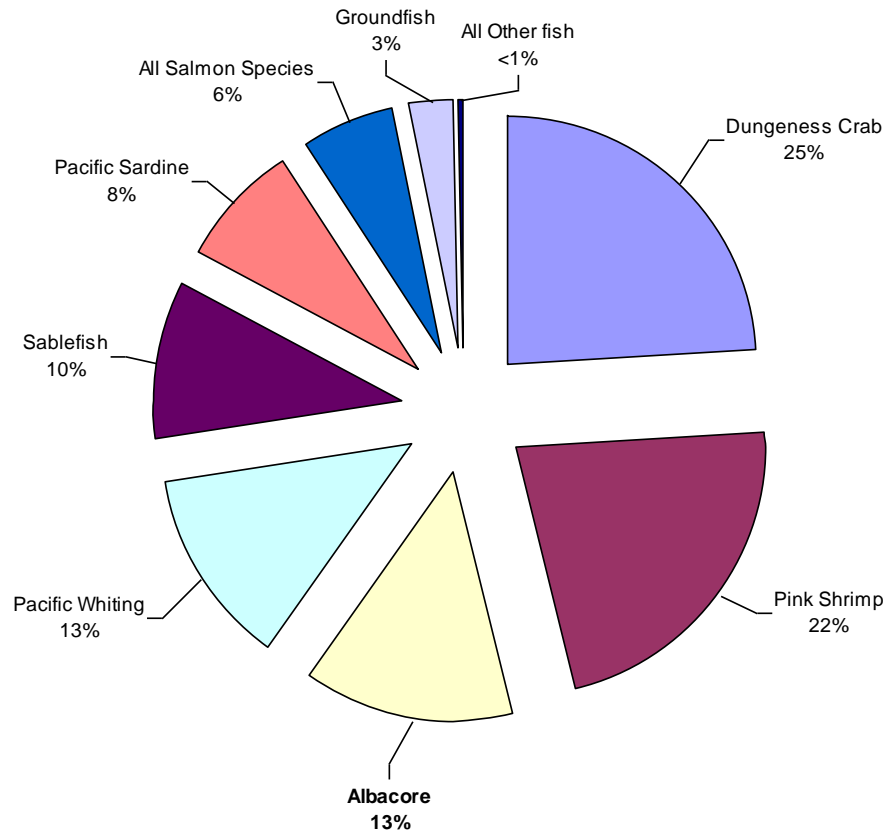


Figure 6 – Oregon marine fish revenue (ex-vessel) for 2012.

2012 COMMERCIAL SAMPLING RESULTS

In 2012, the albacore sampling season began in the first week of July, soon after the start of the fishing season. Dedicated samplers in Astoria, Newport (4 months each), and Charleston (2.25 months) were well prepared before the peak landings occurred in early August, allowing for an overall sampling rate of 63.2%. Additional sampling was conducted by ODFW commercial groundfish port samplers throughout the albacore season when available, as well as before and after the dedicated sampling season. Sampling activities included distribution of logbooks to vessels with valid Highly Migratory Species Permits, logbook envelopes for completed logbooks, providing information to fishers, and measuring albacore for length-frequencies. Table 5 presents a summary of commercial sampling rate information for the 2012 season. Additional statistics required by the contractual agreement with NMFS and PSMFC for albacore sampling funding are presented in Appendix A.

Table 5 – 2012 preliminary Oregon commercial albacore sampling season summary.
 LF = Length frequency.

Port	2012 Landings (pounds)	Pounds Sampled	Sampling Rate (sampled lbs/ landed lbs)	# LF	# Fish	Fish/LF
Astoria	2,006,921	1,529,918	76.2%	69	4,718	68
Gearhart-Seaside	6,931	-	-	-	-	-
Garibaldi	248,195	5,020	2.0%	2	171	86
Pacific City	37,974	-	-	-	-	-
Depoe Bay	4,092	-	-	-	-	-
Newport	5,035,596	3,524,979	70.0%	265	21,805	82
Florence	25,968	-	-	-	-	-
Winchester Bay	169,128	-	-	-	-	-
Charleston	2,234,699	1,156,147	51.7%	88	7,166	81
Port Orford	24,599	-	-	-	-	-
Bandon & Gold Beach*	20,791	-	-	-	-	-
Brookings	80,168	37,254	46.5%	4	210	53
TOTAL	9,895,062	6,253,318	63.2%	428	34,070	80

*These ports are combined for confidentiality

- **2012 Sampling Rate Analysis**

Overall sampling rates for landings were well above the 50% minimum, and the average number of fish per length-frequency was above the 50 fish minimum for the 2012 Oregon commercial albacore season. The three primary tuna sampling ports are Astoria, Newport, and Charleston; smaller ports' tuna landings were occasionally sampled by ODFW commercial groundfish samplers and port biologists when available. Little priority is given to sampling Oregon's smaller ports because of lack of staff to sample at those ports; the overall sampling rate is not typically influenced due to their insignificant landing weights. The tuna sampling rate is determined by the percentage of length-frequency sampled landing weights to total landing weights by port and state.

In addition to the current analysis of sampling rates for minimum sampling percentages, analyzing the difference between the percentage of total weight sampled to the percentage of total vessel trips sampled is important to determine if any sampling bias has occurred (Table 6).

Two possible types of bias can exist in sampling the commercial albacore fleet, and for the purposes of this report will be called 'type A' and 'type B'. Type A bias may indicate samplers focused efforts on vessels with larger amounts of albacore, either because sampling larger offloads were needed to maintain a 50% minimum sampling rate, or simply because the offloads they were present for were larger. Type B bias may indicate samplers focused efforts on obtaining as many length-frequency samples as possible, regardless of the size of offload or specifically targeting smaller offloads, either because larger offloads were missed and more samples were needed to maintain a 50% minimum sample rate, or simply because the offloads they were present for were smaller or randomly sized.

If values that differ from the eight-year averages (2005-2012) by 5% or more are assumed to indicate potential sampling bias, it appears that type A sampling bias possibly occurred in Astoria, as well as all of Oregon (denoted \diamond in Table 7). Astoria had the greatest average landings for 2012 with the two heaviest landings and four out of the five heaviest landings occurring there (Table 8). These top landings in Astoria were all sampled, and likely drove the average difference in sampling rates high enough to alter the Oregon rate towards indication of type A bias. The fact that Astoria's average landing weight was 44% above the Oregon average (6,084 pounds) suggests the type A bias may be anomalous for the port and the state.

Table 6 – Calculation for difference (%L-%T) of landing weight sampling percentage (%L) and vessel trip sampling percentage (%T) for 2012 sampling season. *Oregon includes six sampled trips in Garibaldi and Brookings.

Port	# Trips Sampled	# Trips Total	%T	%L	2012 %L-%T
Astoria	69	183	37.7%	76.2%	38.5%
Newport	265	731	36.3%	70.0%	33.7%
Charleston	88	335	26.3%	51.7%	25.4%
Oregon*	428	1607	26.6%	63.2%	36.6%

Table 7 – Sampling bias calculation for difference of 2005-2012 average %L-%T and 2012 %L-%T.

Port	Average %L-%T	Average %L-%T - 2012 %L-%T
Astoria ◊	24.1%	-14.4%
Newport	31.1%	-2.6%
Charleston	20.7%	-4.7%
Oregon ◊	29.0%	-7.6%

Table 8 – Average landing weights for the primary sampled ports in 2012.

Port	Average Pounds
Astoria	10,944
Newport	6,815
Charleston	6,601

- **2012 Length Frequency Analysis**

A total of 34,070 albacore tuna were measured for length frequencies in the ports of Astoria (Figure 7), Garibaldi, Newport (Figure 8), Charleston (Figure 9), and Brookings. All the sampled ports' length data suggest a similar bimodal distribution; where the primary mode represents a younger age-class of approximately 3.5 years-old, and the secondary mode represents an older age-class of approximately 4.5 years-old (Figure 10; Suda 1966). Although the number of fish sampled in each port varies significantly the distribution and trend appear to be very similar. The overall average length was 69.5 cm which corresponds to an average weight of approximately fifteen pounds based on statistics published by Clemens (1961). Individual figures for Garibaldi and Brookings length data are not provided here due to small sample size.

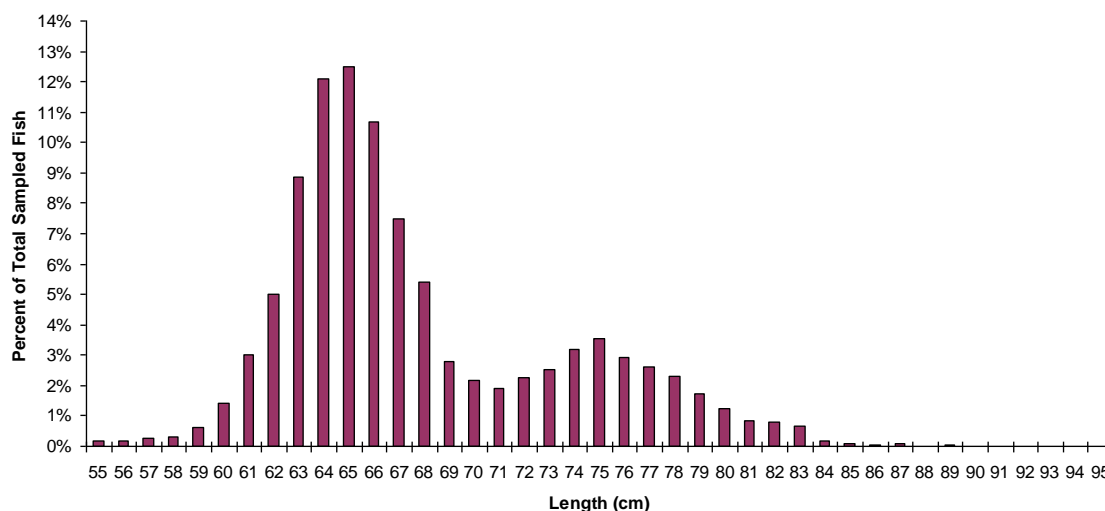


Figure 7 – Length frequency data for Astoria tuna sampling in 2012. Average length = 67.8 cm, n = 4,718.

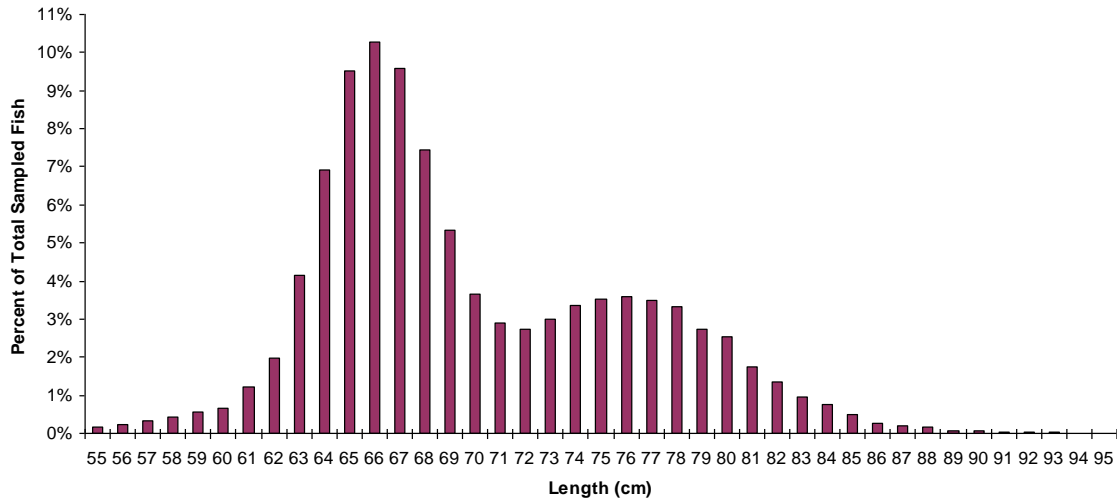


Figure 8 – Length frequency data for Newport tuna sampling in 2012.
Average length = 69.9 cm, n = 21,805.

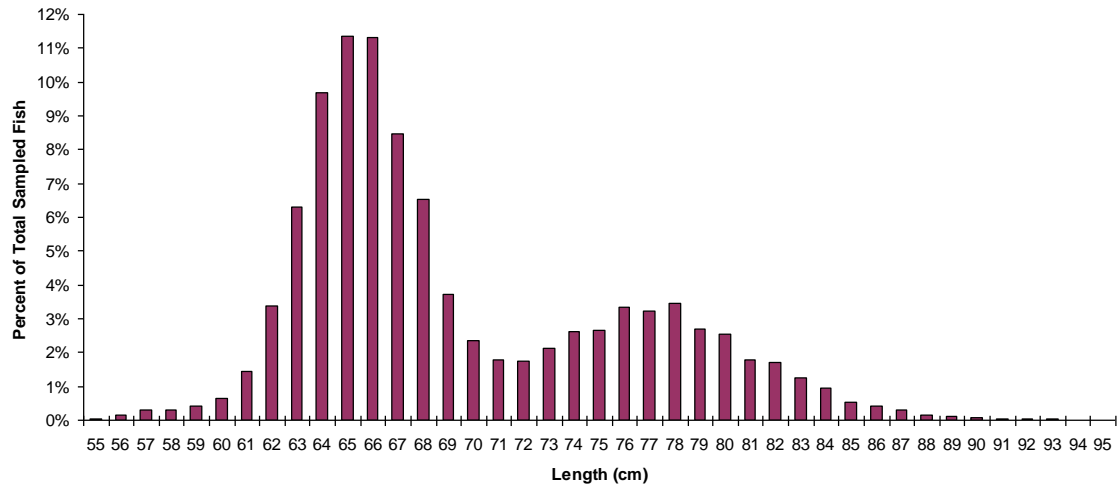


Figure 9 – Length frequency data for Charleston tuna sampling in 2012.
Average length = 69.4 cm, n = 7,166.

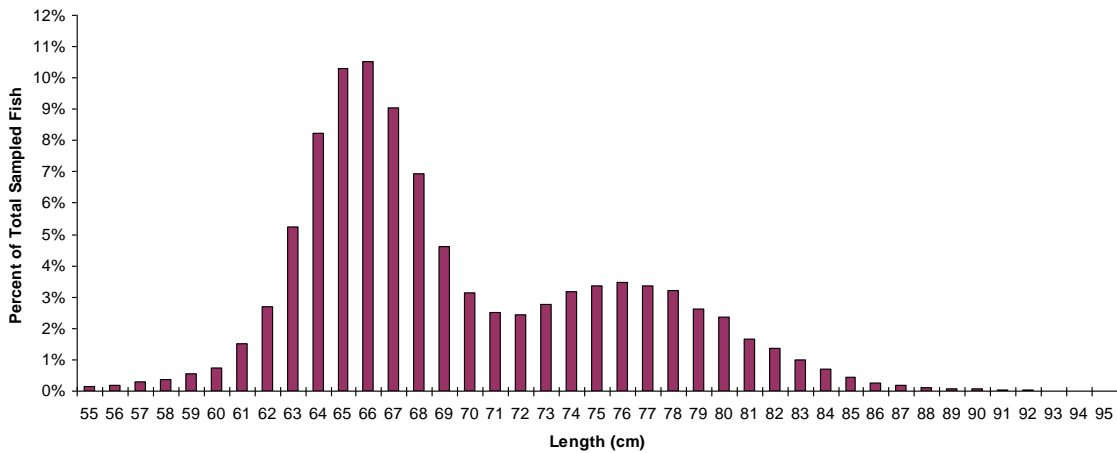


Figure 10 – Length frequency data for all ports combined tuna sampling in 2012.
Average length = 69.5 cm, n = 34,070.

2012 RECREATIONAL FISHERY

Overall, 2012 sport tuna fishermen contributed to the greatest amount of effort and total estimated catch in the history of Oregon’s recreational albacore fishery (Figures 11 & 12). The first sampled recreational albacore were landed in late June, primarily in Depoe Bay and Newport. July was the peak month for private vessels’ effort and catch, while August was the peak month for charter vessels’ effort and catch. Access to albacore for recreational vessels off Oregon can be highly variable, depending on weather conditions and distance to the fish. Although the 2012 season resulted in the most tuna angler trips and number of albacore observed, the catch per unit effort was only slightly above the average.

Directed charter fishing effort for albacore totaled a record high of 3,773 angler trips in 2012, a 28% increase from the five-year average of 2,700 angler trips (Table 9). Directed private albacore trips totaled a record high of 12,240, a 31% increase from the five-year average of 8,427 angler trips (Table 10).

Directed charter catch for albacore totaled a record high of 13,129 fish in 2012, a 39% increase from the five-year average at 7,965 fish (Table 11). Directed private albacore catch totaled a record high of 50,038 fish, a 37% increase from the five-year average of 31,361 fish (Table 12).

Combined charter and private albacore landings for 2012 indicate that Newport, Depoe Bay, and Charleston were the top three ports with 76% of all Oregon’s recreational catch (Figure 13). These three top recreational ports landed a combined 42% more fish than their five-year average.

Charter vessel catch-per-unit of effort (CPUE) in 2012 was calculated to 3.5 albacore per angler, while the private vessel CPUE was calculated to 4.1 albacore per angler. The combined CPUE for Oregon’s recreational season was calculated to 3.9 albacore per angler (Table 13). The 2012 CPUE of 3.9 is ranked third over the last ten years, behind 2004 (4.2) and 2007 (4.4).

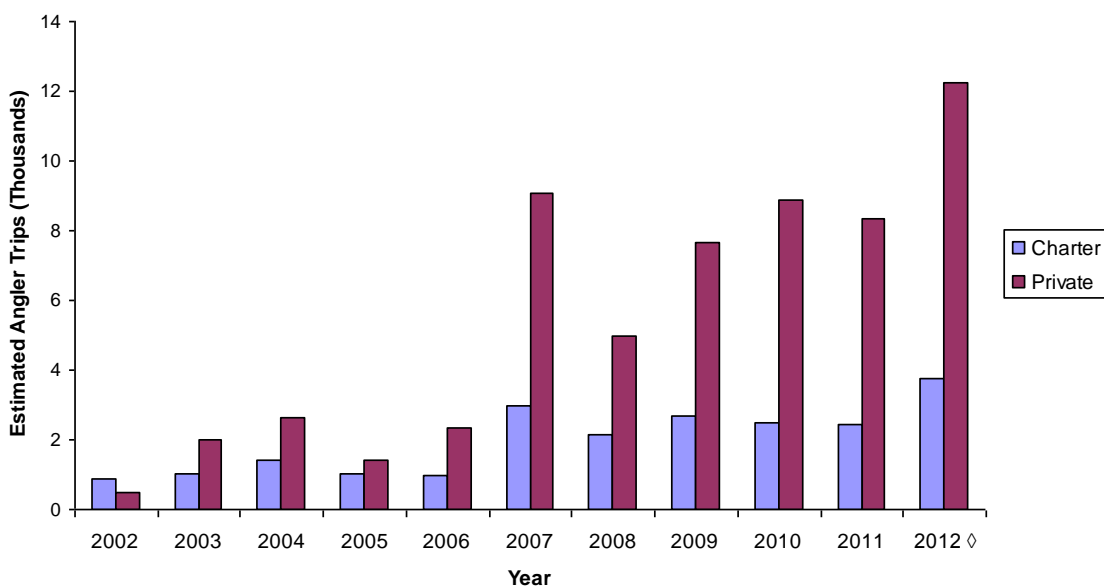


Figure 11 – Oregon recreational albacore fishing effort (angler trips) separated by vessel type, 2002-2012. ◇ 2012 totals are preliminary.

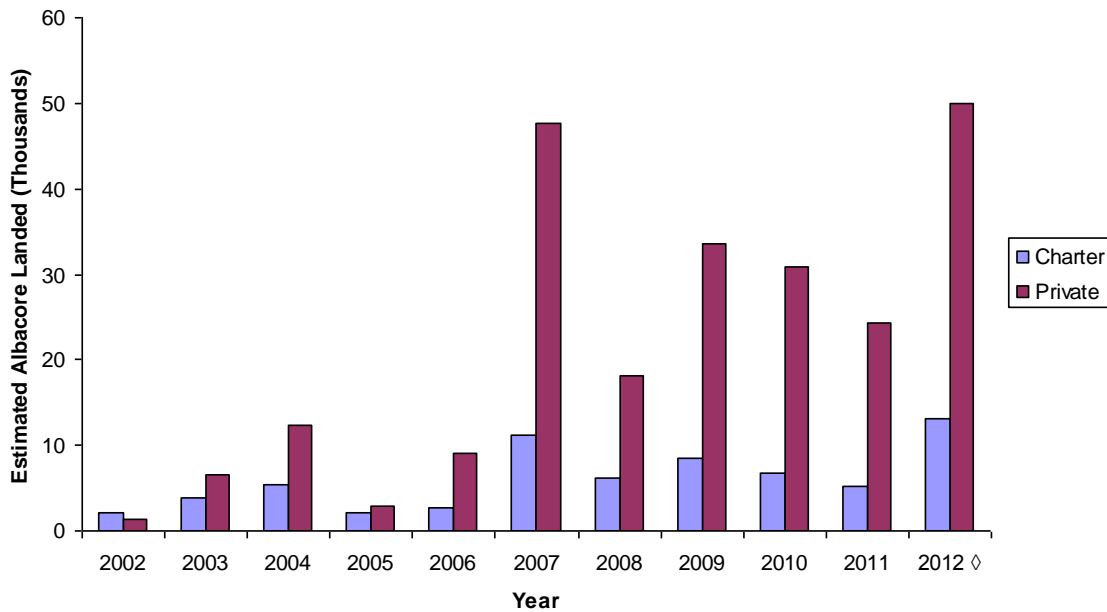


Figure 12 – Oregon recreational albacore catch (estimated number of fish) by vessel type, 2002-2012. ◇ 2012 totals are preliminary.

Table 9 – Oregon charter vessel albacore fishing effort (angler trips) by port, 2002-2012.

Port	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 ◇	5-Year Average ¥
Astoria	0	28	46	72	108	311	390	330	399	193	407	344
Garibaldi	50	31	64	80	38	111	164	117	212	150	310	191
P. City	0	0	12	5	0	9	5	1	8	0	7	4
D. Bay	221	110	256	151	94	683	245	432	595	503	1,169	589
Newport	587	583	722	611	646	1,463	1,089	1,260	970	1,217	1,393	1,186
W. Bay	25	109	160	77	0	12	0	12	0	0	-	3
Charleston	0	55	68	0	10	69	109	240	142	206	240	187
Bandon	0	36	48	14	83	231	107	222	149	166	247	178
G. Beach	NS	14	NS	0	0	30	0	48	0	0	-	12
Brookings	0	51	46	12	0	57	14	20	0	14	-	12
Total	883	1,017	1,422	1,022	979	2,976	2,123	2,682	2,475	2,449	3,773	2,700

◇ 2012 Preliminary Totals

¥ 5-year average includes 2008-2012

NS Indicates no port samplers present that year

Table 10 - Oregon private vessel albacore fishing effort (angler trips) by port, 2002-2012.

Port	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 ◇	5-Year Average ¥
Astoria	19	77	95	186	187	338	422	59	242	97	161	196
Garibaldi	49	94	88	120	641	1,263	960	1,059	2,535	579	2075	1,442
P. City	12	134	132	58	80	209	35	92	246	80	330	157
D. Bay	100	227	419	406	385	1,644	743	694	1,067	930	1760	1,039
Newport	132	224	697	586	644	2,415	1,475	1,991	2,959	2,519	3807	2,550
Florence	0	NS	0	0	NS	30	67	15	16	24	28	30
W. Bay	0	44	98	20	12	367	231	370	177	475	403	331
Charleston	103	528	561	19	144	1,712	960	2,962	1,526	2,871	3503	2,364
Bandon	0	4	53	0	76	132	0	239	19	41	152	90
P. Orford	NS	10	NS	NS	NS	NS	NS	NS	NS	53	-	53
G. Beach	NS	55	NS	0	6	12	0	28	0	108	-	34
Brookings	51	610	505	39	179	932	85	166	115	564	21	190
Total	466	2,007	2,648	1,434	2,354	9,054	4,978	7,675	8,902	8,341	12,240	8,427

◇ 2012 Preliminary Totals

¥ 5-year average includes 2008-2012

NS Indicates no port samplers present that year

Table 11 - Oregon charter vessel albacore catch (number of fish) by port, 2002-2012.

Port	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 ◇	5-Year Average ¥
Astoria	0	106	172	275	231	907	1,167	1,016	1,294	366	1,386	1,046
Garibaldi	144	119	186	170	204	628	440	322	651	149	1,061	525
P. City	0	0	62	3	0	70	98	4	20	0	52	35
D. Bay	390	254	572	186	113	2,139	670	942	1,552	858	3,387	1,482
Newport	1,612	1,978	2,934	1,043	1,653	4,920	3,126	3,419	2,364	2,231	4,880	3,204
W. Bay	15	555	782	327	0	36	0	31	0	0	-	8
Charleston	0	281	192	0	50	301	269	850	410	537	836	580
Bandon	0	243	216	46	398	1,607	333	1,727	510	1,034	1527	1,026
G. Beach	NS	147	NS	0	0	256	0	161	0	0	-	40
Brookings	0	91	327	3	0	319	81	41	0	25	-	37
Total	2,161	3,774	5,443	2,053	2,649	11,183	6,184	8,513	6,801	5,200	13,129	7,965

◇ 2012 Preliminary Totals

¥ 5-year average includes 2008-2012

NS Indicates no port samplers present that year

Table 12 - Oregon private vessel albacore catch (number of fish) by port, 2002-2012.

Port	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 \diamond	5-Year Average \yen
Astoria	16	496	499	317	804	1,832	1,809	247	344	208	920	706
Garibaldi	60	498	819	155	3,160	4,943	3,993	4,119	10,309	539	6,405	5,073
P. City	7	369	1,932	53	92	1,910	314	767	1,468	387	1,697	927
D. Bay	490	1,230	2,259	943	1,413	9,100	2,666	3,458	3,477	2,277	6,995	3,775
Newport	562	762	2,894	1,472	1,875	14,825	6,267	10,887	9,911	5,843	17,187	10,019
Florence	0	NS	0	0	NS	65	287	41	32	13	36	82
W. Bay	0	191	624	8	0	1,571	460	969	547	1,281	1,229	897
Charleston	72	811	2,258	12	816	8,370	2,153	12,036	4,617	10,629	14,875	8,862
Bandon	0	2	167	0	517	624	0	813	28	115	685	328
P. Orford	NS	46	NS	NS	NS	NS	NS	NS	NS	424	-	424
G. Beach	NS	109	NS	0	0	210	0	21	0	967	-	247
Brookings	208	1,962	812	2	303	4,289	136	184	187	1,539	9	411
Total	1,415	6,476	12,264	2,962	8,980	47,739	18,085	33,542	30,920	24,222	50,038	31,361

\diamond 2012 Preliminary Totals

\yen 5-year average includes 2008-2012

NS Indicates no port samplers present that year

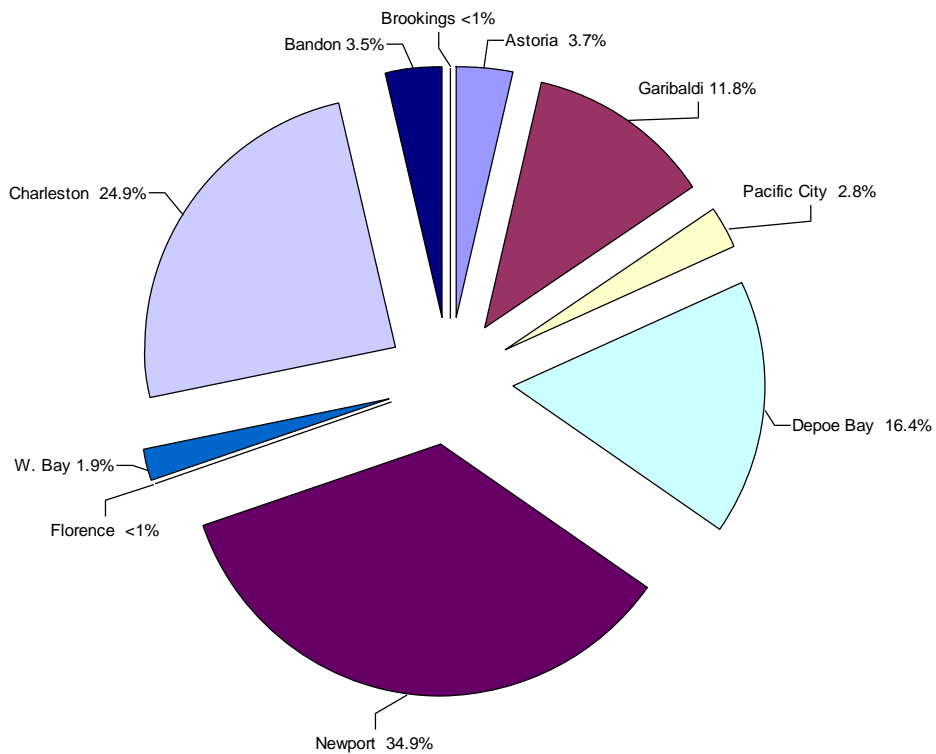


Figure 13 – Percentage of Oregon’s recreational albacore catch (combined charter and private) by port, 2012.

Table 13 – Oregon’s preliminary 2012 recreational catch, effort, and CPUE (catch/effort) by vessel type, port total, and statewide total.

Port	Catch (# of Albacore)			Effort (Angler Trips)			Catch per Unit of Effort		
	Private	Charter	Total	Private	Charter	Total	Private	Charter	Total
Astoria	920	1,386	2,306	161	407	568	5.7	3.4	4.1
Garibaldi	6,405	1,061	7,466	2075	310	2,385	3.1	3.4	3.1
Pacific City	1,697	52	1,749	330	7	337	5.1	7.4	5.2
Depoe Bay	6,995	3,387	10,382	1760	1,169	2,929	4.0	2.9	3.5
Newport	17,187	4,880	22,067	3807	1,393	5,200	4.5	3.5	4.2
Florence	36	-	36	28	-	28	1.3	-	1.3
W. Bay	1,229	-	1,229	403	-	403	3.0	-	3.0
Charleston	14,875	836	15,711	3503	240	3,743	4.2	3.5	4.2
Bandon	685	1527	2,212	152	247	399	4.5	6.2	5.5
P. Orford	-	-	-	-	-	-	-	-	-
G. Beach	-	-	-	-	-	-	-	-	-
Brookings	9	-	9	21	-	21	0.4	-	0.4
Total	50,038	13,129	63,167	12,240	3,773	16,013	4.1	3.5	3.9

• **Recreational Length Frequency Analysis**

Length frequency information was collected on recreationally caught albacore from most of Oregon’s ports by ORBS (Ocean Recreational Boat Survey) port samplers in 2012. A total of 2,621 tuna were measured giving an average length of 72.8 cm, which converts to approximately 17.5 pounds (Clemens 1961).

Figure 14 shows the length frequency histogram of non-sorted, randomly sampled albacore during the 2012 recreational season. The length data suggests a bimodal distribution; where the primary mode represents an older age-class of approximately 4.5 years-old, and the secondary mode represents a younger age-class of approximately 3.5 years-old (Suda 1966).

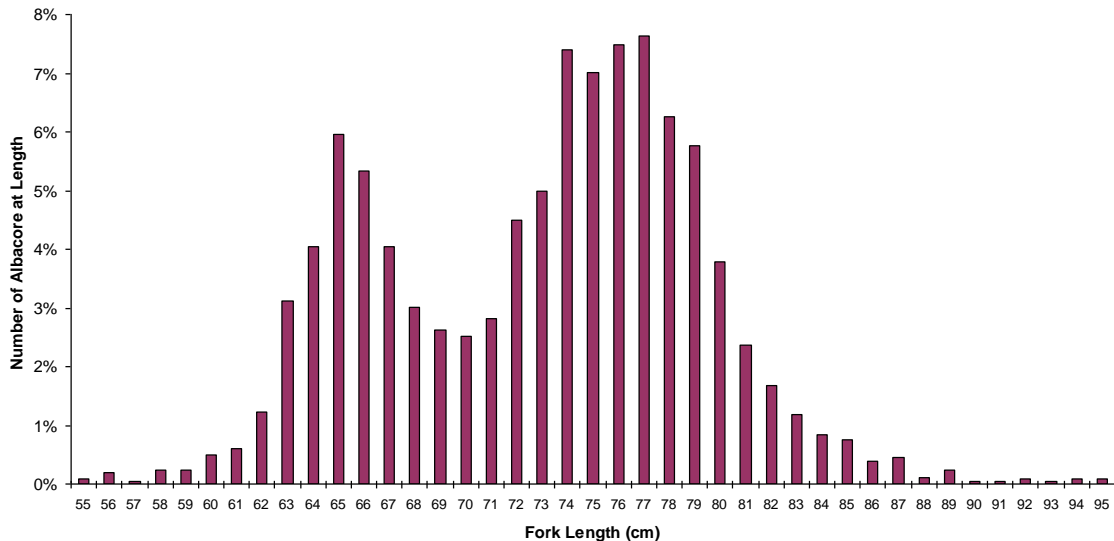


Figure 14 - Length frequency data for all ports sampled for tuna by ORBS in 2012. Average length = 72.8 cm, n = 2,621.

SUMMARY

Oregon's preliminary commercial albacore landings in 2012 totaled 9,895,062 pounds, a 2% increase from 2011, and 2.7% greater than the ten-year average (2003-2012). Ex-vessel revenues from albacore totaled \$15,089,164, a 20% decrease from the 2011 record season, but 28% greater than the ten-year average (2003-2012). Sampling goals were met and exceeded for the three primary ports, and Oregon overall. Recreational fishers contributed to a record high effort and season, landing an estimated 63,167 total albacore weighing approximately 1,105,000 pounds.

In 2011, forty Canadian vessels landed 22% of the total albacore landings in Oregon. It appears that approximately four of those vessels were re-designated as U.S. vessels for 2012. However, the total number of vessels increased by three and the overall landings increased by 2% for 2012 without the Canadian fleet. The reasons for this positive shift are unclear; further analysis at a broader level may be needed to form conclusions.

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APPENDIX A

2012 Summary Statistics for Oregon's Albacore Port Sampling Program

PORT NAME	Astoria	Garibaldi	Newport	Winchester Bay	Charleston	Brookings	All Other Oregon Ports	TOTAL
NO. OF LOGBOOKS ISSUED	5	0	6	0	12	0	0	23
LBS LANDED BY COMMERCIAL SAMPLED VESSELS	1,529,918	5,020	3,524,979	0	1,156,147	37,254	0	6,253,318
NO. FISH MEASURED	4,718	171	21,805	0	7,166	210	0	34,070
NO. COMMERCIAL TRIPS SAMPLED FOR LENGTH-FREQUENCY	69	2	265	0	88	4	0	428
TOTAL NO. OF COMMERCIAL TRIPS/LANDINGS	183	199	731	31	335	13	115	1,607
TOTAL NO. OF COMMERCIAL VESSELS Ω	72	51	219	13	132	3	49	447
LBS LANDED BY COMMERCIAL JIG/TROLL VESSELS	1,954,836	248,195	4,667,967	169,128	2,187,851	80,168	120,355	9,428,500
LBS LANDED BY COMMERCIAL BAIT VESSELS	41,090	0	292,430	0	0	0	0	333,520
LBS LANDED BY COMMERCIAL JIG&BAIT VESSELS	10,995	0	75,199	0	46,848	0	0	133,042
LBS LANDED BY COMMERCIAL GILLNET VESSELS	0	0	0	0	0	0	0	0
LBS LANDED BY SPORT VESSELS**	40,355	130,655	386,173	21,508	274,943	158	251,633	1,105,425
LBS LANDED BY OTHER VESSELS	0	0	0	0	0	0	0	0
PERCENT COMMERCIAL COVERAGE (weight)	76%	2%	70%	0%	52%	47%	0%	63%
PERCENT COMMERCIAL COVERAGE (trips)	38%	<1%	36%	0%	26%	31%	0%	27%

Ω Several vessels made trips into multiple ports, so total numbers of vessels at each port will add up to more than Oregon's total.

** Sport-caught albacore weight estimated using Clemens, 1961.

