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Review of the U.S. Albacore Surface Fishery in the North Pacific in 2010¹

John Childers, Suzy Kohin and Amy Betcher

Southwest Fisheries Science Center National Marine Fisheries Service, NOAA La Jolla, CA 92037

Email: john.childers@noaa.gov



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Introduction

In the U.S., north Pacific albacore are targeted commercially by a surface (troll and pole-andline) fishery and a high seas longline fishery and recreationally by sportfishers. Annual U.S. landings of albacore for the past 10 years (2001-2010) have averaged $13,795 \pm 1,710$ metric tons (t) and represent roughly 17% of the total north Pacific albacore landings. Of the U.S. fisheries, the commercial surface (troll and pole-and-line) is the largest averaging 87% of the annual landings over the same period, followed by the recreational fishery with roughly 9% and finally the longline fishery taking just 3% of the annual landings on average. Other gears that catch albacore in small amounts include pelagic drift gill nets, purse seines and an artisanal troll/handline fishery near Hawaii. Data on total U.S albacore catch in the North Pacific for 2001 through 2010 is presented in Table 1 below.

Cooperative surveys between National Marine Fisheries Service (NMFS) and the American Fishermen's Research Foundation (AFRF) began in 1971 which led to the expansion of the U.S. troll fishery to areas north of Hawaii and west of the International Dateline (Laurs et al., 1975). The North Pacific albacore troll season can begin as early as mid-April in areas northwest of Midway atoll. In July and August, fishing effort expands to the east, towards the west coast of North America.

Gear Use

U.S. troll and pole-and-line vessels target the same fish during similar times and in similar areas. The use of pole-and-line gear by the U.S. fleet in recent years has increased in response to improved harvest rates by this gear type during certain times of the year. Many vessels have the capability to switch between gear types and commonly use both gear types during a single trip. This increase use of pole-and-line gear and increased landings of albacore caught with this gear have led to need for reporting catch statistics separately for the two gear types.

Total Catch and Effort

In recent years reduced availability of albacore in mid-Pacific waters and increased operating costs have resulted in more fishing effort being expended in productive areas off the coasts of Oregon state, Washington state, and Vancouver Island, Canada. Less effort has been expended in high seas areas of the mid-Pacific. An estimated 650 U.S. troll vessels participated in the U.S. albacore troll fishery in 2010, an 8 percent decrease from the estimated 710 vessels that participated in the 2009 albacore troll fishery. U.S. albacore troll vessels harvested approximately 10,130 t of albacore in the 2010 U.S. albacore troll fishery, a 4 percent decrease from the amount harvested in 2009. U.S. vessels that used pole-and-line gear to catch albacore harvested 1,874 t in 2010 compared to 2,218 t harvested in 2009.

Catch Distribution

Distribution of catch by U.S. troll vessels has been narrowly distributed in the eastern North Pacific in recent years compared to previous years. The vast majority of effort is concentrated off the coasts of Washington state and Oregon state.

Size Composition

The size composition of catch by the U.S. albacore troll fleet is narrowly distributed as this fishery harvests juvenile fish in a narrow size range. The size composition of catch from the

2010 U.S. albacore troll fishery shows 2 modes, one centered at approximately 65 cm fork length (FL) and the other centered at approximately 72 cm FL. This is very similar to the size distribution of the catches made in 2009.



Size composition of albacore catch from the 2010 U.S. commercial surface fishery.

Conclusion

Total catch and effort of the U.S. albacore troll fishery in the North Pacific in 2010 decreased slightly from the values in 2009. Distribution of catch and effort has remained stable in recent years. Size composition has also remained relatively constant in recent years. The troll/pole-and-line fishery harvests a narrow range of sizes from the North Pacific albacore stock.

Table 1: U.S. north Pacific albacore catch (in metric tons) by fishery, 2001-2010. Blank indicates no effort. Zero indicates less than 1 metric ton. Provisional estimates in ().

Year	Purse Seine	Gill Net	Pole and Line ¹	Albacore Troll ²	Tropical Troll & Handline	Sport	Longline	Other	Total
2001	51	94	139	11,210	194	1,635	1,295		14,618
2002	4	30	381	10,387	235	2,357	525		13,919
2003	44	16	59	14,102	85	2,214	524		17,044
2004	1	12	127	13,346	157	1,506	361		15,511
2005		20	66	8,413	175	1,719	296		10,689
2006		3	23	12,524	95	385	270		13,300
2007		4	21	11,887	98	1,225	250		13,485
2008	0	1	1,472	10,289	29	415	353	0	12,559
2009	39	3	2,218	10,575	99	677	203	0	13,814
2010	(18)	(3)	(1,874)	(10,130)	(99)	(685)	(203)	(2)	13,013

¹Albacore pole-and-line catches for 2008 - 2010 are estimated from new procedures.

²Albacore troll catches prior to 2008 contain an unknown proportion of pole and line catch.

Literature Cited

Laurs, R.M., R.J. Lynn, and R.N. Nishimoto. 1975. Report of joint National Marine Fisheries Service – American Fishermen's Research Foundation albacore studies conducted during 1975. NMFS-SWFC Admin. Report LJ-75-84. 49 pp.