

N P A F C DOCUMENT	
Ser. No.	166
Rev. No.	

**Summary Report on the Status of Groundfish Resources
of the Eastern Bering Sea and Aleutian Islands in 1995**

by

The Staff of the
Resource Ecology and Fisheries Management Division
Alaska Fisheries Science Center
National Marine Fisheries Service
7600 Sand Point Way NE.
Seattle, WA 98115

Submitted to the

NORTH PACIFIC ANADROMOUS FISH COMMISSION

by the

Unites States Party

NOVEMBER 1995

THIS PAPER MAY BE CITED IN THE FOLLOWING MANNER:

AFSC. 1995. Summary report on the status of groundfish resources of the eastern Bering Sea and Aleutian Islands in 1995. Unpubl. manusc., 3 p. (Document submitted to the annual meeting of the North Pacific Anadromous Fish Commission, October 1995) Alaska Fish. Sci. Cent., Natl. Mar. Fish. Serv., 7600 Sand Point Way N.E., Seattle, WA 98115.

Summary Report on the Status of Groundfish Resources of the Eastern Bering Sea and Aleutian Islands in 1995

A summary of species-by-species biomass, acceptable biological catch (ABC), and harvest levels is presented in Table 1. The following overview is based upon *Our Living Oceans: Report on U.S. Living Marine Resources in 1995* (in press):

The average Eastern Bering Sea-Aleutian Islands groundfish catch during 1992-94 was about 1.9 million t. The total catch in 1994 was 1.86 million t, valued at \$332 million (ex-vessel). The dominant species harvested were walleye pollock (1.28 million t valued at \$210 million); Pacific cod (197,000 t valued at \$65 million), and yellowfin sole (145,000 t valued at \$18 million).

Groundfish populations have been maintained at high levels since implementation of the MFCMA. Their long-term potential yield (LTPY) is about 3.52 million t. The acceptable biological catch (ABC) of 3.07 million t for 1994 is slightly below LTPY. This potential, however, has not been fully utilized because catch quotas cannot exceed the optimum yield (OY) set by the fishery management plan (FMP) at 2.0 million t out of consideration for both socioeconomic and biological factors.

Walleye Pollock: Pollock produce the largest catch of any single species inhabiting the U.S. EEZ. The three main stocks, in decreasing order of abundance, are: Eastern Bering Sea (EBS) stocks, Aleutian Basin (AB) stock, and the Aleutian Islands (AI) stock. The EBS stock, sustained by the strong 1989 and 1992 year classes, is moderately high (near the level that produces LTPY) and fully utilized. The AI stock is believed to be in roughly the same condition as the EBS stock.

Until 1992, another large fishery targeted the portion of the AB stock residing outside of the U.S. and Russian EEZs in the "Donut hole" of the central Bering Sea. However, historical catches from this stock were apparently too high (well over 1,000,000 t throughout the late 1980s) and not sustainable. The abundance of the AB stock was consequently greatly diminished, and all fishing ceased in 1993.

In addition to the interjurisdictional problems previously posed by the Donut hole fishery, it now appears that a large component of the pollock population found within Russian waters is of U.S. origin. As pollock abundance in the Western Bering Sea decreases, Russian effort may shift eastward (toward the U.S.) within the Russian EEZ. To the extent that this occurs, the probability of harvests from Russian waters affecting future yields within the U.S. EEZ will increase.

Pacific cod: Pacific cod abundance remained high and stable throughout the 1980s. Although a string of below-average year classes (those spawned in 1986-88) led to a downturn in abundance during the early 1990s, this trend has been reversed due to a subsequent string of above-average year classes (those spawned in 1989-91). The cod stock is now considered to be healthy, increasing in abundance, and underutilized.

Flatfishes: All flatfish species are underutilized and, with the exception of Greenland turbot, average-to-high in abundance. The underutilization of flatfish results from the FMP requirement to maintain overall groundfish catches within the two million ton OY cap and a desire to prevent excessive incidental catches of Pacific halibut and king and Tanner crabs. Yellowfin sole is the most abundant of the flatfishes. Within the overall groundfish complex, yellowfin sole ranks second in term of abundance, behind walleye pollock. In terms of harvest, yellowfin sole ranks third among the groundfish complex behind pollock and Pacific cod. Greenland turbot, the only depressed flatfish stock, is expected to decline further during the rest of the 1990s as a result of poor spawning success.

Among the other flatfish species, abundance continues to be high/increasing in the cases of arrowtooth flounder and rock sole, and high/stable in the cases of flathead sole, Alaska plaice, and other flatfishes. Rock sole is now the second most abundant of the flatfishes and the third most abundant of all groundfish species, having increased steadily throughout the survey time series (i.e., since 1975).

Sablefish: Sablefish (or blackcod) is a valuable species caught mostly with longline and pot gear in depths greater than those fished by trawlers. Sablefish is considered to be a single stock from the Bering Sea-Aleutian Islands (BSAI) region to the Gulf of Alaska. The BSAI population declined substantially in 1990, perhaps due to migration into the Gulf of Alaska, and has remained at low-to-average levels since. Recent recruitment has been relatively weak. Sablefish is underutilized.

Rockfish: Rockfishes are assessed and managed as two major groups: Pacific ocean perch (POP) and "other rockfish." POP abundance dropped sharply owing to intensive foreign fisheries in the 1960s and remained low into the early 1980s. In recent years, catch levels have been set well below ABC to help rebuild the stocks. The POP group is now recovering and is considered fully utilized.

Atka Mackerel: The Atka mackerel stock occurs mainly in the Aleutian Islands region. Previously, ABC for this species had been set conservatively low because of uncertainty regarding its abundance. However, trawl surveys conducted by NMFS in 1986 and 1991 have confirmed a higher abundance than was previously realized, and a gradual phase-in of substantially higher ABCs has been undertaken since 1992. Since the ABC phase-in has not yet been completed, the stock is considered underutilized.

Other Species: In recent years, "other species" catches have represented 1% or less of the total groundfish catch. Sculpins and skates probably constitute most of this resource, but the abundance of pelagic squids, smelts, and sharks is largely unknown. The ABC has been set at the average catch level.

Table 1. Biomass, acceptable biological catch (ABC), and catch for groundfish in the eastern Bering Sea (BS), Aleutian Islands (AI), or combined BS and AI regions (BSA), as appropriate.

<u>Species</u>	<u>Area</u>	<u>Biomass</u>	<u>ABC</u>	<u>Catch (1994)</u>	<u>Catch (1995)</u>
Walleye pollock	BS	8,080,000	1,250,000	1,362,694	788,322
	AI	189,000	56,600	58,704	63,332
Pacific cod	BSA	1,620,000	328,000	196,572	195,881
Yellowfin sole	BSA	2,770,000	277,000	144,544	81,870
Greenland turbot	BSA	150,000	18,500	7,379	7,366
Arrowtooth flounder	BSA	625,000	113,000	14,376	7,039
Rock sole	BSA	2,330,000	347,000	60,583	53,263
Flathead sole	BSA	725,000	138,000		
Other flatfish	BSA	677,000	117,000		
Flathead+Other flat.	BSA			29,774	27,036
Sablefish	BS	16,500	1,600	699	738
	AI	13,900	2,200	1,770	841
POP Complex					
True POP	BS	47,100	1,850		
Other red rockfish	BS	29,700	1,400		
Total complex	BS			1,906	661
True POP	AI	252,000	10,500		
Sharp/northern	AI	94,500	5,670		
Short/rougheye	AI	45,000	1,220		
Total complex	AI			16,959	14,874
Other rockfish	BS	7,300	365	260	310
	AI	15,500	770	300	179
Atka mackerel	BSA	578,000	145,000	69,591	81,192
Squid	BSA		3,110	588	162
Other species	BSA	682,000	27,600	24,532	17,773

Notes: All figures are in metric tons. Biomass ABC values refer to the most current estimates available. The "POP complex" includes Pacific ocean perch plus sharpchin, northern, shorttraker, and rougheye rockfish. Catch data for 1995 are current through August.