

6. Gulf of Alaska Arrowtooth Flounder (Executive Summary)

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6.1 Introduction

Arrowtooth flounder has been moved to a biennial stock assessment schedule to coincide with new survey data. On alternate (even) years we will present an executive summary with last year's key assessment parameters and projections for this year. A discussion at the September 2006 Groundfish Plan Team meetings concluded the following two important points for updating information in off-year assessments:

- 1) Anytime the assessment model is re-run and presented in the SAFE Report, a full assessment document **must** be produced.
- 2) The single-species projection model **may** be re-run using new catch data without re-running the assessment model.

Therefore, as opposed to 2005, we will not be running the model with updated catch information, but will run the single-species projection model with the updated catch information and present those results with last year's projection results. This projection is based on the 2005 model results. For further information about the model, last year's full stock assessment is on the web (Turnock et al. 2005, <http://www.afsc.noaa.gov/refm/docs/2005/GOAatf.pdf>).

6.2 Updated catch and projection

Arrowtooth is in Tier 3a. The only new information that is updated in the projection is the 2005 catch (19,770 t) and the best estimate of the 2006 catch (27,230 t as of Oct. 28, 2006). For the 2007 fishery, we recommend the ABC of 184,008 t from the updated projection. This ABC is similar to last year's recommended ABC for 2007 of 185,403 mt. The corresponding reference values for arrowtooth flounder are summarized below. The stock is not overfished, nor is it approaching overfishing status. The primary reference values are shown in the following table, with the recommended values in bold:

	Last year's projection-not updated		This year's projection-updated	
	2006	2007	2007*	2008
$B_{40\%}$ (t)	545,926	545,926	545,926	545,926
Female Spawning Biomass (t)	1,173,030	1,254,080	1,243,630	1,298,000
F_{ABC} (maximum allowable= $F_{40\%}$)	0.142	0.142	0.142	0.142
F_{OFL} ($F_{35\%}$)	0.168	0.168	0.168	0.168
$ABC_{F40\%}$ (t yield at $F_{40\%}=F_{max}$)	177,844	185,403	184,008	186,763
OFL (t, yield at $F_{35\%}$)	207,678	216,500	214,828	218,020

6.3 Area Apportionment

The recommended apportionment percentages are identical to last year, because there is no new survey information. The following table shows the recommended apportionment for 2007:

Area:	West		Southeast		Total
	Western	Central	Yakutat	Outside	
Apportionment (%)	11.3	75.9	9	3.8	100
Area ABC (mt)	20,852	139,583	16,507	7,067	184,008

6.4 Research Priorities

Analysis of the herding and escapement studies for arrowtooth would result in improved estimates of selectivities and catchability. Otoliths have been aged through the 2003 survey; continued aging will allow monitoring of growth.

6.5 Summaries for Plan Team

Species	Year	Biomass ¹	OFL ²	ABC ²	TAC ²	Catch ³
Arrowtooth flounder	2005	2,109,700	253,900	216,900	38,000	19,770
	2006	2,138,660	207,678	177,844	38,000	27,230
	2007	2,146,360	214,828	184,008		
	2008	2,147,920	218,020	186,763		

¹Total biomass from the age-structured model (2005) or projection model (2006-2008). ²As published in the Federal Register (2005, 2006) or as recommended based on the projection model (2007, 2008). ³2006 catch as of Oct. 28, 2006.

Stock/ Assemblage	Area	2006				2007		2008	
		OFL ¹	ABC ¹	TAC ¹	Catch ²	OFL	ABC	OFL	ABC
Arrowtooth flounder	W	--	26,250	8,000	1,956	--	20,852	--	21,164
	C	--	168,950	25,000	25,199	--	139,583	--	141,672
	WYAK	--	11,790	2,500	25	--	16,507	--	16,754
	SEO	--	9,910	2.5	50	--	7,067	--	7,172
	Total		207,678	177,844	38,000	27,230	214,828	184,008	218,020

¹As published in the Federal Register. ²As of Oct. 28, 2006.

Note: Tables of ABCs, OFLs, and TACs published in the Federal Register are available for:

2005: http://www.fakr.noaa.gov/sustainablefisheries/specs05_06/goatable1.pdf

2006: http://www.fakr.noaa.gov/sustainablefisheries/specs06_07/goatable1.pdf