

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver *Chris*
Executive Director

DATE: November 25, 2002

SUBJECT: Improved Retention and Utilization (IR/IU) for flatfish

ESTIMATED TIME 1 HOURS

ACTION REQUIRED

Receive report from IR/IU Technical Committee

BACKGROUND

In October the Council voted to delay implementation of IR/IU flatfish regulations for the BSAI until June 1, 2004, with final action scheduled in April 2003. At the same time the Council initiated analyses of four trailing amendments as a means to accomplish bycatch reductions and facilitate reductions in flatfish discards. Amendment A would establish prohibited species bycatch reduction cooperatives operating in the BSAI. Amendment B would create bycatch caps (discard caps) for the flatfish fisheries in the BSAI. Amendment C would establish minimum groundfish retention standards as an alternative to flatfish retention requirements in the BSAI. Amendment D would establish regulatory process for the routine review of flatfish bycatch in the BSAI and GOA fisheries and the exemption of fisheries with less than 5% bycatch of IR/IU flatfish from flatfish retention and utilization rules. Amendment A and B would be completed as soon as practicable and Amendments C and D would be expedited for final action in April 2003. The final October 2002 motion is attached as Item C-5(a).

The IR/IU Technical Committee met via teleconference on October 25, 2002. The teleconference focused on just a few issues. The first was staffing and timing of the trailing amendments. The analysis for Amendment A would be primarily contracted to Northern Economics and MRAG for a tentative completion date of April 2003. Amendments C and D will be completed by Council and NMFS staff, also with contract help, for initial review in February 2003, as instructed by Council.

The Committee then focused their attention on Amendment C. Specifically, the Committee requested from staff tables showing discards and retention rates by target species from 1995 to 2001 to assist in determining minimum groundfish retention standards. To help facilitate discussions on minimum groundfish retention standards, staff also included additional retention and discard data by sector, and graphs showing a distribution of vessels relative to discards for each sector and target from 1999 thorough 2001. The tables and graphs are attached as Item C-5(b). The Committee also requested an opinion from NOAA GC and NMFS Enforcement concerning data used to enforce the minimum groundfish retention standard. A letter outlining these concerns and requesting guidance was sent on November 13, 2002 to NOAA GC and Enforcement. The letter is attached as Item C-5(c). The Committee agreed to meet again via teleconference on November 26 to discuss the analysis thus far and any guidance received from NOAA GC or Enforcement. Staff will report on the results of this teleconference meeting and if there is a need for further Council guidance concerning IR/IU trailing amendments.

**Final Council Motion on IR/TU for Flatfish
Sunday, October 06, 2002**

The Council adopted Alternative 3 to delay implementation of IR/TU flatfish regulations for the BSAI until June 1, 2004, with final Council action scheduled in April 2003. However, if possible, superceding regulations would be implemented prior to the end of the exemption period.

Further, the Council will initiate analyses on 4 trailing amendments described below. Amendments C and D would be on an expedited time line (i.e., final action by April 2003) and Amendments A and B would be accomplished as soon as practicable. Amendments A through C would be limited to the BSAI fisheries. Amendment D would apply to the BSAI and GOA fisheries.

1. Amendment A: Establish Prohibited Species Bycatch Reduction Cooperatives
 - a. Decision Point 8 –The IR/TU Technical Committee further define options for transferability – specifically, can catch history be separated from the vessel, from the LLP and can catch history be subdivided. Further, the Committee provide options for second generation entry into bycatch cooperatives in the event a limited number of coops form, controlling all available PSC.
2. Amendment B: Create Bycatch Caps (Discard Caps) for the Flatfish Fisheries
 - a. No changes
3. Amendment C: A Minimum Groundfish Retention Standard as an Alternative to Flatfish Retention Requirements
 - a. Decision Point 5:
 1. Eliminate Section 5.1: Daily
 2. Add Decision Point 6: Can the groundfish retention limits be measured across groups or pools?
 - 6.1 Groundfish retention limits can be measured across pools
 - 6.2 Groundfish retention limits cannot be measured across pools
 3. Add Decision Point 7: Does a general groundfish retention standard, that isn't species specific, supercede the current pollock and cod retention standard?
 - 7.1 For all fisheries
 - 7.2 For all non-pollock fisheries
 - 7.3 All fisheries excluding pollock and cod
4. Amendment D: Establish a regulatory process for the routine review of flatfish bycatch in the BSAI and GOA fisheries and the exemption of fisheries with less than a 5% bycatch of IR/TU flatfish from flatfish retention and utilization rules. Similarly, fisheries that exceed this standard would be included in the flatfish IR/TU program. The development of this analysis will address NOAA-GC issues associated with frameworked regulatory measures and identify options to best meet the Council intent for timely accountability of fisheries with respect to flatfish bycatch.

In the analysis for Amendment C, the following language should be included in the preamble. "The purpose of this amendment is to encourage fishermen to avoid unwanted catch, increase utilization of fish that are taken, and thus reduce discards of whole fish to the extent practicable (1997 IR/TU EA/RIR/IRFA).

Summary Table of Retention Rates by Target and Sector from 1995 to 2001

Fishery	1995	1996	1997	1998	1999	2000	2001
Sumimi & Fillet CP							
Pollock (midwater)	94.52%	96.26%	95.50%	98.67%	98.91%	98.70%	99.38%
Pollock (bottom)	86.92%	89.09%	84.88%	92.63%	97.35%	91.78%	93.34%
Yellowfin sole	67.19%	70.39%	61.68%	77.21%	90.90%	95.25%	97.36%
Pacific cod	68.19%	77.72%	80.84%	90.03%	88.54%	86.04%	88.20%
Rock sole	48.25%	38.25%	46.01%	39.80%		86.64%	96.08%
Other flatfish	48.72%	26.38%	96.38%			84.64%	
Flathead sole	11.20%		59.93%	44.00%			
Head and Gut							
Pollock (midwater)	90.34%	94.69%	59.69%	99.90%	98.71%	97.29%	98.39%
Pollock (bottom)	80.84%	85.71%	76.09%	78.90%	51.53%	91.22%	80.57%
Yellowfin sole	52.76%	54.36%	65.04%	70.47%	63.81%	68.44%	73.11%
Pacific cod	47.68%	44.82%	44.50%	57.08%	57.48%	63.78%	69.73%
Flathead sole	45.17%	41.74%	48.91%	55.30%	54.47%	62.30%	65.63%
Rock sole	46.17%	45.34%	46.57%	60.60%	52.96%	52.93%	69.48%
Other flatfish	46.10%	47.25%	54.28%	52.21%	36.59%	57.01%	62.47%
BSAI Shoreplant, Floaters, Motherships							
Pollock (midwater)	97.76%	98.39%	98.20%	99.73%	99.17%	99.58%	99.70%
Pollock (bottom)	90.10%	92.55%	95.01%	99.21%	93.18%	92.93%	98.21%
Pacific cod	66.54%	69.22%	63.61%	85.05%	74.14%	85.38%	89.78%
Rock sole	59.65%	95.03%	96.09%			30.26%	
Yellowfin sole	85.58%	89.79%	96.21%	56.94%	94.39%	98.52%	
Other flatfish	26.80%						

2001 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries.

<i>Gear</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Hook and Line	Pollock (bottom)	2	1	3	32.06%
	Pacific Cod	18,836	113,450	132,286	85.76%
	Rockfish	5	9	14	63.71%
	Sablefish	696	1,431	2,127	67.27%
	Arrowtooth flounder	0	1	2	78.25%
Trawl	Pollock (midwater)	5,934	1,331,138	1,337,072	99.56%
	Pollock (bottom)	1,766	25,542	27,308	93.53%
	Yellowfin sole	25,728	72,298	98,026	73.75%
	Atka mackerel	11,539	59,303	70,842	83.71%
	Pacific Cod	10,918	39,117	50,035	78.18%
	Rock sole	8,879	20,744	29,623	70.03%
	Flathead sole	10,051	19,193	29,244	65.63%
	Rockfish	1,256	8,567	9,823	87.22%
	Sablefish	67	83	150	55.22%
	Arrowtooth flounder	625	2,499	3,123	80.00%
	Other flatfish	263	438	701	62.47%
Pot	Pacific Cod	643	16,934	17,576	96.34%
	Sablefish	16	216	231	93.19%
	Arrowtooth flounder	0	1	1	100.00%

2000 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries.

<i>Gear</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Hook and Line	Pollock (bottom)	3	1	4	16.11%
	Pacific Cod	17,511	100,926	118,437	85.22%
	Rockfish	18	15	34	45.02%
	Sablefish	1,464	1,311	2,775	47.25%
	Turbot	2,067	4,711	6,779	69.50%
	Arrowtooth flounder	1	5	6	83.31%
Pot	Pacific Cod	994	18,821	19,815	94.98%
	Sablefish	20	152	172	88.12%
Trawl	Pollock (midwater)	8,505	1,054,388	1,062,893	99.20%
	Pollock (bottom)	3,668	42,368	46,036	92.03%
	Yellowfin sole	33,595	82,631	116,227	71.09%
	Atka mackerel	7,714	48,107	55,822	86.18%
	Pacific Cod	19,972	62,168	82,140	75.68%
	Rock sole	21,755	25,212	46,967	53.68%
	Flathead sole	14,530	24,011	38,540	62.30%
	Rockfish	525	9,165	9,689	94.58%
	Turbot	139	1,209	1,348	89.69%
	Arrowtooth flounder	742	1,683	2,425	69.42%
	Other Flatfish	1,434	1,908	3,341	57.10%

1999 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries.

<i>Gear</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Hook and Line	Pacific cod	12,543	92,550	105,092	88.07%
	Rockfish	85	15	99	14.80%
	Sablefish	1,203	1,011	2,215	45.66%
	Turbot	2,502	3,845	6,346	60.58%
	Arrowtooth flounder	1	0	1	15.13%
Pot	Pacific cod	891	16,163	17,054	94.78%
	Sablefish	11	21	32	64.30%
	Turbot	56	28	84	32.94%
Trawl	Pollock (midwater)	8,952	938,910	947,862	99.06%
	Pollock (bottom)	920	9,100	10,021	90.82%
	Yellowfin sole	33,764	71,306	105,070	67.87%
	Atka mackerel	11,061	52,986	64,048	82.73%
	Pacific cod	28,310	58,477	86,788	67.38%
	Rock sole	13,020	14,660	27,680	52.96%
	Flathead sole	14,547	17,406	31,953	54.47%
	Rockfish	1,256	13,769	15,025	91.64%
	Turbot	659	1,394	2,053	67.91%
	Arrowtooth flounder	566	1,121	1,687	66.45%
	Other flatfish	1,784	1,030	2,814	36.59%

1998 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries.

<i>Gear</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Hook and Line	Pacific cod	18,917	101,332	120,249	84.27%
	Rockfish	11	23	34	67.27%
	Sablefish	513	736	1,249	58.90%
	Turbot	1,639	7,099	8,738	81.25%
Pot	Pacific cod	519	13,603	14,122	96.32%
	Sablefish	1	0	2	17.28%
	Turbot		3	3	100.00%
Trawl	Pollock (midwater)	9,074	1,066,451	1,075,525	99.16%
	Pollock (bottom)	2,914	28,837	31,750	90.82%
	Yellowfin sole	41,126	104,899	146,025	71.84%
	Atka mackerel	8,988	56,574	65,562	86.29%
	Pacific cod	15,813	60,027	75,840	79.15%
	Rock sole	10,181	14,943	25,125	59.48%
	Flathead sole	16,748	20,479	37,227	55.01%
	Rockfish	848	8,630	9,478	91.05%
	Sablefish	4	24	27	87.01%
	Turbot	413	941	1,355	69.48%
	Arrowtooth flounder	518	1,126	1,645	68.48%
	Other flatfish	2,446	2,672	5,118	52.21%

1997 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries.

<i>Gear</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Hook and Line	Pacific cod	21,581	123,742	145,323	85.15%
	Rockfish	65	59	124	47.69%
	Sablefish	1,653	1,194	2,846	41.94%
	Turbot	1,210	4,530	5,740	78.93%
Pot	Pacific cod	623	22,003	22,626	97.25%
Trawl	Pollock (midwater)	34,720	1,014,945	1,049,665	96.69%
	Pollock (bottom)	6,787	40,732	47,518	85.72%
	Yellowfin sole	82,164	167,394	249,558	67.08%
	Atka mackerel	10,307	62,072	72,379	85.76%
	Pacific cod	53,759	77,724	131,483	59.11%
	Rock sole	34,376	30,159	64,535	46.73%
	Flathead sole	10,463	10,167	20,630	49.28%
	Rockfish	1,482	10,801	12,283	87.94%
	Turbot	513	613	1,126	54.44%
	Arrowtooth flounder	67	68	135	50.34%
	Other Flatfish	1,173	3,316	4,488	73.87%

1996 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries.

<i>Gear</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Hook and Line	Pacific cod	15,739	93,638	109,377	85.61%
	Rockfish	32	17	49	34.98%
	Sablefish	1,593	1,269	2,862	44.33%
	Turbot	668	3,463	4,131	83.82%
Pot	Pacific cod	1,413	32,177	33,590	95.79%
	Sablefish	3	1	3	18.29%
Trawl	Pollock (midwater)	29,918	1,055,466	1,085,385	97.24%
	Pollock (bottom)	10,825	95,459	106,284	89.82%
	Yellowfin sole	66,079	108,136	174,215	62.07%
	Atka mackerel	24,951	94,338	119,289	79.08%
	Pacific cod	43,181	70,323	113,504	61.96%
	Rock sole	24,653	20,372	45,024	45.25%
	Flathead sole	14,343	10,276	24,619	41.74%
	Rockfish	3,948	15,722	19,670	79.93%
	Sablefish	58	47	105	44.85%
	Turbot	338	433	772	56.16%
	Arrowtooth flounder	36	23	59	38.72%
	Other flatfish	4,537	3,958	8,495	46.60%

1995 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries.

<i>Gear</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Hook and Line	Pacific cod	17,986	100,147	118,133	84.77%
	Flathead Sole		0	0	100.00%
	Rockfish	17	69	86	79.83%
	Sablefish	3,473	1,663	5,136	32.38%
	Turbot	822	2,368	3,190	74.22%
	Other	27	24	51	47.12%
Pot	Pacific cod	1,012	20,065	21,076	95.20%
	Sablefish	1	18	19	95.78%
Trawl	Pollock (midwater)	47,357	1,123,504	1,170,860	95.96%
	Pollock (bottom)	15,591	105,083	120,674	87.08%
	Yellowfin sole	67,515	108,176	175,691	61.57%
	Atka mackerel	20,051	70,236	90,287	77.79%
	Pacific cod	48,057	68,651	116,708	58.82%
	Rock sole	31,212	27,663	58,875	46.99%
	Flathead Sole	5,842	4,743	10,585	44.81%
	Rockfish	2,453	11,044	13,498	81.83%
	Sablefish	144	58	202	28.86%
	Turbot	2,317	3,541	5,857	60.45%
	Arrowtooth flounder	21	45	65	68.41%
	Other flatfish	10,057	8,535	18,592	45.91%

2001 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries by fleet type.

<i>Fleet</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Sumimi & Fillet CP	Pollock (midwater)	3,698	588,587	592,285	99.38%
	Pollock (bottom)	1,298	18,186	19,484	93.34%
	Yellowfin sole	68	2,526	2,594	97.36%
	Pacific cod	472	3,529	4,001	88.20%
	Rock sole	23	570	593	96.08%
Head and Gut	Pollock (midwater)	11	653	664	98.39%
	Pollock (bottom)	361	1,498	1,859	80.57%
	Yellowfin sole	25,659	69,773	95,432	73.11%
	Pacific cod	7,191	16,562	23,753	69.73%
	Flathead sole	10,051	19,193	29,244	65.63%
	Rock sole	8,842	20,129	28,972	69.48%
	Other flatfish	263	438	701	62.47%
BSAI Shoreplant, Floaters, and Motherships	Pollock (midwater)	2,225	741,984	744,209	99.70%
	Pollock (bottom)	107	5,858	5,965	98.21%
	Pacific cod	3,717	32,639	36,356	89.78%

2000 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries by fleet type.

<i>Fleet</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Surimi and Fillet CP	Pollock (midwater)	5,944	452,075	458,018	98.70%
	Pollock (bottom)	2,750	30,722	33,472	91.78%
	Yellowfin sole	448	8,972	9,419	95.25%
	Pacific cod	685	4,220	4,904	86.04%
	Rock sole	141	913	1,054	86.64%
	Other flatfish	0	2	3	84.64%
Head & Gut CP	Pollock (midwater)	20	703	723	97.29%
	Pollock (bottom)	152	1,579	1,731	91.22%
	Yellowfin sole	33,120	71,825	104,945	68.44%
	Pacific cod	10,693	18,834	29,528	63.78%
	Flathead sole	14,530	24,011	38,540	62.30%
	Rock sole	21,605	24,294	45,899	52.93%
BSAI Shoreplant, Floaters, and Motherships	Pollock (midwater)	2,542	601,923	604,464	99.58%
	Pollock (bottom)	766	10,067	10,833	92.93%
	Pacific cod	9,588	55,993	65,581	85.38%
	Rock sole	10	4	14	30.26%
	Yellowfin sole	28	1,835	1,862	98.52%

1999 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries by fleet type.

<i>Fleet</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Surimi and Fillet CP	Pollock (midwater)	4,496	406,292	410,788	98.91%
	Pollock (bottom)	138	5,084	5,222	97.35%
	Yellowfin sole	1,271	12,698	13,970	90.90%
	Pacific cod	1,477	11,413	12,891	88.54%
Head & Gut CP	Pollock (midwater)	25	1,926	1,951	98.71%
	Pollock (bottom)	529	563	1,092	51.53%
	Yellowfin sole	32,405	57,128	89,533	63.81%
	Pacific cod	13,099	17,710	30,809	57.48%
	Flathead sole	14,547	17,406	31,953	54.47%
	Rock sole	13,020	14,660	27,680	52.96%
	Other flatfish	1,784	1,030	2,814	36.59%
BSAI Shoreplant, Floaters, and Motherships	Pollock (midwater)	4,431	530,692	535,123	99.17%
	Pollock (bottom)	253	3,453	3,706	93.18%
	Yellowfin sole	88	1,480	1,568	94.39%
	Pacific cod	14,577	41,801	56,378	74.14%

1998 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries by fleet type.

<i>Fleet</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Surimi and Fillet CP	Pollock (midwater)	7,737	573,551	581,288	98.67%
	Pollock (bottom)	1,903	23,910	25,813	92.63%
	Yellowfin sole	6,833	23,146	29,980	77.21%
	Pacific cod	2,038	18,394	20,432	90.03%
	Flathead sole	533	418	951	44.00%
	Rock sole	820	542	1,362	39.80%
Head & Gut CP	Pollock (midwater)	0	174	174	99.90%
	Pollock (bottom)	1,001	3,742	4,743	78.90%
	Yellowfin sole	34,224	81,662	115,886	70.47%
	Pacific cod	6,659	8,856	15,514	57.08%
	Flathead sole	16,215	20,061	36,276	55.30%
	Rock sole	9,361	14,401	23,763	60.60%
	Other flatfish	2,446	2,672	5,118	52.21%
BSAI Shoreplant, Floaters, and Motherships	Pollock (midwater)	1,336	492,549	493,886	99.73%
	Pollock (bottom)	9	1,185	1,194	99.21%
	Yellowfin sole	69	91	160	56.94%
	Pacific cod	7,553	42,975	50,527	85.05%

1997 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries by fleet type

<i>Fleet</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Surimi and Fillet CP	Pollock (midwater)	25,699	545,999	571,698	95.50%
	Pollock (bottom)	6,137	34,453	40,589	84.88%
	Yellowfin sole	21,046	33,880	54,926	61.68%
	Pacific cod	5,546	23,399	28,945	80.84%
	Flathead sole	276	413	688	59.93%
	Rock sole	3,749	3,194	6,943	46.01%
	Other flatfish	76	2,013	2,089	96.38%
Head & Gut CP	Pollock (midwater)	432	640	1,073	59.69%
	Pollock (bottom)	384	1,224	1,608	76.09%
	Yellowfin sole	60,275	112,143	172,418	65.04%
	Pacific cod	14,468	11,603	26,071	44.50%
	Flathead sole	10,187	9,754	19,942	48.91%
	Rock sole	30,615	26,681	57,297	46.57%
	Other flatfish	1,097	1,302	2,399	54.28%
BSAI Shoreplant, Floaters, and Motherships	Pollock (midwater)	8,588	468,309	476,898	98.20%
	Pollock (bottom)	265	5,056	5,321	95.01%
	Yellowfin sole	843	21,371	22,214	96.21%
	Rock sole	12	284	295	96.09%
	Pacific cod	34,331	60,001	94,332	63.61%

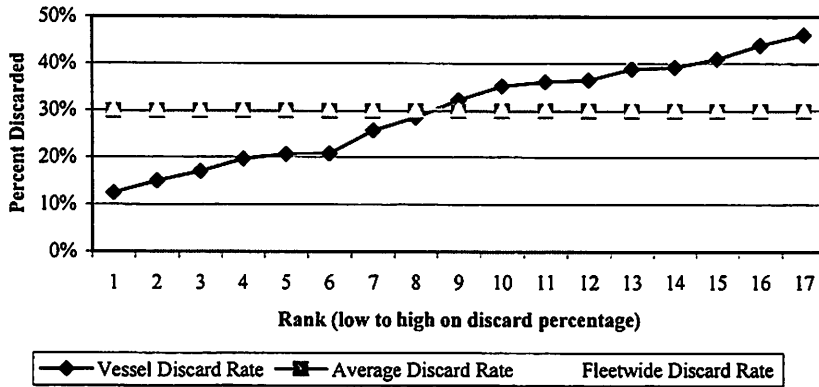
1996 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries by fleet type

<i>Fleet</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Surimi and Fillet CP	Pollock (midwater)	21,642	557,106	578,748	96.26%
	Pollock (bottom)	8,759	71,513	80,271	89.09%
	Yellowfin sole	19,027	45,223	64,250	70.39%
	Pacific cod	5,366	18,723	24,089	77.72%
	Rock sole	1,484	919	2,403	38.25%
	Other flatfish	195	70	265	26.38%
Head & Gut CP	Pollock (midwater)	141	2,506	2,647	94.69%
	Pollock (bottom)	288	1,724	2,012	85.71%
	Pacific cod	8,655	7,031	15,686	44.82%
	Other flatfish	4,341	3,888	8,230	47.25%
	Flathead sole	14,343	10,276	24,619	41.74%
	Rock sole	23,140	19,198	42,338	45.34%
	Yellowfin sole	46,669	55,594	102,263	54.36%
BSAI Shoreplant, Floaters, and Motherships	Pollock (midwater)	8,136	495,853	503,989	98.39%
	Pollock (bottom)	1,774	22,043	23,817	92.55%
	Yellowfin sole	383	7,320	7,702	95.03%
	Rock sole	29	254	283	89.79%
	Pacific cod	30,340	68,223	98,563	69.22%

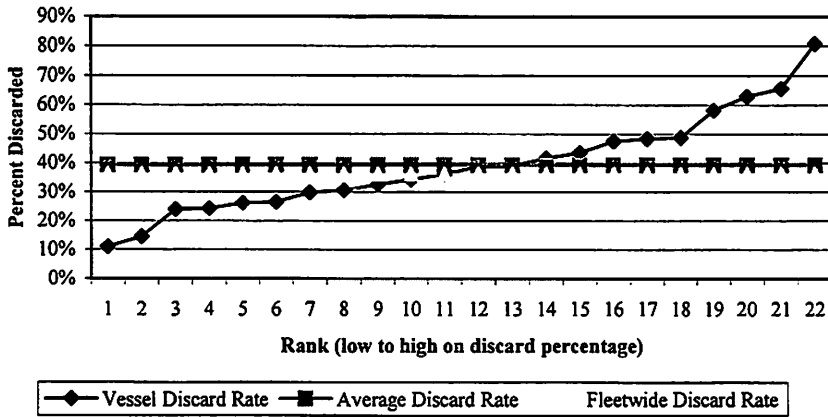
1995 Groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries by fleet type.

<i>Fleet</i>	<i>Target</i>	<i>Total Groundfish (mt)</i>			<i>Retention Rate</i>
		<i>Discard</i>	<i>Retained</i>	<i>Total</i>	
Surimi and Fillet CP	Pollock (midwater)	35,340	608,963	644,303	94.52%
	Pollock (bottom)	13,565	90,177	103,742	86.92%
	Yellowfin sole	19,136	39,181	58,317	67.19%
	Pacific cod	10,005	21,452	31,457	68.19%
	Flathead sole	102	13	115	11.20%
	Rock sole	2,386	2,225	4,610	48.25%
	Other flatfish	618	587	1,205	48.72%
Head & Gut CP	Pollock (midwater)	326	3,054	3,381	90.34%
	Pollock (bottom)	722	3,047	3,769	80.84%
	Yellowfin sole	45,276	50,570	95,847	52.76%
	Pacific cod	13,135	11,971	25,106	47.68%
	Flathead sole	5,740	4,730	10,470	45.17%
	Rock sole	27,674	23,735	51,409	46.17%
	Other flatfish	9,184	7,854	17,038	46.10%
BSAI Shoreplant, Floaters, and Motherships	Pollock (midwater)	11,687	510,995	522,681	97.76%
	Pollock (bottom)	1,303	11,866	13,169	90.10%
	Yellowfin sole	3,103	18,424	21,528	85.58%
	Pacific cod	25,972	51,640	77,612	66.54%
	Rock sole	1,152	1,703	2,856	59.65%
	Other flatfish	255	94	349	26.80%

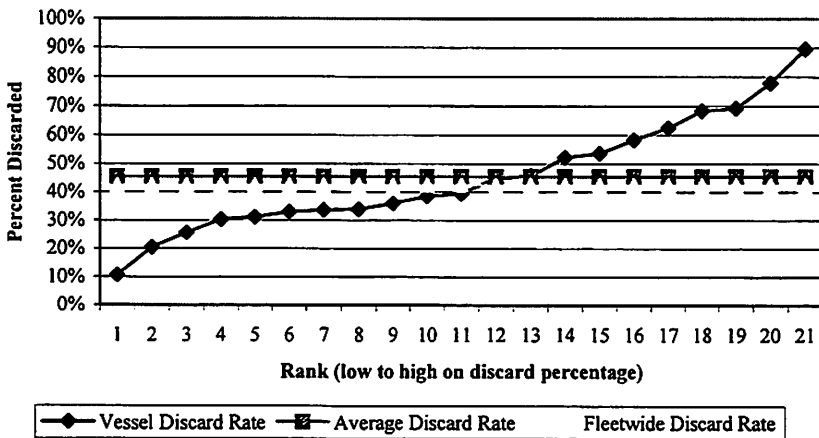
Ranking of Head and Gut Vessels by Percent of Discard in the Pacific Cod Fishery for 2001



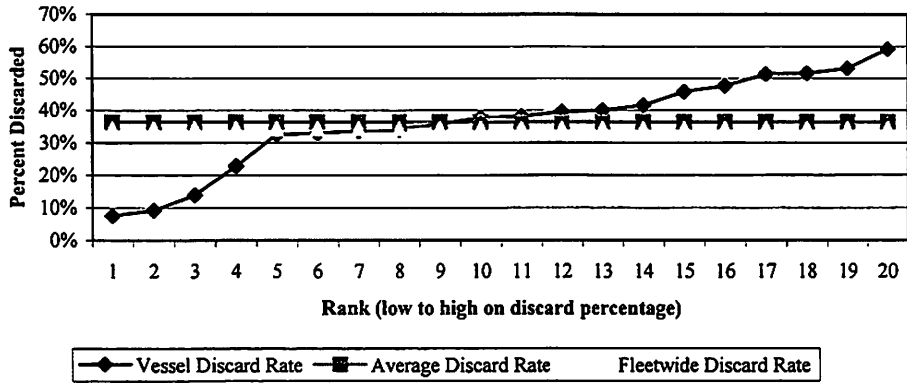
Ranking of Head and Gut Vessels by Percent of Discard in the Pacific Cod Fishery for 2000



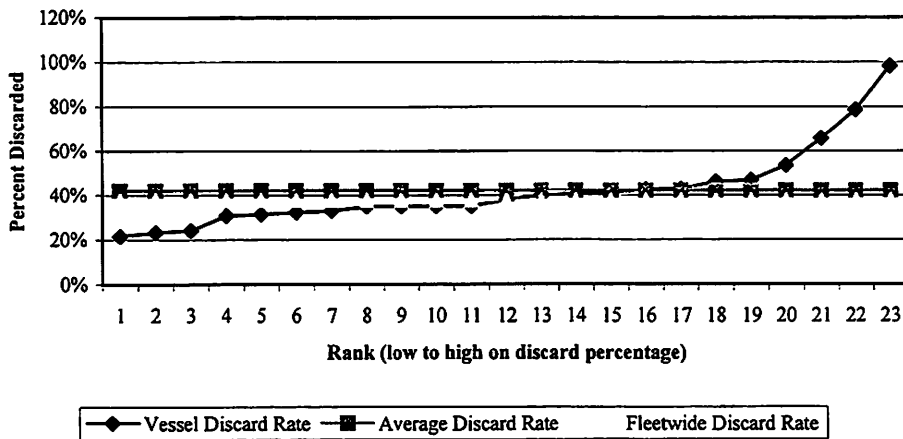
Ranking of Head and Gut Vessels by Percent of Discard in the Pacific Cod Fishery for 1999



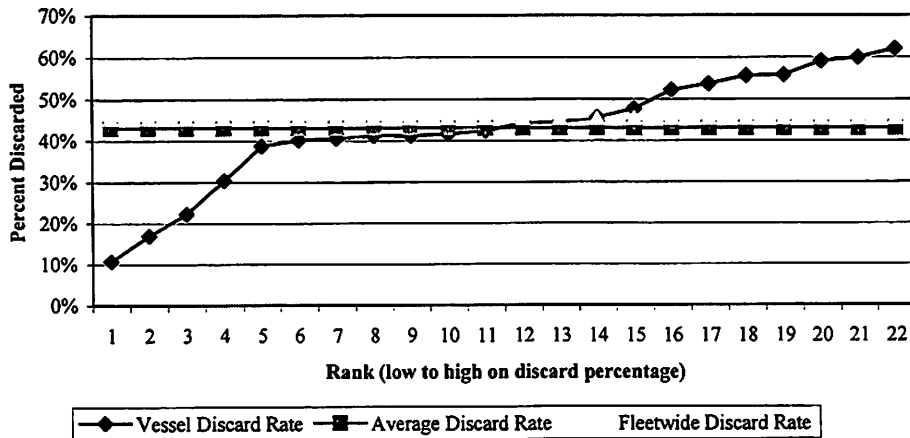
Ranking of Head and Gut Vessels by Percent of Discard in the Flathead Sole Fishery in 2001



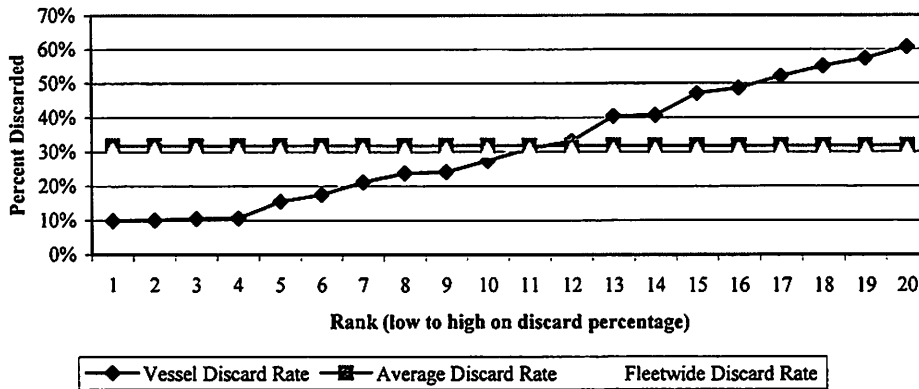
Ranking of Head and Gut Vessels by Percent of Discard in the Flathead Sole Fishery in 2000



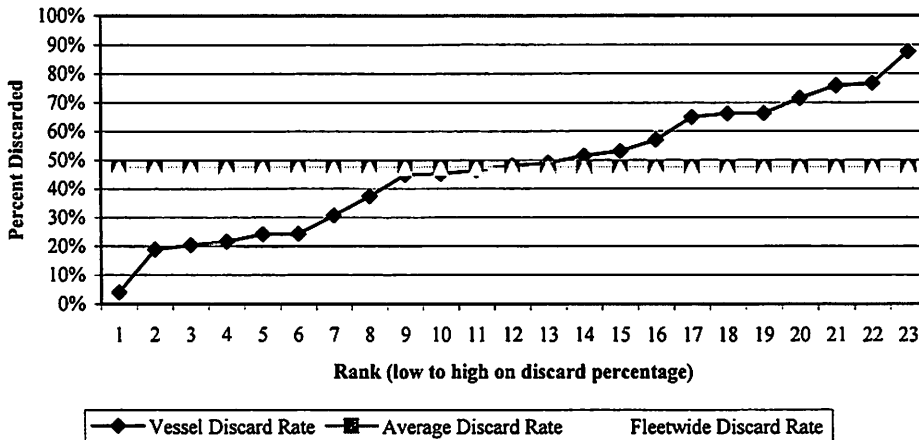
Ranking of Head and Gut Vessels by Percent of Discard in the Flathead Sole Fishery in 1999



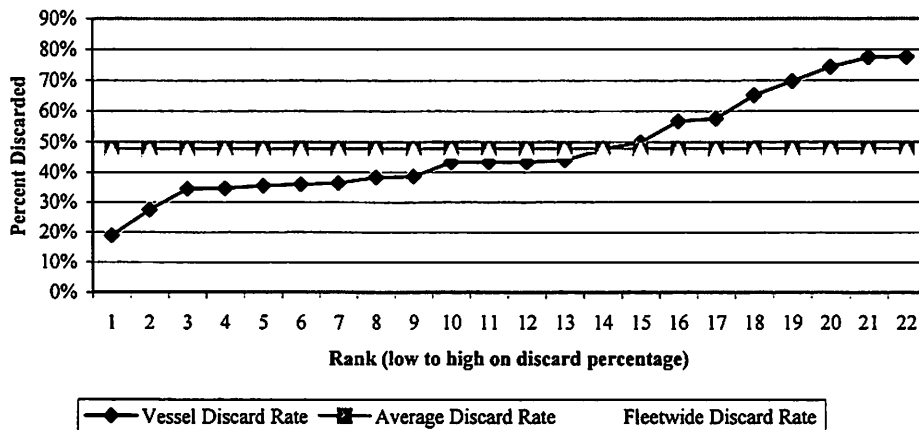
Ranking of Head and Gut Vessels by Percent of Discard in the Rock Sole Fishery in 2001



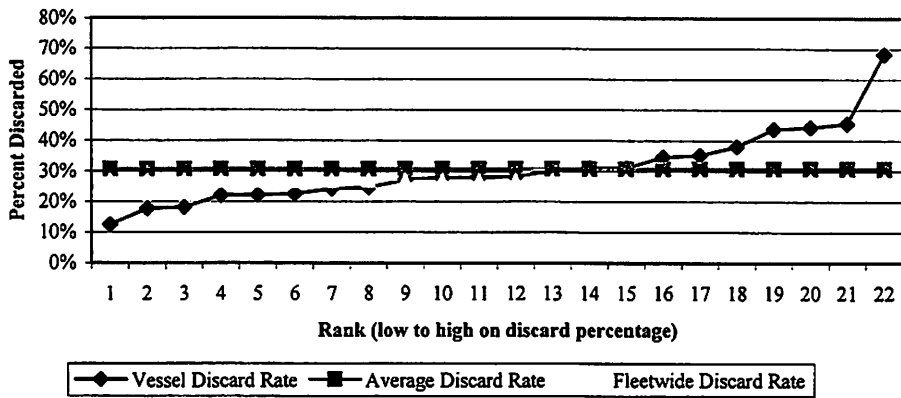
Ranking of Head and Gut Vessels by Percent of Discard in the Rock Sole Fishery in 2000



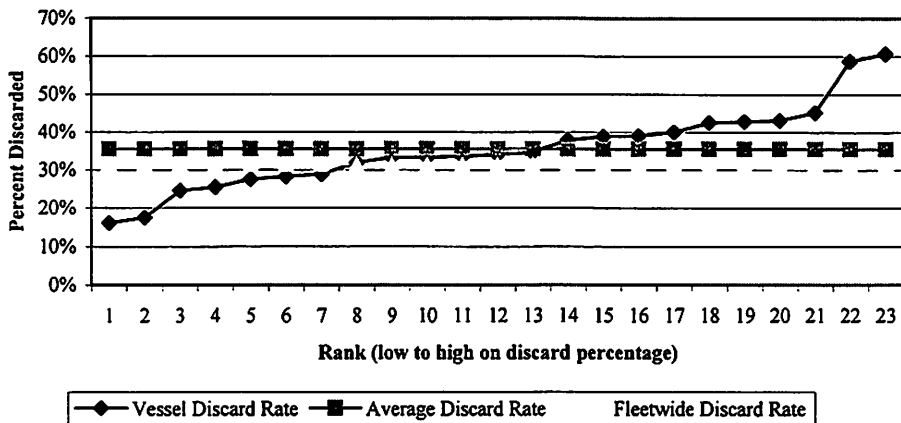
Ranking of Head and Gut Vessels by Percent of Discard in the Rock Sole Fishery in 1999



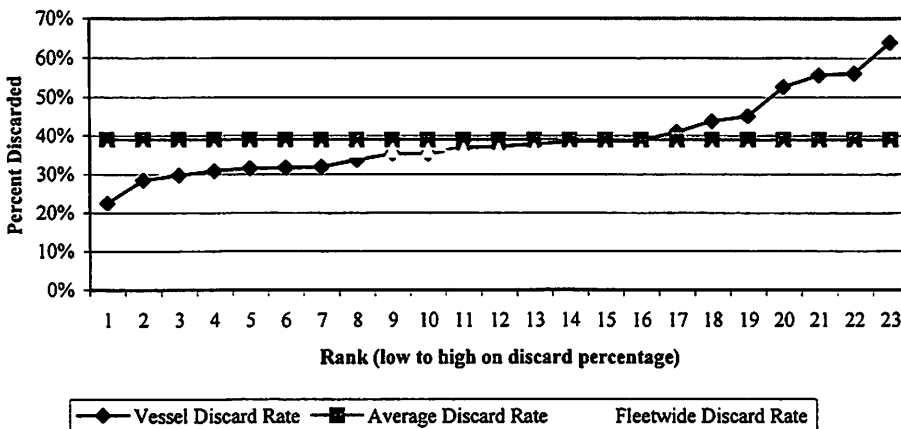
Ranking of Head and Gut Vessels by Percent of Discard in the Yellowfin Sole Fishery for 2001



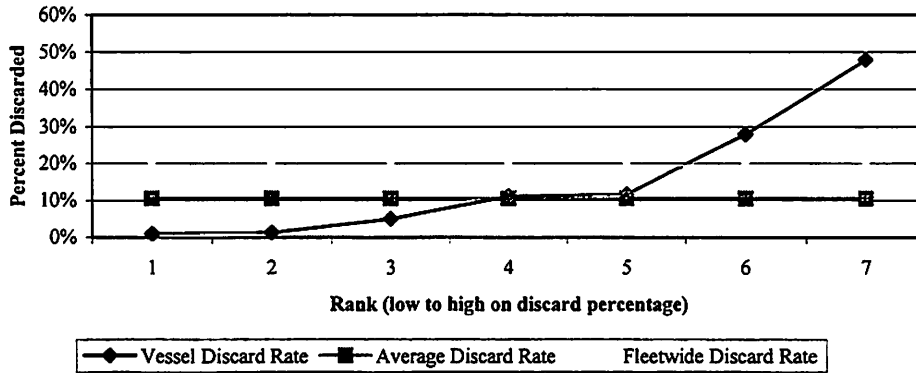
Ranking of Head and Gut Vessels by Percent of Discard in the Yellowfin Sole Fishery for 2000



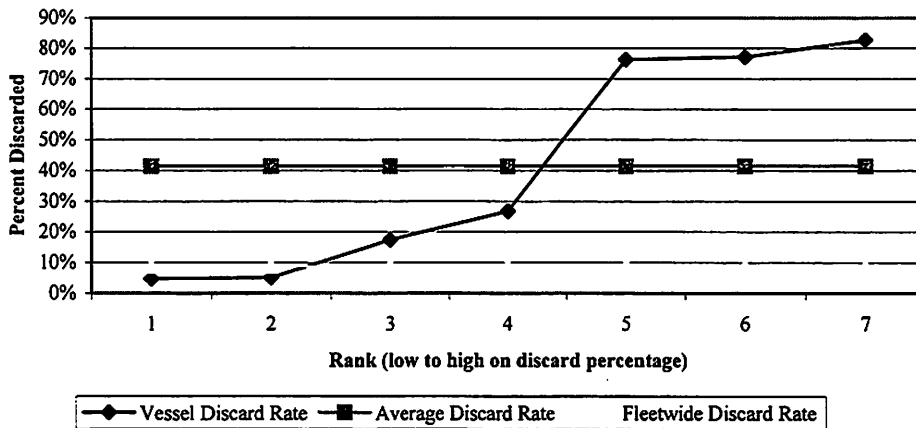
Ranking of Head and Gut Vessels by Percent of Discard in the Yellowfin Sole Fishery for 1999



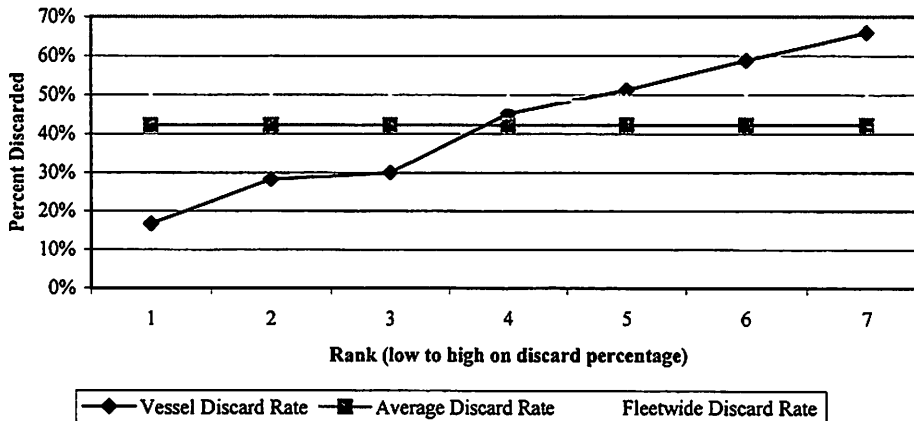
Ranking of Head and Gut Vessels by Percent of Discard in the Bottom Pollock Fishery for 2001



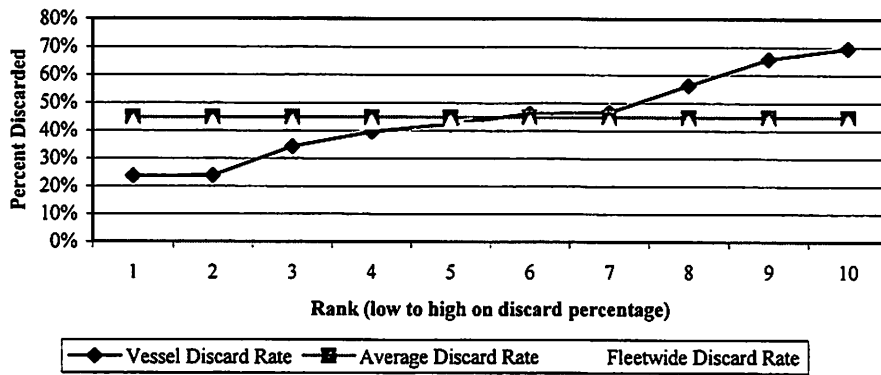
Ranking of Head and Gut Vessels by Percent of Discard in the Bottom Pollock Fishery for 2000



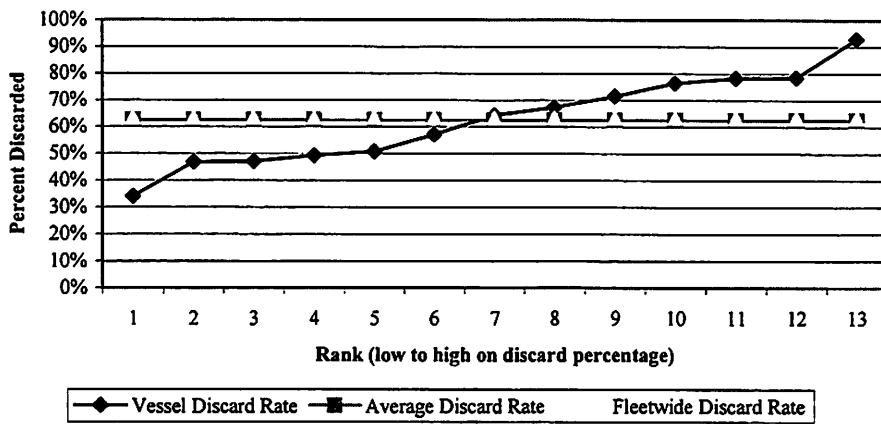
Ranking of Head and Gut Vessels by Percent of Discard in the Bottom Pollock Fishery for 1999



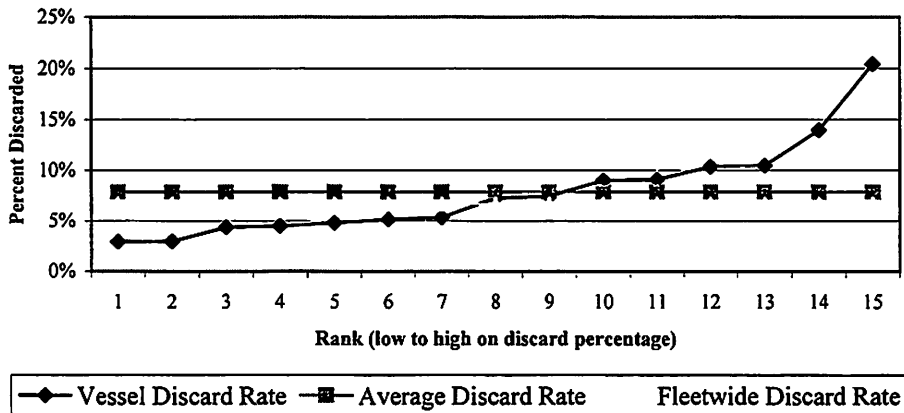
Ranking of Head and Gut Vessels by Percent of Discard in the Other Flatfish Fishery in 2000



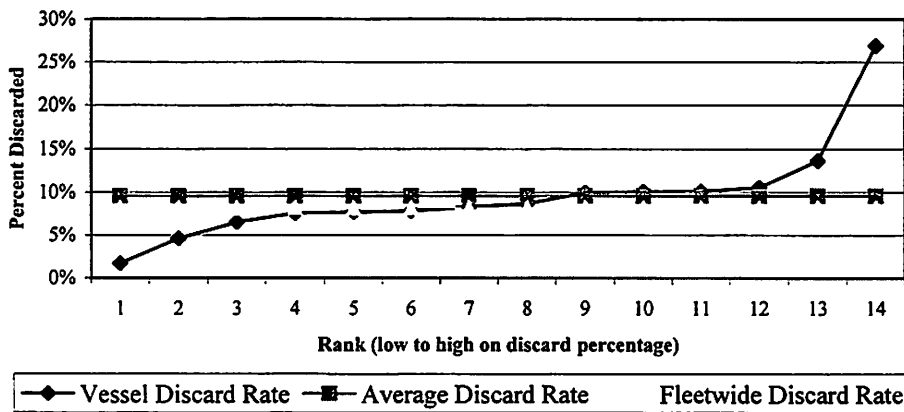
Ranking of Head and Gut Vessels by Percent of Discard in the Other Flatfish Fishery in 1999



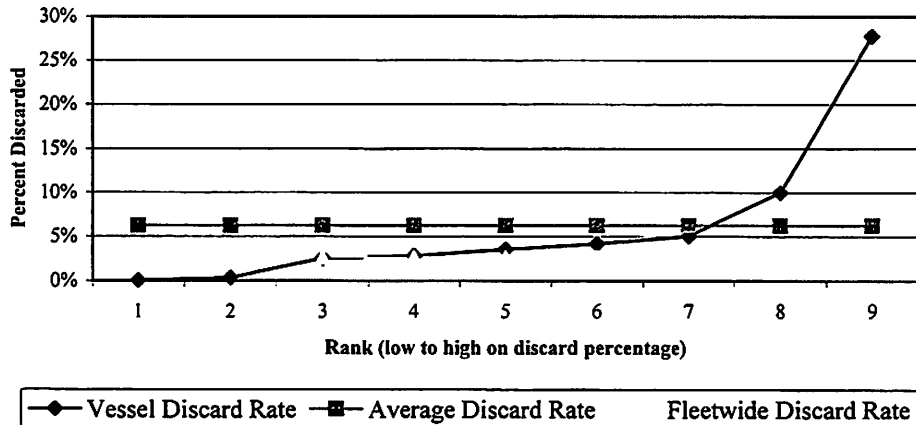
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Bottom Pollock Fishery for 2001



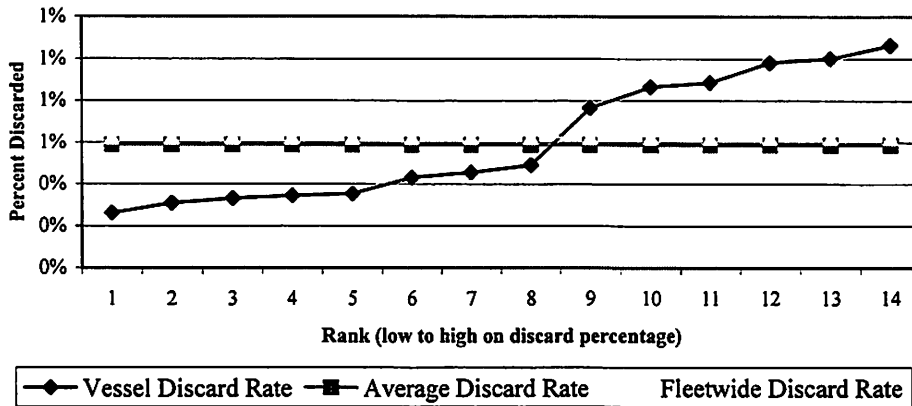
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Bottom Pollock Fishery for 2000



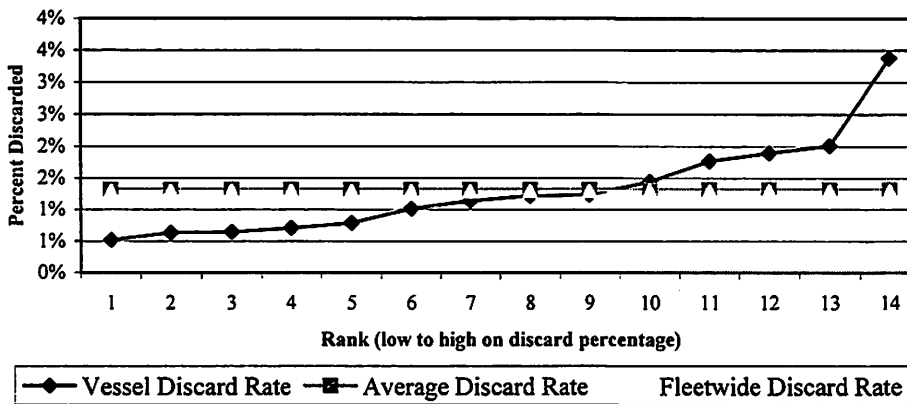
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Bottom Pollock Fishery for 1999



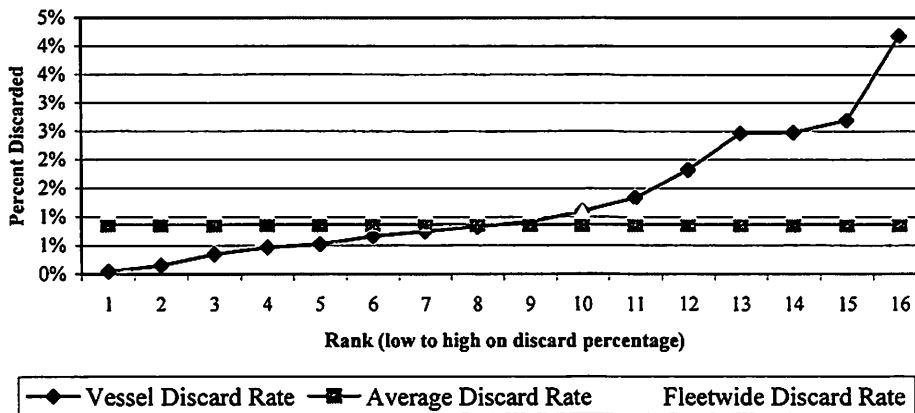
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Midwater Pollock Fishery for 2001



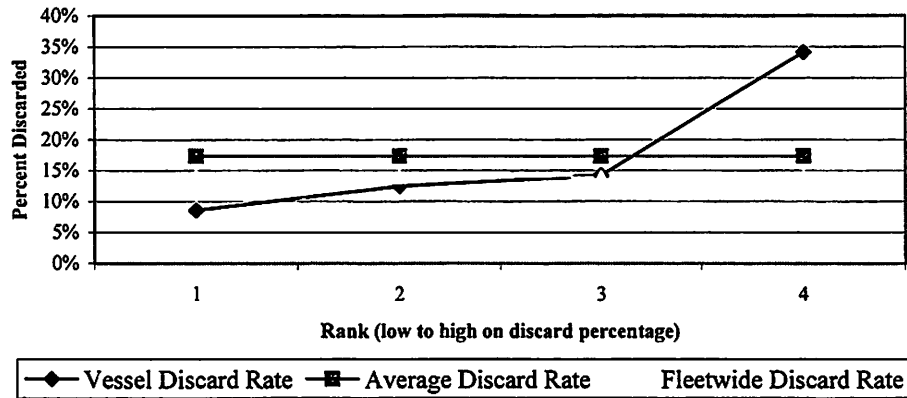
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Midwater Pollock Fishery for 2000



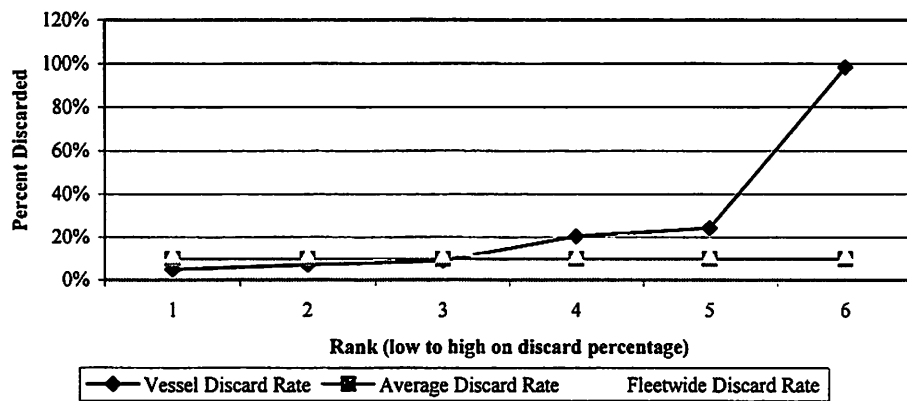
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Midwater Pollock Fishery for 1999



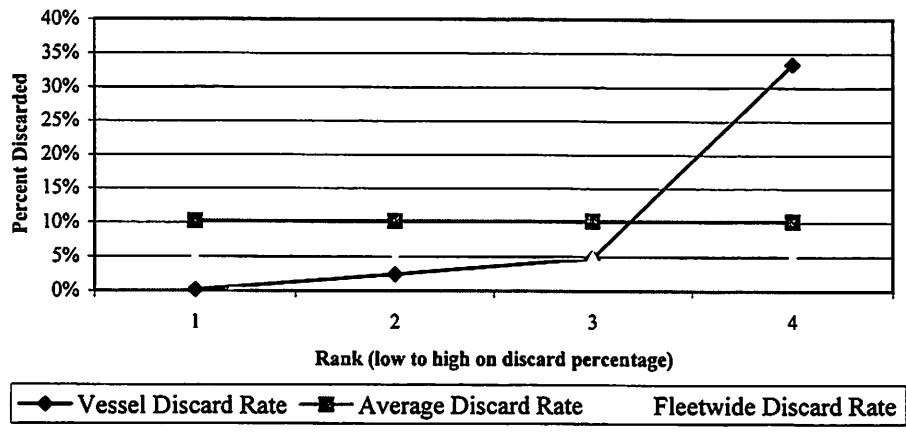
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Pacific Cod Fishery for 2000



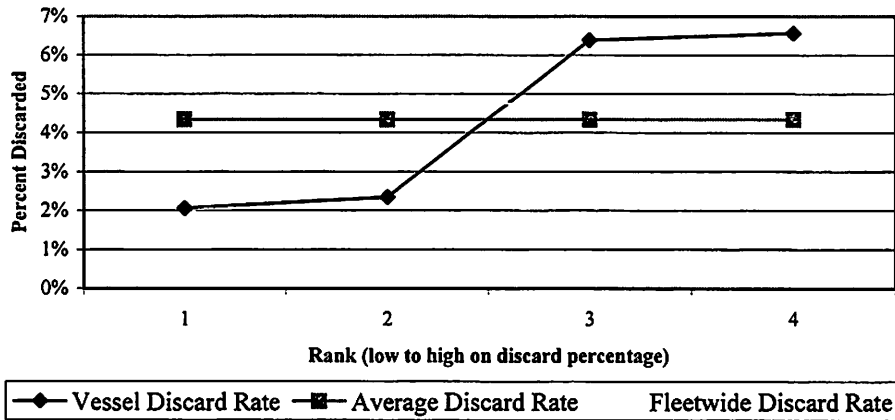
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Pacific Cod Fishery for 1999



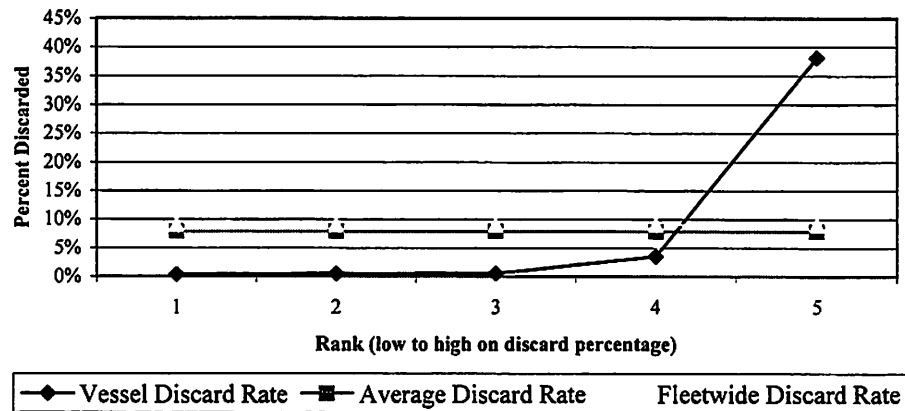
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Rock Sole Fishery for 2000



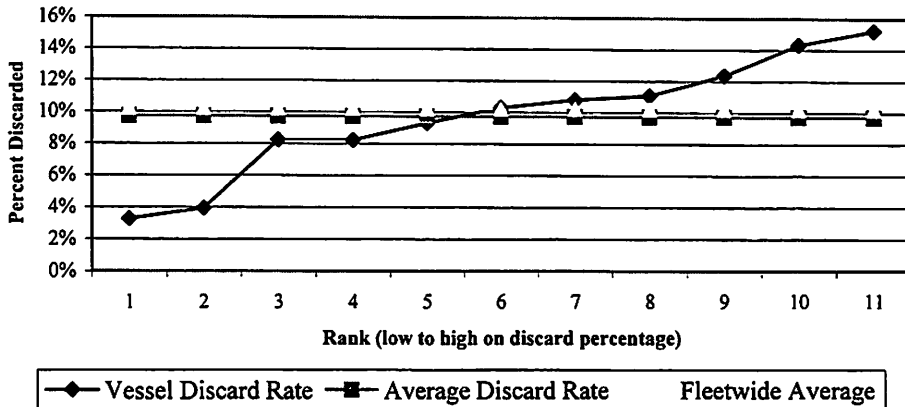
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Yellowfin Sole Fishery for 2000



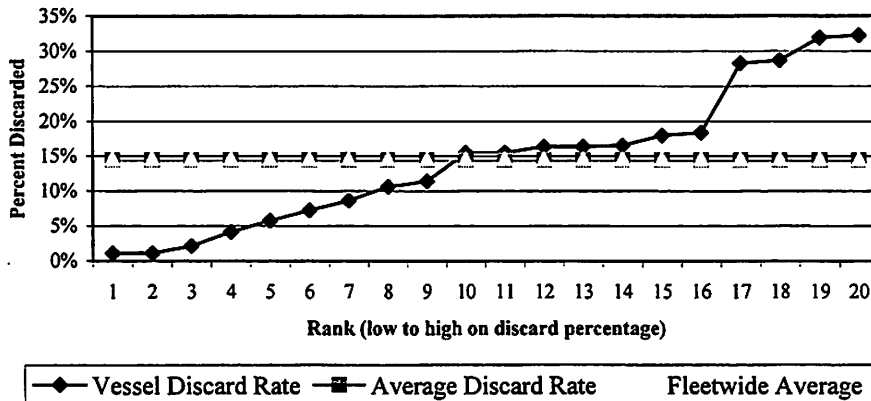
Ranking of Surimi and Fillet Vessels by Percent of Discard in the Yellowfin Sole Fishery for 1999



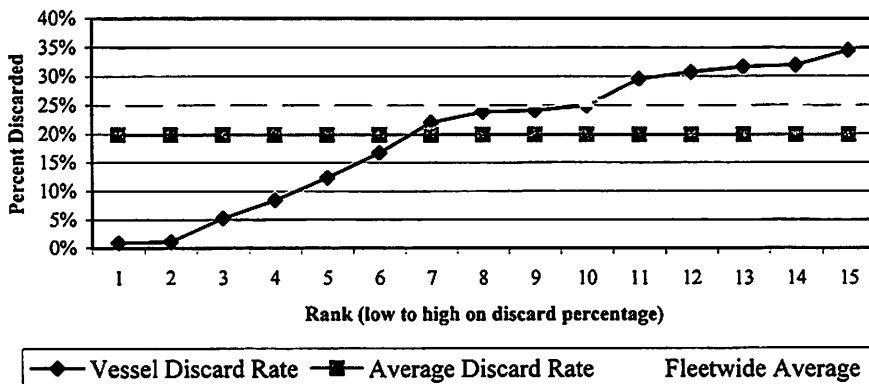
Ranking of Vessels Delivering to Shore/Motherships/Floaters by Percent of Discard in the Pacific Cod Fishery for 2001



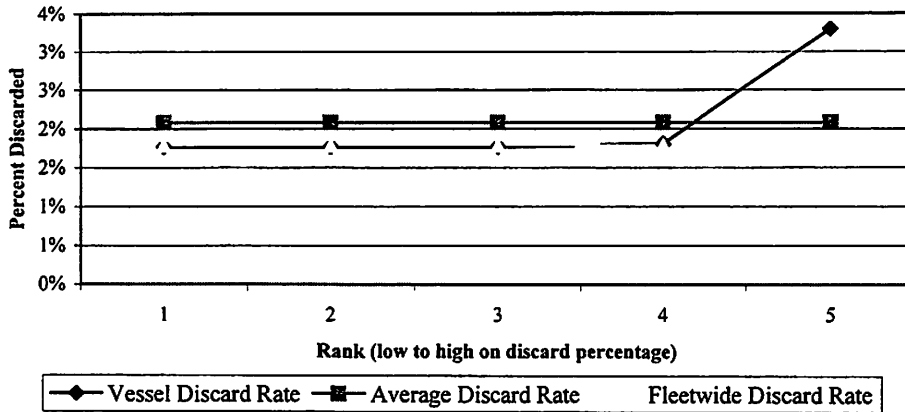
Ranking of Vessels Delivering to Shore/Motherships/Floaters by Percent of Discard in the Pacific Cod Fishery for 2000



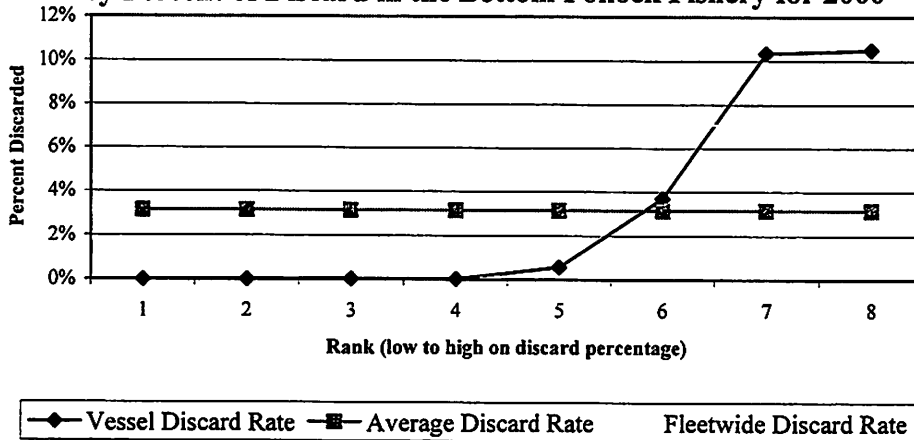
Ranking of Vessels Delivering to Shore/Motherships/Floaters by Percent of Discard in the Pacific Cod Fishery for 1999



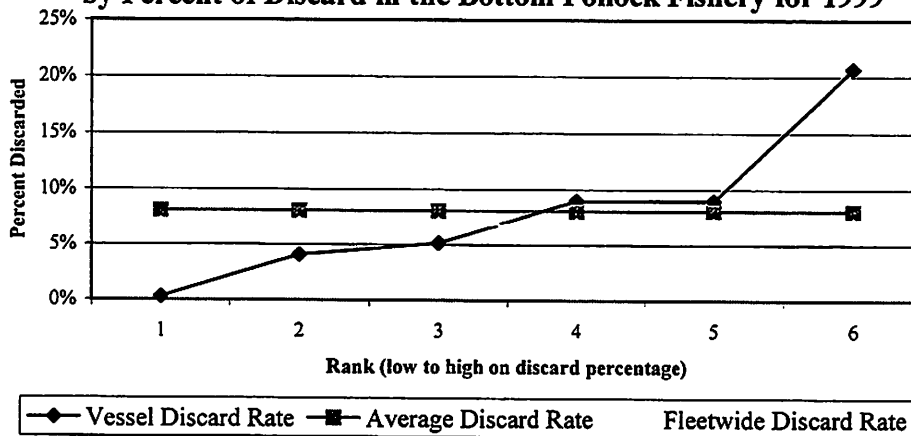
Ranking of Vessels Delivering to Shore/Motherships/Floaters by Percent of Discard in the Bottom Pollock Fishery for 2001



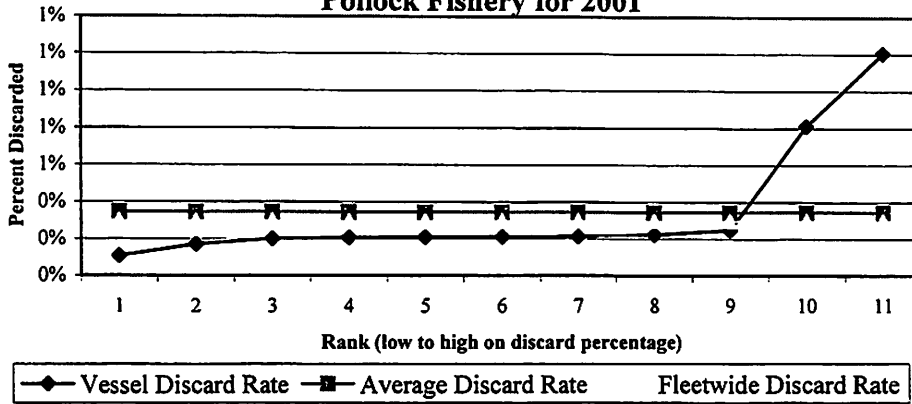
Ranking of Vessels Delivering to Shore/Motherships/Floaters by Percent of Discard in the Bottom Pollock Fishery for 2000



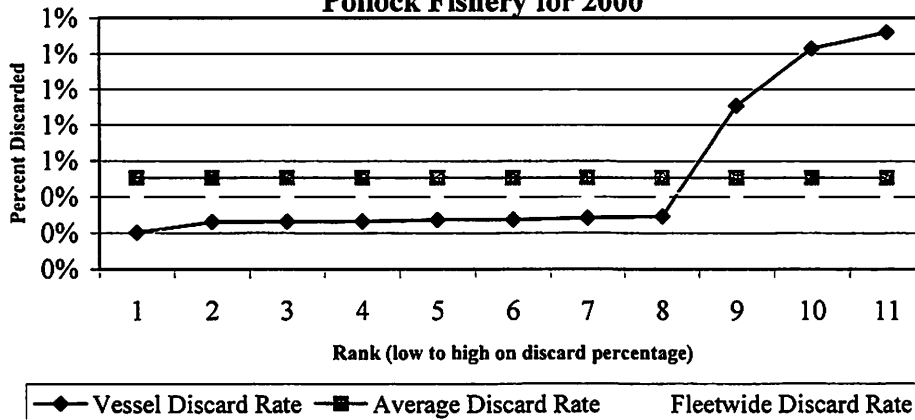
Ranking of Vessels Delivering to Shore/Motherships/Floaters by Percent of Discard in the Bottom Pollock Fishery for 1999



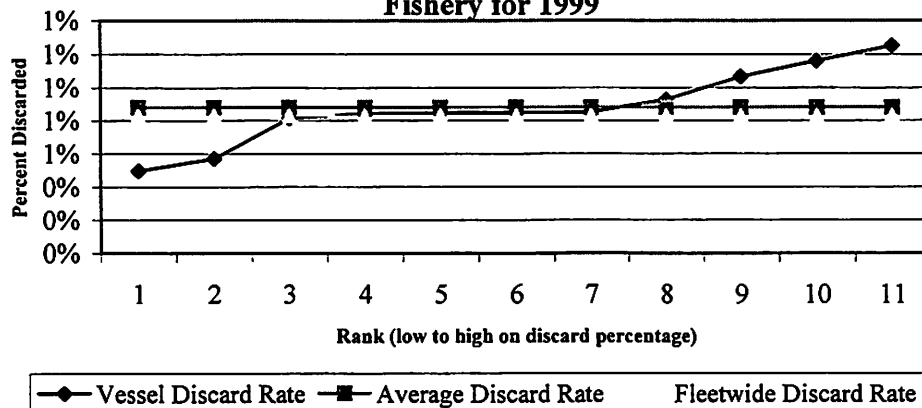
**Ranking of Vessels Delivering to Shore/Motherships/Floaters
by Percent of Discard in the Midwater
Pollock Fishery for 2001**



**Ranking of Vessels Delivering to Shore/Motherships/Floaters
by Percent of Discard in the Midwater
Pollock Fishery for 2000**



**Ranking of Vessels Delivering to Shore/Motherships/Floaters by
Percent of Discard in the Midwater Pollock
Fishery for 1999**



North Pacific Fishery Management Council

David Benton, Chairman
Chris Oliver, Executive Director



ITEM C-5(c)
605 W 4th Ave
Anchorage, AK
DECEMBER 2002

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November 13, 2002

Mr. Garland Walker
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Mr. Jeff Passer
National Marine Fisheries Service, Alaska Region
NMFS Enforcement Division
709 W. 9th Street (F/EN5)
Juneau, AK 99802

Dear Garland and Jeff:

In October 2002, the North Pacific Fishery Management Council delayed implementation of IR/TU requirements for flatfish in the BSAI, and identified four trailing amendments to be analyzed. One of these, 'Amendment C', would establish minimum groundfish retention standards in the BSAI. The minimum retention standard (MRS) would be calculated as the ratio of retained catch (the numerator) to total catch. The fundamental viability of this proposal will depend heavily on monitoring and enforcement considerations.

As proposed, retained catch would be calculated as A) total product weight \times NMFS published product recovery rates (PRR), or alternatively, B) the vessel's hail weight minus the discard amounts as reported in the weekly production reports. The denominator (total catch) would be either C) the vessels estimated total catch (or hail weight) for the haul as recorded in the vessel logbook, or D) total retained catch (from product weight and PRRs) supplemented by the vessels estimate of discards. It should be noted that currently observers on trawl vessels provide the vessel's hail weight when reporting data, and the vessels supply product weight and estimated discards in their weekly production reports.

Under this standard, each vessel would be required to retain a certain percentage of their total catch regardless of the species composition of the catch. For example, if the MRS was set at 25 percent, then for each 100 mt of groundfish harvested the vessel must produce a quantity of products that equal 25 mt in round-weight equivalents. The vessel would be free to choose which suite of species and products to retain in order to meet the MRS.

NMFS has proposed the MRS as an alternative to more complex bycatch standards that had been analyzed under the previous iteration of IRIU for flatfish. The MRS, at least theoretically, does not create significant enforcement problems because:

- 1) there is no need to estimate discards on a species by species basis
- 2) it is possible to use the vessels own catch and production data to monitor and enforce

During initial discussions among the analytical team, several issues have come up that we believe have to be addressed by NOAA GC and NMFS Enforcement before the analysis can be completed. The analysis is currently scheduled for initial review by the Council at the February 2003 meeting. The issues are described below in the form of questions.

Will NMFS Enforcement and NOAA GC be satisfied with a standard that is estimated based solely on data reported by the vessel operator? As indicated above, a vessel's compliance to the MRS will be judged by calculating the ratio of retained catch to total catch—estimates that, as proposed, would come directly from the vessel. Neither the product weight estimate, nor the vessel's hail weight are currently used regularly by NMFS to judge total catch. In this case however both would be used to measure compliance to the MRS. In a sense NMFS would be asking vessels to self-report whether or not they were in compliance.

If NMFS is comfortable with self-reported compliance does it really matter how the ratio is calculated? For example, why not simply ask vessels to report their retention ratio on a regular basis?

If NMFS is not comfortable with self reported compliance, then can it develop a practicable method to measure a retention ratio on a individual vessel basis that does not place additional burden on observers, short of requiring on-board scales for every vessel?

If NMFS cannot develop a practicable method to measure retention ratios on an individual vessel basis, would it be comfortable enforcing an MRS over a group of vessels over a particular season? In this case it is assumed that the numerator of the ratio would be calculated as in (A) described above, summed over all of the vessels in the group during the season, and the denominator would be the official total catch (OTC) estimate that is currently reported in the blend data.

It should be noted that NMFS PRRs have not been used regularly to estimate total catch, and they have not been updated for several years. It is claimed by AFA processors for example that with AFA they are able to generate higher recovery rates for surimi then they have in the past. The additional time afforded AFA processor probably also allows them to generate higher PRRs for fillet and mince products. If actual PRRs are higher than NMFS PRRs it is very possible that the estimated retained weight may be greater than the OTC in the denominator. An example of this issue follows:

Assume that the MRS for the pollock fishery is set at 90 percent. Assume that AFA catcher processors actually generate slightly over 22 tons of surimi for every 100 tons of pollock they catch, even though NMFS PRR for surimi is 15 percent. Further assume that the fleet's OTC is 100,000 tons—consisting of 82,000 tons of pollock and 18,000 tons of flatfish. The fleet discards all of its flatfish, but reports 18,500 tons of surimi in its weekly reports. The fleet also slightly under-reports its discards of rock sole at 12,500 tons. In actuality the fleet is in violation of the MRS because it retained only 82 percent of its groundfish. However, based on NMFS PRRs the fleet retained 123,300 tons of pollock or 123 percent of its OTC. Even if NMFS chose to set the denominator equal to the back calculated round-weight (using PRRs), plus the fleet's estimate of discards, the calculated retention ratio would be 91 percent and the fleet could not be charged with a violation.

Even more troubling is the following example:

The H&G catcher processor fleet discovers a school of unusually large yellowfin sole (YFS). The school is also unusually pure and catches are 95 percent YFS. Because of the uniformly large size of the fish, the fleet does not discard any YFS, but it does discard all other groundfish. Assume that all of the YFS are made into kirimi, which has an official PRR of 20 percent.¹ Because of the very large size of the fish the actual PRR is 16.5 percent. Assume the OTC for the fleet is 100,000 and that the MRS for the YFS fishery is set at 85 percent. The fleet accurately reports 15,675 tons of kirimi, and

¹ The official kirimi PRR may be different—but we use this PRR for expository purposes.

actually overstates its discards at 6,000 tons. Based on its PRRs, NMFS would calculate total retained catch as 78,375 and would inaccurately charge the fleet with a violation of the MRS.

Given hypothetical examples described above, a critical question is whether NMFS will be able to approve an MRS enforced on a group of vessels without significant changes to observer and reporting requirements. An additional question is whether post-season sanctions might be an alternative method to enforce such a regulation, in order to prevent closing a fishery to a vessel, or group of vessels, prematurely.

To assist in providing guidance on these issues, background information is available in a decision framework document which was used for reviewing and revising this set of IR/TU trailing amendments, and which was distributed at the October Council meeting. The Council's IR/TU Technical Committee has scheduled a teleconference for November 26 at 10:00 am Alaska time (on our conference line at 907-271-2896), to discuss these and other issues associated with proposed Amendment C. Input from your offices will be critical to further development of this proposal, and we would appreciate any such input as soon as is practicable.

Sincerely,

Chris Oliver
Executive Director

cc: Lisa Lindeman
Kent Lind
Rich Marasco
Sue Salvesson

Draft Minutes
IR/TU Committee
November 26, 2002

The IR/TU Technical Committee met via teleconference on November 26, 2002.

Committee members that were present include: Matt Dougherty, Geoff Shester, John Henderschedt, Bill Orr, Teresa Kandianis, Donna Parker, and Michelle Ridgeway.

Staff members that were present include: Chris Oliver Jon McCracken (NPFMC), Kent Lind and Garland Walker (NMFS), Marcus Hartley (NEI) and Graeme Parks (MRAG).

Members of the audience included: Dave Wood, Mike Szymanski, and Paul MacGregor.

The meeting began with a general overview of the tables and graphs sent to the committee members for review. The data presented in the tables showed groundfish retention rates for selected Bering Sea and Aleutian Islands target fisheries by gear and by sector, while the graphs depicted a distribution of the fleet by discard percent for specific target species from 1999 to 2001. Also presented in the graphs were the fleet wide discard rate and the average discard rate. The fleet wide discard rate is calculated by dividing the total fleet wide groundfish discard amount by the fleet wide groundfish catch. Average discard rate was calculated by summing the vessel by vessel discard rates in the fleet and then dividing by the number of vessels in the fleet. In most cases, the fleet wide discard rate and the average discard rate were similar. This indicates that vessels at the extremes do not overly influence the fleet wide discard rate. However, there are few fisheries where the two averages are very different from one another. In the cases where fleet wide rate is higher than average rate, then high-volume producers had high discard rates, thus skewing the fleet average higher. In cases where fleet wide rates are lower than average rates, the high volume producers had low discard rates, thus skewing the fleet average lower.

A large portion of the meeting centered around clarifying the data used in the tables and graphs. There was some discussion on tracking vessels through time to determine if the same vessels were consistently above the fleet wide average discard rate. However, it was felt by the Committee that tracking individual vessels across time does not directly address the issue of minimum groundfish retention standards and would add additional burden to the analytical team. As an alternative, it was agreed that some effort by the analytical team should be spent fashioning a historical distribution table that will identify how many vessels fall outside (over) a given minimum retention standard.

There was also some discussion about whether or how PSC should be included in the retention standard. In addition, there was some discussion about whether the groundfish retention standard should include other non-fish species like corals and sponges. One Committee member specifically requested the analysis of discard rates to include non-groundfish species. However, it was agreed upon by the Committee that retention standards should continue to focus only on groundfish, and unless otherwise directed by the Council, this will be how the analysis is conducted. There was also a brief discussion concerning a single minimum retention groundfish standard across all target fisheries or multiple retention standards specific to individual target fisheries (Decision Point 2 from the Decision Framework Document handed out at the October 2002 Council meeting). It was agreed that both alternatives should still be considered for analysis purposes.

The remaining portion of the meeting centered around the response from NMFS Enforcement regarding the November 13, 2002 letter addressed to NOAA GC and NMFS Enforcement (see attachment C-5(3)). In the November 13 letter, four questions were raised concerning the data that would be used to enforce a minimum groundfish retention standard. Specifically, one group of questions asks whether NOAA GC and NMFS Enforcement are satisfied with using estimates based solely on data reported by the vessel operator. The response from NMFS Enforcement and NOAA GC is they are not satisfied with self-reporting and would like to see a better source of data for enforcing compliance. Another issue raised in the November 13 letter was whether enforcing compliance of minimum retention standards over a group of vessels was an acceptable alternative to enforcing compliance by individual vessels. In response, NMFS Enforcement and NOAA GC were not comfortable using minimum retention standards over a group of vessels. The Committee felt it was important to inform the Council on this initial response to the November 13 letter. The Committee requested further consideration of these issues by NOAA GC, Enforcement, and Fisheries Management staff, particularly in the context of existing IR/IU enforcement standards (for pollock and cod), as well as what would be in place under a flatfish full retention regulation.

The Committee also noted that a substantial amount of relevant information already exists in the previous IR/IU analytical documents, and should be incorporated where relevant.