

An Analysis of Non-participating Limited Entry Permits in the Bristol Bay Salmon Drift Gillnet Fishery, 1990-2005

CFEC Report No. 06-4N
December, 2006

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Abstract

This report offers several views of unfished permits in the Bristol Bay drift gillnet salmon fishery. These permits are of interest to those pursuing fleet consolidation efforts in Alaska's commercial salmon fisheries. The number of years unfished permits are inactive, the frequency and timing of transfers for fished versus unfished permits, and the average age and average relative earnings of holders of fished versus unfished permits are presented. Tables throughout the report show permits not fished are transferred in subsequent years at a higher rate than fished permits and permits not fished in a year are likely to become active in the short-term. Summary data are provided for years 1990 through 2005. Discussion is focused on 2001 through 2005: the start of this period is marked by dramatic declines in fishery-wide earnings and participation rates.

1.0 Introduction

Alaska's permanent entry permits are homogenous; within each permit fishery, every permit provides the same level of fishery access and harvest privilege.¹ While each permit provides equal access to a fishery, entry permit holders differ in the amount of fishery knowledge, time, skill, and equipment they are able to pair with the permit. A permit holder may harvest much less of the resource than the average permit holder in any year, or further, they may opt not to participate. In either case, the permit holder could then permanently transfer their permit to a fisher whose total landings in the next year fall well above average.

If a fleet reduction program through buy-back or consolidation of permits is of interest to Bristol Bay salmon drift gillnet permit holders, it would be prudent to consider the effort associated with those permits most likely to be removed from the fishery. The focus of this report is on permits not fished in recent years. Unfished permits are often spoken of as a discrete group, and thought likely to sell in a fleet consolidation program. This report provides some tools to evaluate the extent to which unfished permits are a discrete set, remaining unfished year after year. It also shows the number and timing of transfers for permits not fished one or more years.

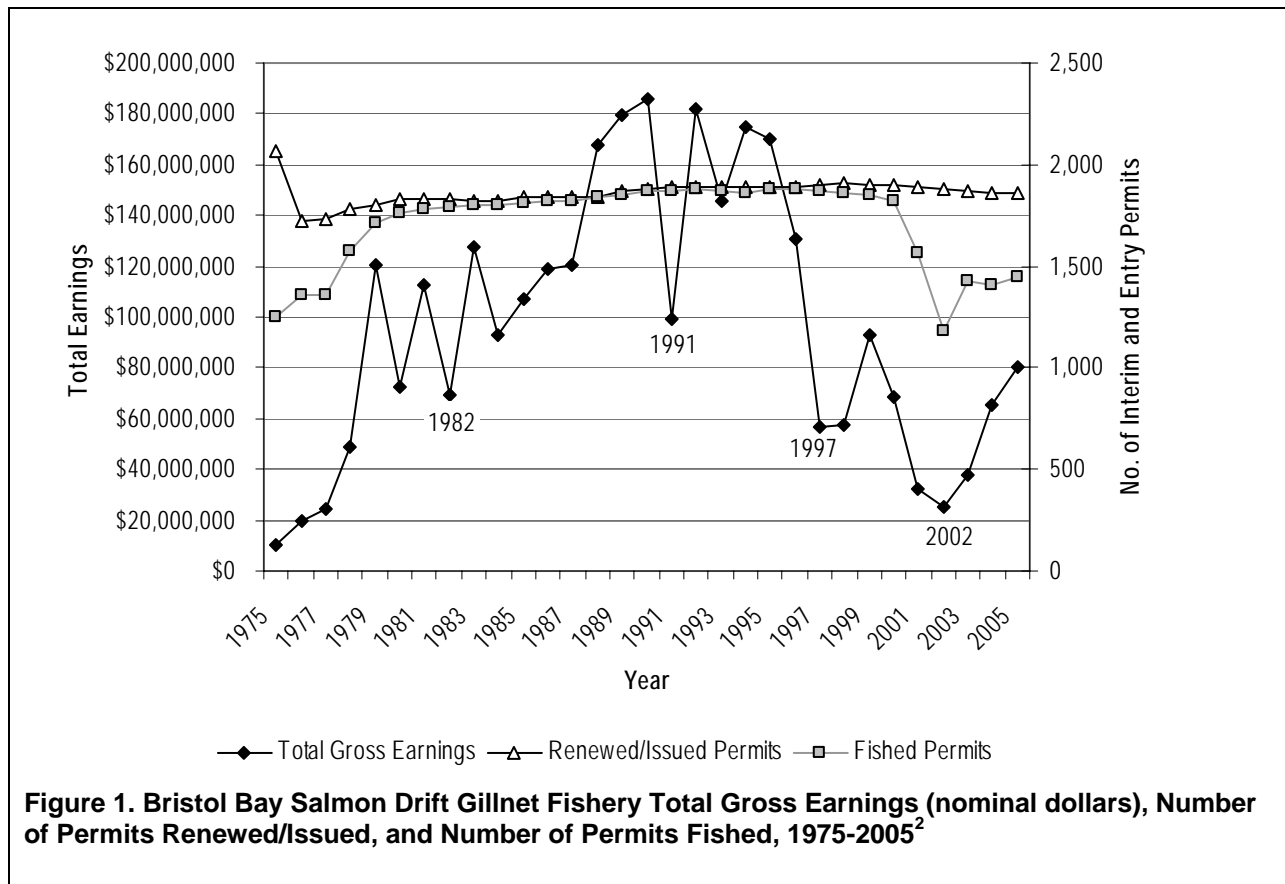
Potential short-term gains from fleet consolidation will be minimal if the majority of the permits removed from the fishery are those that would not have participated in absence of a buyback or consolidation program. An evaluation of likely short-term versus long-term gains from fleet consolidation requires identification of the permits most likely to be removed, and a summary of the past performance of those permits. Also of interest is the amount of time these unfished permits remain idle before permanent transfer to someone likely to actively participate in the fishery.

Interest in fleet consolidation has intensified with the economic decline of the Bristol Bay salmon fishery that began in the late 1990s, largely due to growth in the farmed salmon industry. Earnings in the Bristol Bay salmon drift gillnet fishery have varied widely over time since the introduction of limited entry. The peak ex-vessel value (nominal dollars) occurred in 1990 at more than \$180 million. Between 1988 and 1995, gross earnings in the fishery in seven of the eight years were more than \$140 million. A recent low fishery-wide ex-vessel value occurred in 2002 at a level approaching earnings in the earliest years of limited entry. In 2002, fishery-wide gross earnings in the fishery totaled just over \$25 million.

Participation levels in this fishery, however, have been much more stable through time. Participation was nearly 100 percent in each year 1980 through 2000. The number of permit holders who opted to fish fell dramatically in 2001 and again in 2002 with the decline in earnings. More permits fished in 2003, following the 2002 low, but the participation rate has remained fairly stable at a relatively low level through 2005.

¹ Some fisheries have various levels of capacity constraints, such as vessel length or number of allowable pots. Each level of constraint is assigned a different permit code. Permits are homogenous within a single permit fishery, or permit code, but there may be multiple permit fisheries within what has traditionally been defined as a single fishery.

Figure 1, below, shows the total nominal gross earnings in the Bristol Bay salmon drift gillnet fishery and permit activity, 1975 through 2005. Historical fishery earnings and permit activity shown in Figure 1 provide context for trends that emerge in tables throughout this report.



In sections that follow, this report provides a summary of unfished permits in the Bristol Bay salmon drift gillnet fishery. Unfished permits are often referred to as “inactive” or “latent”. This report attempts to examine how long unfished permits remain inactive. The number of seasons permits have remained inactive, transfer rates, and the timeline of transfers in relation to years of inactivity are explored. Characteristics of permit holders are also considered.

Section 2 of this report shows the number of Bristol Bay salmon drift gillnet permanent entry permits unfished each season. Of those permits unfished, the number of consecutive years they have been idle is also provided. This section begins to answer questions such as: are the permits not fished in a year the same from year-to-year, or do they tend to be different permits each year? In years of high participation in the fishery, summary data show less than 1.5 percent of permanent entry permits were idle for multiple consecutive years. Fewer than 10 unfished permits in any of those years had been unfished for 6 or more consecutive years. In 2001, there were sharp declines in fishery-wide earnings and participation rates. A substantial number of the permits that went unfished in 2001 also went unfished in subsequent years. The same holds for

² This figure includes both permanent entry permits and interim entry permits. Data source: Commercial Fisheries Entry Commission Basic Information Tables. All other tables in this report include only permanent entry permits.

the low earnings year that followed. As seasons pass and fishery earnings have increased, however, a significant number of these permits have again become active in the fishery.

Section 3 shows how many permits have been transferred in the Bristol Bay salmon drift gillnet fishery and when they were transferred. These data are shown separately for permits not fished and permits fished in each year. This section shows permits not fished in a year are transferred in subsequent years at a higher rate than permits fished.

Section 4 explores attributes of holders of fished versus unfished permits. Average age of year-end permit holders and average earnings in the previous year are provided for each group of permits: fished and unfished. The purpose of this section is to see if generalizations can be made about permit holders who opt not to fish their permit. Questions addressed include: do holders of unfished permits tend to be older than holders of fished permits; do they tend to have lower earnings, on average, relative to holders of permits that are fished? Age data do not show a clear trend in this fishery between holders of fished and unfished permits. Past earnings for permits not fished, however, are consistently lower in recent years than the fishery-wide average.

Appendix Tables A-1 and A-2 combine information presented in Sections 2 and 3. Through a combination of the last year an inactive permit was fished and the number of years into the future a transfer occurred, we can begin addressing the question if nonparticipation is a prelude to permit turnover or if it is something that continues year after year without a permanent transfer.

2.0 Consecutive Years of Inactivity for Entry Permits Not Fished

Table 2-1 in this section shows the number of Bristol Bay salmon drift gillnet permanent entry permits unfished in each year, 1990-2005.³ Throughout this report, a permit is considered “fished” if at least one commercial delivery is recorded in fish ticket data for the permit.⁴ The permit holder him/herself or an emergency transferee may have made the landing(s). Of those permits unfished, the number of years permits have gone without fish ticket activity on record is also provided. This table provides answers to questions such as: are the permits not fished in a year the same from year-to-year, or do they tend to be different permits each year?

The percentage of permanent Bristol Bay salmon drift gillnet entry permits that were fished in years 1990 through 1997 ranged from 98.7% to 99.7% in each year. Consequently, a relatively small set of permits were not fished in each of those years. The length of time these small sets of unfished permits have been inactive, on average, appears to be fairly erratic over time. This wide year-to-year variation occurs not only in the data below on number of consecutive years of inactivity, but also in permit attributes such as relative earnings leading to a year of inactivity and the age of permit holder presented later in this report. Table 2-1 shows over the 1990 through 1997 period, between 11% and 78% of the permits not fished in a year were fished in the previous year. Between 13% and 89% had not been fished for 6 or more years. The total number

³ As of the writing of this report, 2006 fish ticket data are not yet available.

⁴ Beginning in 2004, 2 permit holders on a vessel allow for additional gear to be fished in this fishery, though it was not required that landings be recorded on both permits. This may lead to an undercount of permits fished in 2004 and 2005.

of unfished permits during this period, however, does not exceed 23 in any year and is as low as 5 permits in 1992.

In 2001, average earnings in the Bristol Bay salmon drift gillnet fishery fell dramatically. From 2001 forward, a higher percentage of permanent entry permits have not been fished. The highest number of permits that went unfished in any year occurred in 2002 (688 permits or 36.9% of all permanent entry permits in the year). As the number of unfished permits became a substantial portion of the permit holdings and earnings in the fishery remained low, a trend of increasing consecutive years a permit is idle developed.

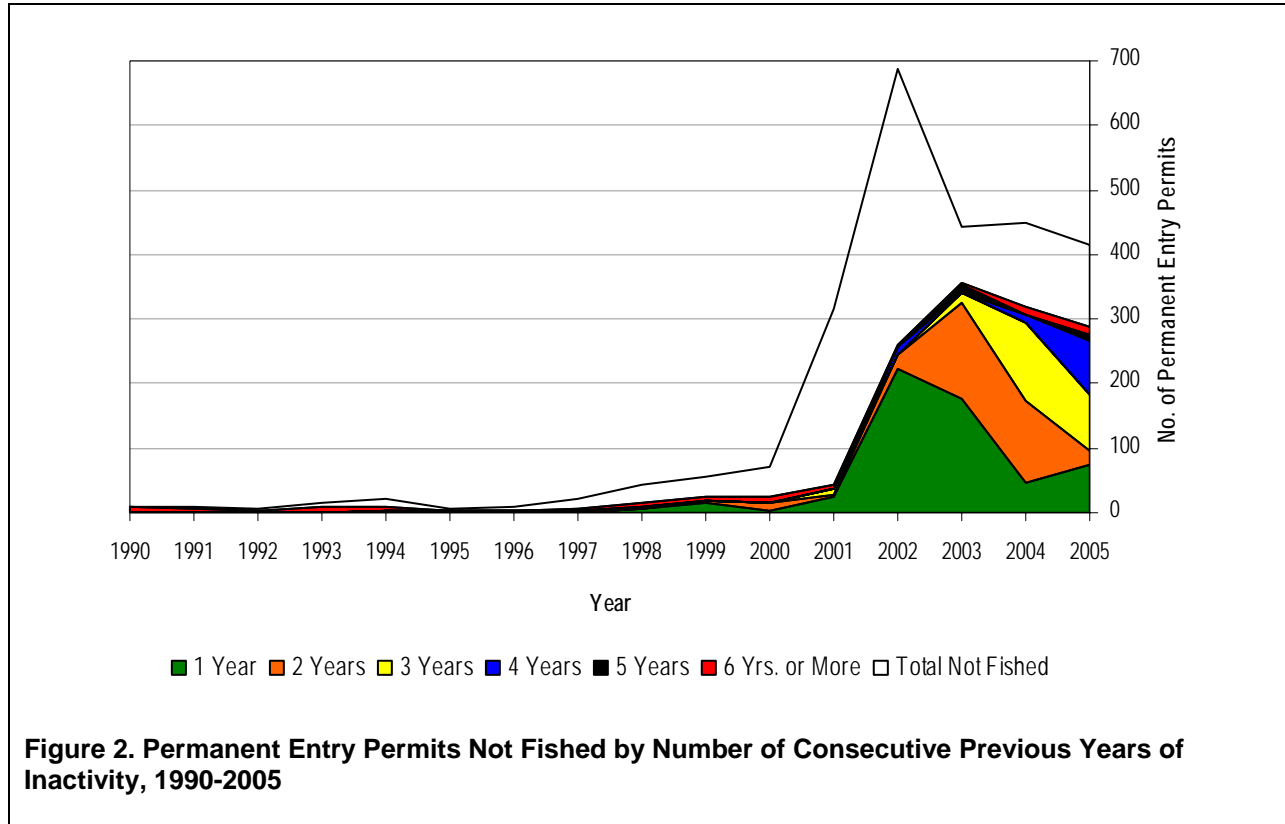


Figure 2. Permanent Entry Permits Not Fished by Number of Consecutive Previous Years of Inactivity, 1990-2005

Most of the 315 permits that went unfished in 2001 went unfished again in 2002 (260 permits or 82.5%), which was the lowest total gross earnings year in the fishery since the late 1970s. Of this same group of 315 permits; 179 (56.8%) went unfished in 2003; 143 (45.4%) went unfished again in 2004; and 106 (33.7%) in 2005. Viewed from a percent fished perspective, of the 315 permits that went unfished in 2001, 55 (17.5%) were fished within the next year; 136 (43.2%) were fished within the next two years; 172 (54.6%) were fished within the next three years; and 209 (66.3%) within the next four years.

Likely due to low anticipated earnings in 2002, a new substantial set of permits went unfished: 428 permits that had been fished in the previous year went unfished in 2002. Of this group, 178 permits that last fished in 2001 (41.6%) went unfished in 2003; 129 (30.1%) in 2004; and 85 (19.9%) in 2005. From a percent fished perspective, of these 428 permits that fished in 2001 but went unfished in 2002, 250 (58.4%) were fished within the next year; 299 (69.9%) were fished within the next two years, and 343 (80.0%) were fished within the next three years.

In 2003, only 87 permanent permits that had participated in the previous year went unfished. The vast majority of unfished permits in 2003 had not been fished in the prior one to two years. Fishery earnings increased dramatically in 2004. Total earnings approached the year 2000 level and average earnings per permit exceeded the 2000 level. In 2004 and 2005, the number of permits unfished that had participated in the previous year rose slightly from 2003 to about 130 permits in each year. By 2005, however, enough permits that had not fished in one or more previous consecutive years had become active that the overall number of permits not fished in 2005 was the lowest level since 2001.

Table 2-1. Permanent Entry Permits Not Fished by Number of Consecutive Years Without Landings Activity, 1990-2005.

Year	Fished in Prev. Year		No. of Previous Consecutive Yrs. Permit Was <i>Not</i> Fished										Total No. of Permits Not Fished in Yr.		
			1 Year		2 Years		3 Years		4 Years		5 Years			6 Yrs. or More	
2005	127	31%	75	18%	22	5%	85	20%	84	20%	11	3%	11	3%	415
2004	131	29%	46	10%	129	29%	118	26%	13	3%	1	0%	11	2%	449
2003	87	20%	178	40%	147	33%	16	4%	1	0%	10	2%	5	1%	444
2002	428	62%	222	32%	23	3%	1	0%	10	1%	1	0%	3	0%	688
2001	272	86%	26	8%	1	0%	10	3%	1	0%		0%	5	2%	315
2000	44	63%	4	6%	11	16%	2	3%		0%		0%	9	13%	70
1999	29	53%	14	25%	4	7%		0%		0%	1	2%	7	13%	55
1998	29	66%	6	14%		0%	1	2%	1	2%		0%	7	16%	44
1997	18	78%		0%	1	4%	1	4%		0%		0%	3	13%	23
1996	4	50%	1	13%	1	13%		0%		0%		0%	2	25%	8
1995	1	20%	1	20%	1	20%		0%		0%		0%	2	40%	5
1994	13	57%	3	13%		0%	1	4%		0%		0%	6	26%	23
1993	6	40%		0%	1	7%		0%		0%		0%	8	53%	15
1992	1	20%	1	20%		0%		0%		0%		0%	3	60%	5
1991	3	30%		0%		0%		0%		0%		0%	7	70%	10
1990	1	11%		0%		0%		0%		0%		0%	8	89%	9

Beginning in 2004, 2 permit holders on a vessel allow for additional gear to be fished in this fishery, though it was not required that landings be recorded on both permits. This may lead to an undercount of permits fished in 2004 and 2005.

3.0 Transfer Rates and Timing for Entry Permits Not Fished

In this section, Tables 3-1 and 3-2 show how many permanent entry permits were transferred. Permits not fished in a year are shown in Table 3-1 and permits fished in a year are shown in Table 3-2. For each group and year, the cumulative distribution of the numbers of permits that have since been transferred are presented by the number of years into the future the transfer occurred.⁵ This section provides information necessary to learn if permits that are not fished in a

⁵ Data for this report was compiled in November 2006, so a transfer must have completed by mid-November 2006 to be included.

year are more likely to be transferred away in subsequent years than permits that were fished in the year.

Counts and percentages of entry permits transferred provided in this section are cumulative by year. For example, in 2000, 70 entry permits were not fished in the year. Of those, 13 were transferred one year later, 3 more transferred two years later, 5 transferred three years later, 3 transferred four years later, and 5 transferred five years later. Cumulatively, 29 of the 70 entry permits unfished in 2000 transferred away from the holder of record by year-end 2005.

The highest number of permits not fished in a single year during the reported period occurred in 2002; 688 (nearly 37%) of renewed permanent entry permits in this year were not fished. Of these, 104 permits were transferred away the following year. By November of 2006, a total of 286 permits (41.6%) that were not fished in 2002 have been transferred away from the 2002 holder of record.

In contrast, Table 3-2 shows the rate of transfer for those permits that were fished in each year, 1990 through 2005. In 2002, 1,175 entry permits were fished. Of those fished permits in 2002, only 5.4% were transferred away in the following year. By November 2006, just over 20% of the 1,175 permits holders who opted to fish in 2002 transferred their permit away. This is half the rate of that shown in Table 3-1 for unfished permits over the same time period. Across all years, transfers of permits fished in a year occur at a lower rate than for permits not fished in a year. This is true for the short-term and through the five-year span following the fishery year.

Table 3-1. Permanent Transfers of Entry Permits Not Fished, 1990-2005.

Year	Permanent Entry Permits			Permanent Entry Permits <i>Not</i> Fished in Year Transferred Within ¹ :										
	Total	Not Fished	% Not Fished	Current Year ²	1 Year		2 Years		3 Years		4 Years		5 Years	
2005	1,859	415	22.3%	0.0%	65	15.7%	N.A.		N.A.		N.A.		N.A.	
2004	1,857	449	24.2%	0.0%	88	19.6%	141	31.4%	N.A.		N.A.		N.A.	
2003	1,861	444	23.9%	1 0.2%	67	15.1%	145	32.7%	180	40.5%	N.A.		N.A.	
2002	1,863	688	36.9%	0.0%	104	15.1%	160	23.3%	248	36.0%	286	41.6%	N.A.	
2001	1,861	315	16.9%	0.0%	47	14.9%	83	26.3%	108	34.3%	146	46.3%	163	51.7%
2000	1,858	70	3.8%	0.0%	13	18.6%	16	22.9%	21	30.0%	24	34.3%	29	41.4%
1999	1,850	55	3.0%	0.0%	8	14.5%	14	25.5%	15	27.3%	22	40.0%	23	41.8%
1998	1,844	44	2.4%	0.0%	5	11.4%	9	20.5%	12	27.3%	15	34.1%	18	40.9%
1997	1,832	23	1.3%	0.0%	6	26.1%	7	30.4%	9	39.1%	12	52.2%	12	52.2%
1996	1,821	8	0.4%	0.0%		0.0%	1	12.5%	1	12.5%	1	12.5%	3	37.5%
1995	1,813	5	0.3%	0.0%	2	40.0%	3	60.0%	3	60.0%	3	60.0%	3	60.0%
1994	1,810	23	1.3%	0.0%	8	34.8%	12	52.2%	13	56.5%	14	60.9%	15	65.2%
1993	1,805	15	0.8%	0.0%	3	20.0%	9	60.0%	12	80.0%	13	86.7%	13	86.7%
1992	1,797	5	0.3%	0.0%		0.0%	1	20.0%	3	60.0%	3	60.0%	4	80.0%
1991	1,793	10	0.6%	0.0%	3	30.0%	5	50.0%	5	50.0%	8	80.0%	8	80.0%
1990	1,785	9	0.5%	0.0%	2	22.2%	2	22.2%	3	33.3%	4	44.4%	6	66.7%
Annual average:		161	8.7%	0 0.0%	26	18.6%	41	32.7%	45	41.9%	42	50.2%	25	58.7%

See notes at bottom of Table 3-2.

Table 3-2. Permanent Transfers of Entry Permits Fished, 1990-2005.

Year	Permanent Entry Permits			Permanent Entry Permits Fished in Year Transferred Within ¹ :											
	Total	Fished	Pct. Fished	Current Year ²	1 Year		2 Years		3 Years		4 Years		5 Years		
2005	1,859	1,444	77.7%	0	0.0%	77	5.3%	N.A.		N.A.		N.A.		N.A.	
2004	1,857	1,408	75.8%		0.0%	123	8.7%	184	13.1%	N.A.		N.A.		N.A.	
2003	1,861	1,417	76.1%	1	0.1%	72	5.1%	172	12.1%	236	16.7%	N.A.		N.A.	
2002	1,863	1,175	63.1%	2	0.2%	63	5.4%	116	9.9%	190	16.2%	237	20.2%	N.A.	
2001	1,861	1,546	83.1%		0.0%	106	6.9%	211	13.6%	285	18.4%	387	25.0%	444	28.7%
2000	1,858	1,788	96.2%	1	0.1%	134	7.5%	254	14.2%	375	21.0%	460	25.7%	580	32.4%
1999	1,850	1,795	97.0%	1	0.1%	106	5.9%	232	12.9%	347	19.3%	456	25.4%	537	29.9%
1998	1,844	1,800	97.6%	1	0.1%	97	5.4%	189	10.5%	306	17.0%	409	22.7%	514	28.6%
1997	1,832	1,809	98.7%		0.0%	124	6.9%	210	11.6%	294	16.3%	393	21.7%	491	27.1%
1996	1,821	1,813	99.6%		0.0%	103	5.7%	222	12.2%	299	16.5%	375	20.7%	471	26.0%
1995	1,813	1,808	99.7%	2	0.1%	111	6.1%	206	11.4%	316	17.5%	383	21.2%	449	24.8%
1994	1,810	1,787	98.7%	2	0.1%	127	7.1%	219	12.3%	303	17.0%	400	22.4%	462	25.9%
1993	1,805	1,790	99.2%		0.0%	124	6.9%	226	12.6%	307	17.2%	380	21.2%	471	26.3%
1992	1,797	1,792	99.7%	1	0.1%	112	6.3%	219	12.2%	314	17.5%	391	21.8%	460	25.7%
1991	1,793	1,783	99.4%		0.0%	121	6.8%	213	11.9%	306	17.2%	391	21.9%	461	25.9%
1990	1,785	1,776	99.5%		0.0%	94	5.3%	198	11.1%	283	15.9%	371	20.9%	444	25.0%
Annual average:		1,671	91.3%	1	0.0%	106	6.3%	205	12.1%	297	17.4%	387	22.4%	482	27.2%

Beginning in 2004, 2 permit holders on a vessel allow for additional gear to be fished in this fishery, though it was not required that landings be recorded on both permits. This may lead to an undercount of permits fished in 2004 and 2005.

¹Transfers must have occurred by mid-November 2006 to be accounted for in this table.

²Table is based on the year in which an individual permanently transferred their permit away. If they transferred it away, we would not expect to see them associated with the permit at year-end of the current year. This can occur, however, if an individual permanently transfers the permit away, but then receives it back by permanent transfer prior to year-end.

4.0 Average Age of Holder and Average Earnings for Unfished Vs. Fished Permits

This section addresses the question: are older permit holders and those with lower earnings more likely to opt not to fish their permits? Table 4-1 shows average age and average relative gross earnings for year-end holders of unfished entry permits and for year-end holders of fished entry permits. On average, in early years of the 1990 to 2005 period, those permits not fished were held by older individuals. The average age of inactive permit holders in each year, 1990 through 1993 was more than 10 years higher than for holders of active permits. In 1994 and 1995, the difference was 6.2 and 4.8 years, respectively. Beginning in 1996, the gap in average age between holders of inactive permits and holders of fished permits narrows and does not follow a consistent pattern. In some years, the average age of holders of fished permits is higher than that for unfished permits.

The average earnings ratio shown in the Table 4-1 is calculated by dividing the earnings associated with each permit by the fishery-wide average earnings in the year, and averaging across all permits included in the fished or unfished category as shown in the table. An earnings ratio of exactly 1.0 is equal to the fishery-wide average gross earnings estimate for the year. A ratio greater than 1.0 translates to permit earnings higher than average, and a ratio less than 1.0

translates to earnings are lower than the fishery-wide average for the year. This ratio is available only for permits that fished the year prior to that shown in the left most column; therefore, the previous year earnings count is often lower than the total number of permits in the category.

In early years of the period included in this table, the average previous year earnings ratio for permits not fished varies widely from year-to-year and relative to that for permits fished. This may be due to the small set of unfished permits, and even smaller set for which this statistic is available. In early years, many of the permits that were not fished in the year also were not fished in the previous year. In recent years, there is a large set of unfished permits. On average, the previous year earnings ratio for permits not fished is more than 20 percent lower than for those fished. In 2002, the ratio for fished permits is 1.09 which shows dominance in that group by above average 2001 fishers.

Table 4-1. Average Age of Year-end Permit Holders and Average Permit Earnings Relative to Average Earnings in Previous Year for Permanent Permits 1990-2005, Fished and Not Fished.

Year	Permanent Permits <i>Not</i> Fished in Year					Permanent Permits Fished in Year				
	Avg. Age	Age Count ¹	Avg. Earnings Ratio, Prev. Yr. ²	Prev. Yr. Earnings Count ³	Total	Avg. Age	Age Count ¹	Avg. Earnings Ratio, Prev. Yr. ²	Prev. Yr. Earnings Count ³	Total
2005	47.6	384	0.68	127	415	48.6	1,437	1.03	1,281	1,444
2004	48.7	418	0.74	131	449	48.9	1,392	1.03	1,286	1,408
2003	49.6	420	0.67	87	444	48.5	1,402	1.03	1,088	1,417
2002	48.9	663	0.78	428	688	48.3	1,164	1.09	1,118	1,175
2001	49.4	303	0.84	272	315	47.6	1,529	1.03	1,516	1,546
2000	45.3	68	0.75	44	70	47.7	1,771	1.01	1,751	1,788
1999	45.6	51	0.74	29	55	47.2	1,780	1.01	1,771	1,795
1998	47.5	40	0.95	29	44	46.5	1,782	1.00	1,780	1,800
1997	50.6	21	0.79	18	23	46.5	1,793	1.01	1,795	1,809
1996	43.3	7	0.66	4	8	46.1	1,800	1.01	1,804	1,813
1995	*	2	*	1	5	45.7	1,791	1.01	1,786	1,808
1994	51.7	19	0.69	13	23	45.5	1,769	1.01	1,776	1,787
1993	56.0	13	0.46	6	15	45.1	1,774	1.01	1,786	1,790
1992	59.0	4	*	1	5	44.8	1,776	1.01	1,782	1,792
1991	60.2	9	*	3	10	44.5	1,768	1.01	1,773	1,783
1990	61.0	7	*	1	9	44.0	1,760	1.02	1,763	1,776

*Confidential data

Beginning in 2004, 2 permit holders on a vessel allow for additional gear to be fished in this fishery, though it was not required that landings be recorded on both permits. This may lead to an undercount of permits fished in 2004 and 2005.

¹*Permits foreclosed on and held by state authorized lenders at year-end are included. Permit holder age is missing for these permits. In addition, age is not available for permits held by estates at year-end. The occurrence of missing age data is reflected in the age count provided on this table. State authorized lender holdings account for a significant portion of the missing ages in recent years. They held permits at year-end in the following quantities and years: 20 permits in 2005, 26 in 2004, 18 in 2003, 16 in 2002, 8 in 2001, 1 in 1999 and 1997, and 2 in 1998.*

²*Average earnings ratio in the previous year is calculated by dividing the total gross earnings for the permit in the previous year by the average gross earnings across the fishery in the same year.*

³*Permit earnings in the previous year are available only for those permits that were fished in the previous year. The previous year earnings count provides the number of permits fished in the previous year, within current year not fished and fished categories.*

5.0 Conclusion

This report offers several views of unfished permits in the Bristol Bay drift gillnet salmon fishery. These permits are of interest to those pursuing fleet consolidation efforts in Alaska's commercial salmon fisheries. Consolidation efforts most often discussed are buy-back programs and programs where multiple permits are allowed to fish a single vessel for an additional privilege. Under a buy-back program, permits would be removed from the fishery. Under consolidation programs where multiple permits may fish a single vessel to gain additional privileges, permits would not likely be removed from the fishery, but the overall participation rate in terms of number of permits participating may be higher in years of low economic returns than would be otherwise. If permits removed from the fishery under fleet consolidation efforts or made active by programs such as multiple permits on a vessel for additional privileges are those that would have otherwise not participated in the near-term, short-term gains from such programs would be minimal.

Tables in Section 3 of this report show unfished permits appear more likely to be transferred in subsequent years than those permits that are fished. Since unfished permits appear to be more likely to be transferred in subsequent years, they may have higher transfer rates during a buyback or fleet consolidation program than would fished permits. One could also conclude, however, that these unfished permits are just as likely to transfer into the hands of someone intending to fish the permit in absence of a fleet consolidation program in coming years as they have been in past years. Moreover, permits that have not been fished for 4 or more years made up only 5.7 percent of available entry permits in this fishery in 2005, 1.3 percent in 2004 and less than 1 percent in 1990-2003; thus they may not remain latent for long.

In 2006, the Commission adopted an optimum number range for the Bristol Bay drift gillnet salmon fishery of 900 to 1,400 permits: 458 to 958 fewer permits than in the fishery today. For those concerned that fleet consolidation efforts will only remove or make active permits that would otherwise be idle, the tables included in this report should provide some reassurance that significant fleet consolidation efforts will reach permits that would otherwise be fished in the near-term and provide associated benefits to those who remain in the fishery.

Appendix: Transfer Rates by Number of Years of Inactivity

Appendix Tables A-1 and A-2 combine information presented in Sections 2 and 3 (Tables 2-1 and 3-1) for years 2000 through 2005. From the combination of the last year an inactive permit was fished and the number of years into the future a transfer occurred, we can glean more from these data. For example, we can begin addressing the question if nonparticipation is a prelude to permit turnover or if it is something that occurs year after year without a permanent transfer.

In Tables A-1 and A-2, the number of years before an unfished permit is transferred is shown by the number of consecutive years of inactivity. In combination, a more complete picture of unfished permits can emerge. For recent years, the frequency with which permit holders continue to hold a permit, but do not fish is presented. It is this group that is of concern to proponents of fleet consolidation who wish to remain in the fishery post-consolidation efforts. If permits are removed from the fishery that would have remained unfished in the short-term, fishery participants would not enjoy any short-term gains from permit consolidation; although the gain would be realized over the longer term. The first table (Table A-1) shows counts of entry permits. The second (Table A-2) shows the same information as a percentage of the pool of unfished permits in the year.

According to Table A-1, 350 of the 415 permits that were not fished in 2005 were still held by the year-end 2005 holder of record as of November 2006. Of these 350, almost half were fished in 2004 and/or 2003. The other half were last fished in year 2002 or prior. Only 20 of the permits not fished in 2005 have not been fished for six or more consecutive years (year 1999 or prior).

In 2002, the lowest level of participation in the Bristol Bay salmon drift gillnet fishery occurred: 688 entry permits were not fished. Table A-1 shows through November 2006, 286 have since transferred away from the year-end 2002 permit holder. In 2003, the table shows of the 444 permits not fished in that year, 87 had fished in 2002, leaving 357 unfished in 2002 and prior. This number drops further in 2004 and 2005.

This table shows as of 2005, only 90 permits have last been fished 5 or more years ago that have not yet been transferred away as of November 2006. If past trends of higher transfer rates among permits that have not been fished hold, we would expect many of these permits to be transferred, if not fished, in coming years.

Table A-1. Permanent Transfers of Unfished Entry Permits by No. of Years Since Most Recent Participation, 1990-2005.

Year	Last Fished	Permanent Entry Permits <i>Not</i> Fished in Year Transferred In:					Not Transferred as of Nov. 06	Total Not Fished in Year	
		Current Year	1 Year	2 Years	3 Years	4 Years			5 Years
2005	Prev. Yr.		17	N.A.	N.A.	N.A.	N.A.	110	127
	2 Yrs. Ago		13	N.A.	N.A.	N.A.	N.A.	62	75
	3 Yrs. Ago		4	N.A.	N.A.	N.A.	N.A.	18	22
	4 Yrs. Ago		15	N.A.	N.A.	N.A.	N.A.	70	85
	5 Yrs. Ago		14	N.A.	N.A.	N.A.	N.A.	70	84
	6 Yrs. Ago		1	N.A.	N.A.	N.A.	N.A.	10	11
	Over 6 Yrs. Ago		1	N.A.	N.A.	N.A.	N.A.	10	11
			65	N.A.	N.A.	N.A.	N.A.	350	415
2004	Prev. Yr.		16	18	N.A.	N.A.	N.A.	97	131
	2 Yrs. Ago		10	6	N.A.	N.A.	N.A.	30	46
	3 Yrs. Ago		29	16	N.A.	N.A.	N.A.	84	129
	4 Yrs. Ago		31	11	N.A.	N.A.	N.A.	76	118
	5 Yrs. Ago		1	1	N.A.	N.A.	N.A.	11	13
	6 Yrs. Ago				N.A.	N.A.	N.A.	1	1
	Over 6 Yrs. Ago		1	1	N.A.	N.A.	N.A.	9	11
			88	53	N.A.	N.A.	N.A.	308	449
2003	Prev. Yr.		15	17	8	N.A.	N.A.	47	87
	2 Yrs. Ago	1	27	28	16	N.A.	N.A.	106	178
	3 Yrs. Ago		22	30	9	N.A.	N.A.	86	147
	4 Yrs. Ago		2	2	1	N.A.	N.A.	11	16
	5 Yrs. Ago					N.A.	N.A.	1	1
	6 Yrs. Ago				1	N.A.	N.A.	9	10
	Over 6 Yrs. Ago			1		N.A.	N.A.	4	5
		1	66	78	35	N.A.	N.A.	264	444
2002	Prev. Yr.		65	32	51	22	N.A.	258	428
	2 Yrs. Ago		36	21	33	11	N.A.	121	222
	3 Yrs. Ago		1	3	3	3	N.A.	13	23
	4 Yrs. Ago		1				N.A.		1
	5 Yrs. Ago		1			1	N.A.	8	10
	6 Yrs. Ago						N.A.	1	1
	Over 6 Yrs. Ago				1	1	N.A.	1	3
			104	56	88	38	N.A.	402	688
2001	Prev. Yr.		45	32	22	34	12	127	272
	2 Yrs. Ago		2	1	3	3	4	13	26
	3 Yrs. Ago			1					1
	4 Yrs. Ago			1			1	8	10
	5 Yrs. Ago							1	1
	Over 6 Yrs. Ago			1		1		3	5
			47	36	25	38	17	152	315

Table A-2. Permanent Transfers of Unfished Entry Permits by No. of Years Since Most Recent Participation, Presented as Percentage of Unfished Entry Permits in Each Year, 1990-2005.

Year	Last Fished	Permanent Entry Permits <i>Not</i> Fished in Year Transferred In:						Not Transferred as of Nov. 06	Total Not Fished in Year	
		Current Year	1 Year	2 Years	3 Years	4 Years	5 Years			
2005	Prev. Yr.	0.0%	4.1%	N.A.	N.A.	N.A.	N.A.	26.5%	30.6%	
	2 Yrs. Ago	0.0%	3.1%	N.A.	N.A.	N.A.	N.A.	14.9%	18.1%	
	3 Yrs. Ago	0.0%	1.0%	N.A.	N.A.	N.A.	N.A.	4.3%	5.3%	
	4 Yrs. Ago	0.0%	3.6%	N.A.	N.A.	N.A.	N.A.	16.9%	20.5%	
	5 Yrs. Ago	0.0%	3.4%	N.A.	N.A.	N.A.	N.A.	16.9%	20.2%	
	6 Yrs. Ago	0.0%	0.2%	N.A.	N.A.	N.A.	N.A.	2.4%	2.7%	
	Over 6 Yrs. Ago	0.0%	0.2%	N.A.	N.A.	N.A.	N.A.	2.4%	2.7%	
			0.0%	15.7%	N.A.	N.A.	N.A.	N.A.	84.3%	415
2004	Prev. Yr.	0.0%	3.6%	4.0%	N.A.	N.A.	N.A.	21.6%	29.2%	
	2 Yrs. Ago	0.0%	2.2%	1.3%	N.A.	N.A.	N.A.	6.7%	10.2%	
	3 Yrs. Ago	0.0%	6.5%	3.6%	N.A.	N.A.	N.A.	18.7%	28.7%	
	4 Yrs. Ago	0.0%	6.9%	2.4%	N.A.	N.A.	N.A.	16.9%	26.3%	
	5 Yrs. Ago	0.0%	0.2%	0.2%	N.A.	N.A.	N.A.	2.4%	2.9%	
	6 Yrs. Ago	0.0%	0.0%	0.0%	N.A.	N.A.	N.A.	0.2%	0.2%	
	Over 6 Yrs. Ago	0.0%	0.2%	0.2%	N.A.	N.A.	N.A.	2.0%	2.4%	
			0.0%	19.6%	11.8%	N.A.	N.A.	N.A.	68.6%	449
2003	Prev. Yr.	0.0%	3.4%	3.8%	1.8%	N.A.	N.A.	10.6%	19.6%	
	2 Yrs. Ago	0.2%	6.1%	6.3%	3.6%	N.A.	N.A.	23.9%	40.1%	
	3 Yrs. Ago	0.0%	5.0%	6.8%	2.0%	N.A.	N.A.	19.4%	33.1%	
	4 Yrs. Ago	0.0%	0.5%	0.5%	0.2%	N.A.	N.A.	2.5%	3.6%	
	5 Yrs. Ago	0.0%	0.0%	0.0%	0.0%	N.A.	N.A.	0.2%	0.2%	
	6 Yrs. Ago	0.0%	0.0%	0.0%	0.2%	N.A.	N.A.	2.0%	2.3%	
	Over 6 Yrs. Ago	0.0%	0.0%	0.2%	0.0%	N.A.	N.A.	0.9%	1.1%	
			0.2%	14.9%	17.6%	7.9%	N.A.	N.A.	59.5%	444
2002	Prev. Yr.	0.0%	9.4%	4.7%	7.4%	3.2%	N.A.	37.5%	62.2%	
	2 Yrs. Ago	0.0%	5.2%	3.1%	4.8%	1.6%	N.A.	17.6%	32.3%	
	3 Yrs. Ago	0.0%	0.1%	0.4%	0.4%	0.4%	N.A.	1.9%	3.3%	
	4 Yrs. Ago	0.0%	0.1%	0.0%	0.0%	0.0%	N.A.	0.0%	0.1%	
	5 Yrs. Ago	0.0%	0.1%	0.0%	0.0%	0.1%	N.A.	1.2%	1.5%	
	6 Yrs. Ago	0.0%	0.0%	0.0%	0.0%	0.0%	N.A.	0.1%	0.1%	
	Over 6 Yrs. Ago	0.0%	0.0%	0.0%	0.1%	0.1%	N.A.	0.1%	0.4%	
			0.0%	15.1%	8.1%	12.8%	5.5%	N.A.	58.4%	688
2001	Prev. Yr.	0.0%	14.3%	10.2%	7.0%	10.8%	3.8%	40.3%	86.3%	
	2 Yrs. Ago	0.0%	0.6%	0.3%	1.0%	1.0%	1.3%	4.1%	8.3%	
	3 Yrs. Ago	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	
	4 Yrs. Ago	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	2.5%	3.2%	
	5 Yrs. Ago	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	
	Over 6 Yrs. Ago	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	1.0%	1.6%	
			0.0%	14.9%	11.4%	7.9%	12.1%	5.4%	48.3%	315

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