

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672

563 SCOM17: JOINT INTERIM COMM. ON LIMITED ENTRY 1979

Intra-Familial Permanent Permit Transfers
(5)

<u>Fishery/Gear Type</u>	<u>Year</u>	<u>NR</u>	<u>Intra-Cohort¹</u>			<u>AUN</u>	<u>Cross²</u>	<u>Total</u>
			<u>ARL</u>	<u>AUL</u>	<u>ARN</u>		<u>Cohort</u>	
<u>Norton Sound</u>								
Gillnet	1976	0	0	0	0	0	0	0
	1977	0	0	0	0	0	1	1
	1978	0	3	1	0	0	0	4
	1979	0	3	0	0	0	0	3
Totals		0	6	1	0	0	1	8

¹Permit remained in same residency category.

²Permit crossed residency categories.

APPENDIX E:

ECONOMIC RESIDENCY

Economic Residency

When working with Commercial Fishing Entry Commission records, it became evident that data on residency might be confounded by cases of persons having permits mailed to addresses where they fish rather than their primary place of residence. Especially salient were cases of permits being mailed to cannery addresses and "in care of" addresses. If the incidence of this phenomenon was high, then there would be a substantial distortion in the residency distribution data based on Commission records. In order to obtain data on the frequency of this, cross checks of mailing addresses with expert local sources were carried out in three regions: Prince William Sound, Kodiak, and Bristol Bay. The methodology in each case involved abstracting the present permit holders who listed one of the communities in each respective regions (see Appendix B) as their residency and then having these lists reviewed by local knowledgeable sources using local definitions of residency which required at least six months residency in a community to qualify as a local resident. Four sources were used in Kodiak, six in Prince William Sound, and two in Bristol Bay. Local sources included long-time fishermen in the region, merchants involved in supplying the fishermen, processing industry representatives, proxy solicitors for regional native corporations, and others related to the fishing industry in their respective region. In each case, local sources were asked to use their own definitions of local residency. There was a high degree of consensus among the sources in all three regions.

The data indicate that Prince William Sound had the highest frequency of local residency appearance by persons who, by local standards, were not local residents. Of 817 permits in the three Prince William Sound fisheries, 91 of the 505 (18%) who had their permits sent to addresses in Prince William Sound were deemed nonresidents of the region by local standards. Of 592 permits in the

three Kodiak fisheries, 31 out of 373 (8.3%) who had their permits sent to addresses in the Kodiak region were regarded as nonresidents by local standards. Data on Bristol Bay was collected for another research project and only includes permits issued through 1977. Of permit holders in the Bristol Bay fisheries who had permits sent to communities in the Bristol Bay region, approximately 6.5% were not local residents according to local sources. In general, these findings indicate that nonlocal and nonresident permit holdings are somewhat higher than reported in this research but there is significant variation by fishery in the amount of error in the Commission records.

The importance of local definitions of residency is that they provide a close approximation of economic residency. Economic residency refers to where the net earnings (as well as expenses too in some cases) from a fishery are pumped back into an economy. The largest portion of net earnings derived from a fishery will be spent or invested in the region where fishermen make their permanent residence. These earnings provide a base for multiplier effects on employment and other economic activity and are critical to the building of an economic infrastructure which can accomplish the maintenance, upgrading, and expansion of the fisheries. To the extent that substantial amounts of net earnings from a fishery are drained into regions other than the one where the fishery is located, then the economic capacity of the region to expand, diversify, and provide its own infrastructure is impaired. The issue of where the net earnings from Alaska's fisheries are pumped back into other sectors of the economy is a matter of both historical and contemporary concern. Further research on this topic is required if Alaska is to be able to make the best use of the potential rent from its fisheries.

Errata in "Transfer Patterns in Alaska Limited
Entry Fisheries" by Steve Langdon

- Page 13: Kuskokwim gillnet 1977 - "28.7" should read 38.7
- Page 26: Line 19 - "51%" should read 517
- Page 27: Line 5 - "93%" should read 937
- Page 46: should follow page 44
- Page 45: should follow page 52
- Page 65: Prince William Sound Drift Gillnet 1979 - "3,722" should read 33,722.

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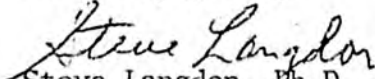
COLLEGE OF ARTS AND SCIENCES

1/7/80

Dear Committee Member:

The enclosed represents a complete working draft of the the text of my report. Correction of typographical errors, minor editing, reorganization, and revision, plus duplication of the appendices (mostly tables of data and lists) are the only modifications before the final draft is submitted for duplication to the Legislative Affairs Agency next week (1/14). This working draft can be used for the Committee meeting on Jan. 21 since all the data and findings are in it. If you have any questions, please feel free to call me; my office phone is 263-1723 and my home phone is 349-5407.

Sincerely yours,


Steve Langdon, Ph.D.

Transfer Patterns in Alaskan
Limited Entry Fisheries

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Working Draft Research Report
for the Limited Entry Study Group
of the Alaska State Legislature

January 7, 1980

Contents

Acknowledgments

- I. Introduction
- II. Transfer Patterns in the Limited Salmon Fisheries
 - Transfer Incidence
 - Sex
 - Age
 - Family Relationship
 - Residency
- III. Entry into the Limited Salmon Fisheries
 - Purchase, Gift, and Lease Entry
 - Entry Through the State Loan Program
- IV. Socioeconomic Impacts of Transfer Patterns in the Limited Entry Salmon Fisheries
 - Income
 - Employment
 - Rent
- V. Conclusion
- VI. References
- VII. Appendices
 - A. Methodology
 - B. Local Rural and Urban Communities by Region
 - C. Residency of Initial Issues and Transfer Patterns Among Residency Categories by Year
 - D. Familial Transfers by Residency Category By Fishery and Year
 - E. Economic Residency

I. Introduction

Alaska's limited entry program for commercial fisheries was enacted in 1973 under the authority of AS 16.43 following earlier unsuccessful attempts. The purposes of limited entry, as specified by an amendment to the State Constitution in 1972, are to promote "resource conservation, to prevent economic distress among fishermen and those dependent upon them for a livelihood and to promote the efficient development of aquaculture in the state." AS 16.43 itself seeks "to promote the conservation and sustained yield management of Alaska's fishery resource and the economic health and stability of commercial fishing in Alaska by regulating and controlling entry into the commercial fisheries in the public interest and without unjust discrimination." Although the enabling legislation creating Alaska's Commercial Fisheries Entry Commission could not specifically require that regulating and controlling entry into the commercial fisheries promote the economic health and stability of commercial fishing by Alaskan residents, such considerations are clearly of importance to the people of Alaska and the legislature. Concern about the economic contribution of Alaska's fisheries to the well-being of Alaskans is underscored in the Commercial Fishing Loan Act which declares that "It is the policy of the State . . . to promote . . . the development of a predominantly resident fishery." Of the various characteristics of Alaska's limited entry program, the most controversial and potentially detrimental to the State's stated goal of a "predominantly resident fishery" is the provision for permanent permits to be freely transferable from one person to another for the "bid" or market price.¹ This provision also makes possible substantial reordering of participation in the fisheries among various segments of the Alaskan population as well.

1

This provision is subject to a statutory limitation of one permit per person in a given fishery as defined by species, gear type, and administrative area.

2

The purpose of the research reported on here is to analyze the transfer patterns in Alaska's limited entry fisheries which have resulted from this provision for market transferability. More specifically the objectives are threefold:

- 1) to identify transfer patterns in the limited entry fisheries that have occurred;²
- 2) to identify patterns of new entry into limited entry fisheries; and
- 3) to analyze the socioeconomic impacts on various sectors of the Alaskan population in terms of employment in and economic return from the limited entry fisheries.

The remainder of the report is divided into four sections, three for presenting information on each of the objectives and a concluding section examining the most important findings with regard to the implications of market transferability for the future conduct of Alaska's limited entry fisheries.³ Several different types of data were needed to complete this research and the types of data and methodology used are treated in Appendix I. Other Appendices list the local rural and urban communities for each fishery, provide detailed breakouts of the residency of initial permit holders by year, summarize transfer patterns among residency categories by year, summarize familial transfers within and across residency categories by year and discuss the incidence of permit holders making dubious claims to residency.

² Permanent transfers only (not temporary transfers) have been analyzed for this report.

³ It should be noted that the analysis has only been conducted on salmon fisheries.

Table 1

Number of Permanent Permits
Transferred
by
Fishery and Gear Type

<u>Fishery/Gear Type</u>	<u>Total Number of Permits</u>	<u>Number of Permits Transferred</u>	<u>Number of Permits Not Transferred</u>	<u>Stability Index</u> <u>Percent of Permits</u> <u>Transferred (Rank)</u>	
Southeastern					
Drift gillnet	462	226	236	48.9%	(3)
Purse seine	414	164	250	39.6%	(13)
Statewide power troll	933	436	497	46.7%	(4)
Yakutat set gillnet	166	69	97	41.6%	(11)
Prince William Sound					
Drift gillnet	531	226	306	42.5%	(8)
Purse seine	258	108	150	41.9%	(9)
Set gillnet	28	10	17	35.7%	(16)
Cook Inlet					
Drift gillnet	555	266	289	47.9%	(5)
Purse seine	75	31	44	41.3%	(12)
Set gillnet	743	327	416	44.0%	(7)
Kodiak					
Beach seine	33	20	13	60.6%	(1)
Purse seine	374	165	209	44.1%	(6)
Set gillnet	185	95	90	51.3%	(2)
Chignik purse seine	90	18	72	20.0%	(20)
Peninsula-Aleutians					
Drift gillnet	156	65	91	41.7%	(10)
Purse seine	117	35	82	29.9%	(18)
Set gillnet	110	34	76	30.9%	(17)

II. Transfer Patterns in the Limited Salmon Fisheries

Using the Commercial Fisheries Entry Commission's record of permanent permit issues and permanent transfers, an enumeration of Alaskan limited entry permanent permit holders has been made by year, fishery, sex, age and residency (divided into the categories nonresident, Alaskan rural local, Alaskan urban local, Alaskan rural nonlocal and Alaskan urban nonlocal for each fishery) in order to determine patterns of permanent transfers. In addition, familial transfers have also been identified using last name as the guide to familial membership. A discussion of transfer incidence will precede presentation of findings on transfer patterns by sex, age, family relationship and residency.

Transfer Incidence

Table 1 summarizes the number of permits transferred temporarily or permanently at least once (many have been transferred multiple times) for each fishery. A stability index has been computed by dividing the total number of permits transferred by the total number of permanent permits issued for that particular fishery. The lower the index, the more stable a fishery is since the higher the proportion of initial issuees who have never transferred their permits will be. On a statewide basis, 36.5% of all permanent permits have been transferred at least once either temporarily or permanently. Naturally there are major variations on this statewide figure with the least stable fishery in the state being the Kodiak beach seine fishery in which 60.6% of the permanent permits issued have been transferred while the Lower Yukon gillnet rate of 10.4% indicates that it has been the stablest fishery in the state over the period 1976-1979. Computation of stability indexes by gear type indicates that 39.2% of initial permit holders in the six purse seine fisheries (Southeast, Prince William Sound, Cook Inlet, Kodiak, Chignik, and Peninsula-Aleutians) have transferred their permits. These range from a high of 44.1% in the Kodiak purse seine fishery to a low of 20.0% in the Chignik purse seine fishery. In

5

the five drift gillnet fisheries (Southeast, Prince William Sound, Cook Inlet, Peninsula-Aleutians, and Bristol Bay), 42.6% of the permanent permits have been transferred. These range from a high of 48.9% in Southeast to a low of 39.2% in Bristol Bay. In the six set gillnet fisheries (Yakutat, Prince William Sound, Cook Inlet, Kodiak, Peninsula-Aleutians, and Bristol Bay), 40.8% of the permanent permits have been transferred. These range from a high of 51.3% in the Kodiak set gillnet fishery to a low of 30.9% in the Peninsula-Aleutians fishery. The AYK fisheries exhibit the greatest degree of stability in the limited entry salmon fisheries as only 14.1% of permanent permits in these fisheries have been transferred. They range from a high of 24.4% in the Kotzebue gillnet fishery to a low (previously noted) of 10.4% in the Lower Yukon fishery. Low rates of transfer in these fisheries are due to the later date of initial issue (3/76 as opposed to 1/75 for the other fisheries), to the isolation of these fisheries from major urban centers, and the low value of net earnings derived from these fisheries. As previously noted, the percent of permits transferred in the Kodiak beach seine fishery is the highest of any fishery at 60.6% while the power troll fishery is also quite high with an index of 46.7%.

Table 2 summarizes 1) the total number of permanent transfers annually in each fishery since permits were first issued, 2) the total statewide transfer figure annually, and 3) tabulates the average number of permanent transfers per permit per year. Since 1975 the number of statewide permanent transfers has increased every year, albeit much more slowly over the past two years than previously. The increase in the number of transfers in 1976 over 1975 was 31%; in 1977 37.3% more transfers occurred than in 1976; and in 1978 17.3% more transfers occurred than in 1977. Projecting the rate of transfer which occurred during the first eight months of 1979 over the final four would produce a total of 1400 transfers for 1979 or a 12.8% increase over 1978. However, the actual number of permanent transfers in 1979 is likely to be lower than this projection because the last quarter generally sees fewer transfers than the other three quarters.

Number of Permanent Permits Transferred

2

<u>Fishery/Gear Type</u>	<u>Total Number of Permits</u>	<u>Number of Permits Transferred</u>	<u>Number of Permits Not Transferred</u>	<u>Stability Index</u>	
				<u>Percent of Permits Transferred</u>	<u>(Rank)</u>
Bristol Bay					
Drift gillnet	1717	674	1043	39.2%	(14)
Set gillnet	912	340	572	37.3%	(15)
Kuskokwim gillnet	781	119	662	15.2%	(23)
Lower Yukon gillnet	702	73	629	10.4%	(25)
Norton Sound gillnet	177	26	151	14.7%	(24)
Kotzebue gillnet	180	44	136	24.4%	(19)
Upper Yukon					
Gillnet	49	8	41	16.3%	(22)
Fishwheel	113	22	91	19.5%	(21)
Totals	9861	3601	6260	36.5%	

Table 2

Number of Permanent Transfers
By Fishery and Year

Fishery	75	76	77	78	79 (thru 8/20/79)	Total	Average Number of Permanent Transfers Per Permit Per	
							Year	(Rank)
Southeast purse seine	51	24	49	51	25	200	.097	(12)
Southeast drift gillnet	93	59	67	74	50	343	.148	(4)
Statewide power troll	139	77	150	138	96	600	.161	(2)
Yakutat set gillnet	9	15	16	20	12	72	.108	(11)
Prince William Sound								
Purse seine	20	41	27	32	37	157	.122	(8)
Drift gillnet	40	70	81	81	50	322	.121	(9)
Set gillnet	2	0	2	5	2	11	.079	(18)
Cook Inlet purse seine	3	7	12	9	5	36	.096	(13)
Cook Inlet drift gillnet	30	75	85	84	71	343	.124	(5)
Cook Inlet set gillnet	44	78	88	123	79	412	.111	(10)
Kodiak purse seine	20	42	68	60	40	230	.123	(7)
Kodiak beach seine	0	2	9	15	7	33	.200	(1)
Kodiak set gillnet	22	37	28	27	26	140	.151	(3)
Chignik purse seine	4	4	6	3	1	18	.040	(22)
Peninsula-Aleutians								
Purse seine	3	6	15	12	11	47	.080	(17)
Drift gillnet	4	16	28	27	22	97	.124	(5)
Set gillnet	4	5	15	14	10	48	.087	(16)
Bristol Bay drift gillnet	81	127	211	226	180	825	.096	(13)
Bristol Bay set gillnet	23	67	71	130	118	409	.090	(15)
Kuskokwim	-	9	17	50	33	109	.035	(23)
Lower Yukon gillnet	-	6	8	24	22	60	.021	(25)
Norton Sound gillnet	-	0	1	6	9	16	.023	(24)
Kotzebue gillnet	-	4	3	17	17	41	.058	(19)
Upper Yukon gillnet	-	1	1	2	4	8	.041	(21)
Upper Yukon fishwheel	-	2	2	11	6	21	.046	(20)
Total	592	774	1058	1241	933	4598		

2

If the incidence of emergency transfers and multiple permanent transfers of a single permit corresponded with the rate of permanent transfers, one would predict a one to one relationship between the rank of fisheries on the stability index (percent of permits transferred column from Table 1) and the average number of permanent transfers per permit per year column in Table 2. Although such a relationship appears to hold for some fisheries, notably the Kodiak beach seine fishery and the Lower Yukon gillnet fishery, which are respectively first and last on both measures, discrepancies can be discerned as well. For example, the statewide troll fishery is fourth on the stability index but second on the permanent transfers per permit per year measure. This means that the power troll fishery is characterized by a higher rate of permanent transfers and a lower rate of emergency transfers than the Kodiak set gillnet and Southeastern drift gillnet fisheries in which a greater percentage of permits have been transferred but fewer permanent transfers per permit per year have occurred. Similar comparisons of the relative occurrence of emergency and permanent transfers can be made but they are only a peripheral concern of this report.

The next sections of the report identifying transfers patterns by sex, age, family relationships, and residency address issues of continuity in the limited entry fisheries. Put another way, these data are critical to an understanding of whether or not market transferability is altering the composition of the Alaskan fishing corps from what it was when permanent permits were first issued.

Sex

Most fishing adaptations around the world are dominated by male participants and Alaska's limited entry salmon fisheries collectively are no exception to this rule. As Table indicates, statewide, females held approximately 11.6% of the permanent permits as of June 30, 1979. The table also indicates a continuing trend of greater female participation from 1975 to the present. It is apparent from Table that females are predominant in only one fishery,

Table 3

Female Permanent Permit Holders
By Fishery and Year¹

Fishery	1975		1976		1977		1978		1979	
	No. of Females	Total No. of Permits	No. of Females	Total No. of Permits	No. of Females	Total No. of Permits	No. of Females	Total No. of Permits	No. of Females	Total No. of Permits
Southeast										
Purse seine	0	398	0	409	0	409	0	413	0	414
Drift gillnet	7	431	4	451	5	459	4	462	7	462
Statewide										
Power troll	11	824	14	881	15	924	16	933	15	933
Yakutat										
Set gillnet	27	148	41	156	39	156	34	161	40	166
Prince William Sound										
Purse seine	2	210	3	247	6	255	9	257	6	258
Drift gillnet	19	494	21	514	25	523	31	528	30	531
Set gillnet	2	28	2	28	4	28	4	28	6	28
Cook Inlet										
Purse seine	0	49	0	63	0	72	0	74	0	75
Drift gillnet	8	453	14	514	23	538	29	549	35	555
Set gillnet	103	657	210	711	220	729	222	742	227	743
Kodiak										
Purse seine	2	334	2	358	5	363	4	371	6	374
Beach seine	0	19	0	22	1	30	1	33	3	33
Set gillnet	28	139	47	176	51	180	54	184	56	185
Peninsula-Aleutians										
Purse seine	1	108	0	112	1	113	0	115	0	117
Drift gillnet	7	152	7	153	7	152	4	156	4	156
Set gillnet	12	32	15	105	14	106	13	108	14	110
Chignik purse seine	0	85	0	90	0	90	0	90	0	90

Female Permanent Permit Holders

2

Fishery	1975		1976		1977		1978		1979	
	No. of Females	Total No of Permits	No. of Females	Total No. of Permits	No. of Females	Total No. of Permits	No. of Females	Total No. of Permits	No. of Females	Total No. of Permits
Bristol Bay										
Drift gillnet	23	1416	49	1621	59	1657	69	1700	58	1717
Set gillnet	334	716	388	759	409	819	450	889	475	912
Kuskokwim										
Gillnet			15	591	26	749	30	767	39	781
Lower Yukon										
Gillnet			41	678	52	675	51	694	50	702
Norton Sound										
Gillnet			5	169	17	171	16	176	18	177
Kotzebue										
Gillnet			6	118	15	173	19	177	20	180
Upper Yukon										
Gillnet			5	35	8	44	11	47	9	49
Fishwheel			1	51	15	107	17	108	22	113
Total	586	6743	890	9012	1017	9522	1088	9762	1140	9861
% of Female	(8.7%)		(9.9%)		(10.7%)		(11.1%)		(11.6%)	

1

Female enumeration as of June 30 of each year while number of permanent permits is a year end total except for 1979, when it is as of August 20.

(1)

the Bristol Bay set gillnet fishery where they hold 52% of the permits. In addition, females hold a significant number of permits in the Cook Inlet, Yakutat and Kodiak set gillnet fisheries. Females hold 38.2% of permits in the six set gillnet fisheries, 3.9% of permits in the five drift gillnet fisheries, and less than 1% of permits in the six purse seine fisheries. Females make up 7.9% of permit holders in the AYK fisheries, 9.1% in Kodiak beach seine fishery, and 1.6% in the power troll fishery. The foregoing indicates that in general the more technologically sophisticated and the greater the net earnings from a given fishery, the fewer the numbers of female permit holders there are in a fishery.

Transfer patterns have had a major impact on sex ratios only in a few fisheries. In the Bristol Bay drift gillnet fishery there has been a 16% decline in female permit holders. Most other fisheries show relatively small fluctuations, but females have gained permits in twice as many fisheries as they have lost. Females have gained a substantial number of permits in the Prince William Sound and Cook Inlet drift gillnet fisheries and the Kodiak and Bristol Bay set gillnet fishery.

Age

One of the concerns voiced at the time of implementing the limited entry was that such a system would tend to lock in those who initially received permits. This would preclude entry by younger people and perhaps lead to a decline in the efficiency and productivity of the fisheries as older fishermen with deteriorating skill and motivation came to predominate. This has not been the case as market transferability has led to a reduction in the average age of permit holders in 22 out of the 25 limited entry salmon fisheries.⁴

Table summarizes data on the average age of permit holders in the limited entry salmon fisheries since initial issuance of permits. Overall, the average age of permit holders has dropped from 43.1 years old in 1975 to 40.3 years old in 1979. The three fisheries in which average age in 1979 is higher than in 1975

⁴Late issuance of permanent permits to younger individuals is quite likely also a factor in lowering the average age of permit holders in several fisheries, most notably the Kuskokwim gillnet fishery.

Table 4

Mean Age of Permanent Permit Holders
By Fishery and Year¹

Fishery	Year				
	1975	1976	1977	1978	1979
Southeast purse seine	46.6	46.0	45.1	44.6	44.6
Southeast drift gillnet	43.0	42.5	41.8	41.5	41.8
Statewide power troll	48.1	47.3	46.9	46.3	46.4
Yakutat set gillnet	39.6	36.9	37.5	37.1	37.1
Prince William Sound purse seine	45.3	42.9	42.2	42.1	41.9
Prince William Sound drift gillnet	39.3	38.3	38.2	37.9	38.7
Prince William Sound set gillnet	44.4	45.8	44.1	43.4	42.8
Cook Inlet purse seine	43.9	43.3	41.4	39.6	40.1
Cook Inlet drift gillnet	47.8	44.4	48.3	43.2	42.5
Cook Inlet set gillnet	39.3	37.0	36.9	37.3	36.6
Kodiak purse seine	42.6	41.6	41.0	40.0	39.5
Kodiak beach seine	41.9	40.7	39.4	37.7	38.5
Kodiak set gillnet	39.2	38.3	36.9	37.9	37.9
Peninsula-Aleutians purse seine	41.3	41.9	40.8	40.1	40.5
Peninsula-Aleutians drift gillnet	41.7	40.8	39.7	40.7	39.9
Peninsula-Aleutians set gillnet	41.0	41.6	38.8	39.6	40.1
Chignik purse seine	39.9	40.0	39.5	40.9	42.1
Bristol Bay drift gillnet	46.7	44.5	43.9	43.5	43.0
Bristol Bay set gillnet	33.7	36.0	35.3	34.1	33.9
Kuskokwim gillnet		52.7	28.7	38.4	38.3
Lower Yukon gillnet		37.3	37.5	37.8	38.1
Norton Sound gillnet		42.7	42.0	42.5	42.2
Kotzebue gillnet		40.5	40.9	40.1	40.1
Upper Yukon gillnet		53.7	43.3	44.3	44.0
Upper Yukon fishwheel		40.9	39.2	39.9	40.2
Total	43.1	42.9	41.6	40.5	40.3

1

June 30 of each year.

are the Chignik purse seine fishery, the Bristol Bay set gillnet fishery, and the Lower Yukon gillnet fishery. The modest increase in age in the Chignik purse seine fishery is not surprising due to the low number of transfers in that fishery (see Table) and the high net earnings accruing to that fishery (see Table). The Lower Yukon is also characterized by a low number of transfers (see Table) as initial issuees have chosen to hold on to their permits. The 1975-1977 average gross in this fishery was \$3,724; however, this is the poorest region in the state and salmon fishing is virtually the only source of income for many families of the region. The Bristol Bay set gillnet average age has shown fluctuations, not the steady aging trend found in the other two. This is likely the result of families with several children as initial issuees selling off permits of one of the younger members to an older person outside the family.

In 1975 and in 1979, power trollers had the highest average age, 48.1 and 46.4 years respectively; while in both years Bristol Bay set gillnetters had the lowest average age, 33.7 and 33.9 respectively. In 1979 the average age across both the purse seine and drift gillnet fisheries was 41.9 years while the set gillnet average was 37.6. The lower average age of set gillnetters is due primarily to a much larger group of permit holders in the 11-20 age range than in the purse seine and drift gillnet fisheries. The average age in the AYK fisheries in 1979 was 39 years of age.

This overall decline in average age of permit holders can be partially attributed to the fact that permanent permits were not issued until 1975 in most fisheries and March of 1976 in others. Initial issuees were awarded their permits based primarily on participation in a given fishery during the period 1969 to 1972. It is probably that many participants in the 1969-72 period had left the fishery by 1975 and sold their permits immediately upon receipt. This

14.
is especially true in the power troll fishery. In addition, participants in the period from 1969-72 would all have aged an additional two years between their application and receipt of a permanent permit. Despite these factors, it is still true that market transferability has provided a mechanism for the retirement of the aging fishermen and entry of the younger fishermen in most of Alaska's limited entry salmon fisheries.

Family Relationships

The continuation of family fishing traditions through the transfer of permits to offspring is an important consideration for many Alaskan fishermen. Table summarizes the number of familial transfers and the percentage of all transfers that are familial for each fishery. It should be recalled that the definition of a familial transfer used here is that the transfer be from one person to another person with the same last name as the first person. This rule thus eliminates from consideration transfers to in-laws and maternal relatives which could also be conceptualized as familial but time and cost prohibited collection of this additional data. Another additional note which deserves mentioning is that each and every familial transfer appearing in the Entry Commission's records has been tabulated. This includes multiple permanent transfers from father to son and back again, husband to wife and back again, or brother/sister to brother/sister and back again. Transfer patterns of this type are not widespread but multiple transfers of this variety might skew the results in fisheries with few permanent transfers.

The overall rate of familial transfers is 23.2%. The range is from lows of 13% in the power troll fishery and 13.7% in the Prince William Sound drift gillnet fishery to highs of 67% in the Kuskokwim gillnet fishery and 66.7% in

Table 5

15

Summary of Intrafamilial
Permanent Permit Transfers
By Fishery and Gear Type

<u>Fishery/Gear Type</u>	<u>Total Number of Permits</u>	<u>Number of Permanent Transfers</u>	<u>Number of Familial Transfers</u>	<u>Familial Transfers As Percentage of Permanent Transfers</u>
Southeast				
Purse seine	414	200	28	14.0%
Drift gillnet	462	343	74	21.6%
Statewide power troll	933	600	78	13.0%
Yakutat set gillnet	166	72	15	20.8%
Prince William Sound				
Purse seine	258	157	29	18.5%
Drift gillnet	531	322	44	13.7%
Set gillnet	28	11	1	9.0%
Cook Inlet				
Purse seine	75	36	11	30.5%
Drift gillnet	555	343	83	24.2%
Set gillnet	743	412	98	23.9%
Kodiak				
Purse seine	374	230	43	18.7%
Beach seine	33	33	9	27.3%
Set gillnet	185	140	22	15.7%
Peninsula-Aleutians				
Purse seine	117	47	22	46.8%
Drift gillnet	156	97	22	22.7%
Set gillnet	110	48	21	43.7%
Chignik purse seine	90	18	8	44.4%
Bristol Bay				
Drift gillnet	1717	825	202	24.5%
Set gillnet	912	409	108	26.4%
Kuskokwim gillnet	781	109	73	67.0%
Lower Yukon gillnet	702	60	40	66.7%
Norton Sound gillnet	177	16	8	50.0%
Kotzebue gillnet	180	41	19	46.3%
Upper Yukon				
Gillnet	49	11	6	54.5%
Fishwheel	113	21	6	28.6%
Totals	9861	4601	1070	23.2%

the Lower Yukon gillnet fishery. Although one might expect that family fishing traditions, as displayed by intrafamilial transfers, might be more pronounced in technologically complex fisheries requiring considerable training and experience, that does not appear to be the case. In fact the trend seems to be in precisely the opposite direction as 17% of all permanent transfers in the purse seine fisheries are intrafamilial while 22% in the drift gillnet fisheries and 24.3% in the set gillnet fisheries are intrafamilial. It might also be the case that these figures include "temporary" permanent transfers to a family member while the original permit holder participates in another fishery or works at other employment. This would imply greater mobility and less stability among permit holders in fisheries with relatively low net earning potential.

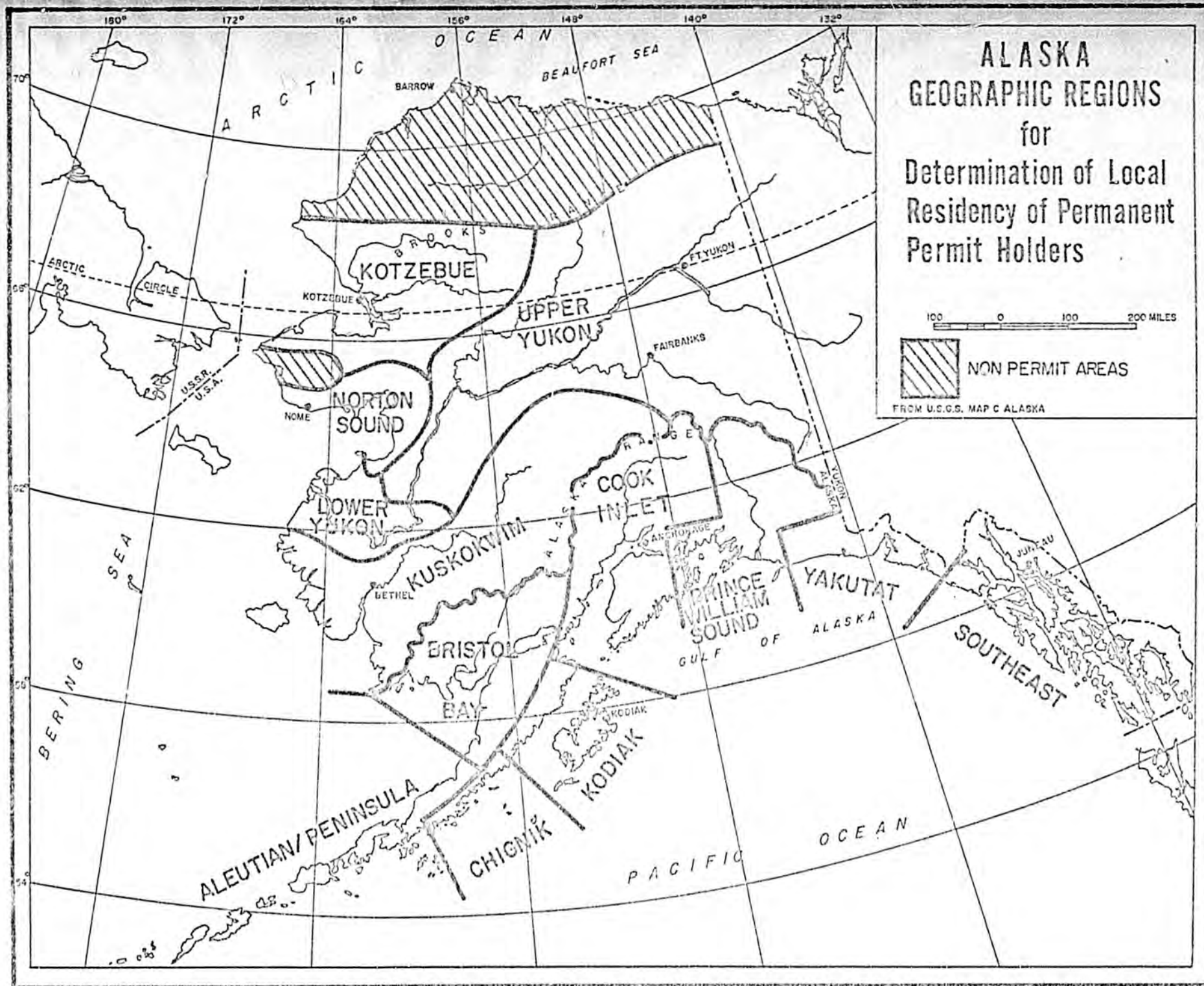
Intrafamilial transfers are extremely high in the AYK fisheries where they comprise 58.9% of all permanent transfers. It is clear, despite the low net earnings available from these fisheries, that permits and fishing income derived from them are vitally important to the families which hold them. It also seems likely that it is relatively rare to find individuals in these fisheries holding permits in other fisheries which they could switch to allowing them to move to another fishery. This can be deduced from the low overall rate of transfers which will be discussed later.

In general, the statewide figure of 23.2% intrafamilial transfers indicates a fairly strong preference by fishermen to be able to transfer permits to family members. The importance of intrafamilial transfers, however, varies widely from fishery to fishery.

Residency

The Commercial Fisheries Entry Commission has tracked resident-non-resident transfer patterns for the limited entry fisheries and summarized this data in their annual reports. This reporting is the result of the traditional concern by Alaskans that state residents derive the primary benefits from Alaska's fisheries and represents a continuation of pre-statehood resentments toward absentee cannery operators and trap owners. Residency definitions for this research have been further subdivided into five categories: nonresident, Alaskan rural local, Alaskan urban local, Alaskan rural nonlocal, and Alaskan urban nonlocal. The standard of 2,000 used by the Department of Community and Regional Affairs has been used to differentiate urban from rural. Population figures provided by the Department of Community and Regional Affairs for 1978 have been applied to place a given community in urban or rural classification for all five years 1975-1979. This procedure was used so that no community would appear as rural in one year and urban the next. Figure 1 is a map of the geographic regions used for determination of local-nonlocal residency. In general, the boundaries are those used by the Department of Fish and Game and the Entry Commission for management and/or permit areas. Where those boundaries were insufficient, watershed characteristics have been used to complete the geographic demarcation of the regions. Appendix provides a listing of the urban and rural communities in the various local regions which at least one permit holder has listed as his address during the period from 1975-1979.

Before examining transfer patterns by residency, an example of how classification was accomplished is in order. A person who has a Southeast Alaska drift gillnet permit is classified as a nonresident if he lists his residency with the Commission as outside Alaska. The same individual would be classified as Alaskan



rural local if he listed as his residency a community of less than 2,000 within the geographic region labeled Southeast in Figure 1. He would be classified as an Alaskan urban local if he lived in a community larger than 2,000 in Southeast Alaska. If he lived in a community larger than 2,000 persons elsewhere in the state of Alaska, he would be classified as an Alaskan rural nonlocal. This same procedure was used to classify all permit holders in all fisheries.⁵

Table summarizes the number and percentage of initial issuees in each residency category for each fishery. Initial issuees refers to all initial permit holders no matter whether they received their permanent permit in 1975 or in August of 1979. Statewide 66.9% of initial permit holders were residents of their local areas and 77.6% were residents of the state.⁶ In no fishery permit were there as many as 50% nonresident initial permit holders; the percentage of nonresident initial holders range from a high of 49.5% in the Southeast purse seine fishery to a low of 0% in the Cook Inlet purse seine fishery as well as five of the six AYK fisheries. Statewide, 43.9% of initial permit holders were rural residents and 33.7% were urban residents. Of the 4,328 rural Alaskan initial permit holders, 1655 or 38.2% were permit holders in the AYK fisheries where rural permit holders comprised 82.7% of the initial fishermen. In the remainder of the state's limited entry fisheries rural residents were issued 34% of all initial permanent permits. In fisheries other than the predominantly rural and local AYK fisheries, nonresidents obtained 28.1% of the initial permanent permits leaving 37.9% in the hands of urban Alaskans.

5

Several minor variations on this classification scheme are noted in the Appendix B.

6

For a discussion of various problems with residency determination, see Appendix

Table 6
Residency of Initial
Permanent Permit Holders
By Fishery
(8/20/79)

Fishery	NR	ARL	Residency		ARN	AUN	Total
			AUL				
Southeast purse seine	205	91	118		0	0	414
Southeast drift gillnet	156	80	222		0	4	462
Statewide power troll	275	198	448		2	10	933
Yakutat set gillnet	18	124	0		5	19	166
Prince William Sound purse seine	55	7	172		3	21	258
Prince William Sound drift gillnet	137	10	336		21	27	531
Prince William Sound set gillnet	7	0	19		0	2	28
Cook Inlet purse seine	0	31	43		0	1	75
Cook Inlet drift gillnet	183	91	262		6	13	555
Cook Inlet set gillnet	54	189	468		4	28	743
Kodiak purse seine	106	73	160		10	25	374
Kodiak beach seine	2	10	19		1	1	33
Kodiak set gillnet	49	38	80		4	14	185
Peninsula-Aleutian purse seine	14	100	0		0	3	117
Peninsula-Aleutian drift gillnet	44	95	0		0	17	156
Peninsula-Aleutian set gillnet	7	92	0		0	11	110
Chignik purse seine	21	29	24		4	12	90
Bristol Bay drift gillnet	728	662	0		101	226	1717
Bristol Bay set gillnet	149	567	0		25	171	912
Kuslokwin gillnet	0	444	165		172	0	781
Lower Yukon gillnet	1	624	0		67	10	702
Norton Sound gillnet	0	162	14		1	0	177
Kotzebue gillnet	0	42	135		0	3	180
Upper Yukon gillnet	0	39	8		2	0	49
Upper Yukon fishwheel	0	99	11		3	0	113
Totals	2211 (22.4%)	3897 (39.5%)	2704 (27.4%)		431 (4.4%)	618 (6.3%)	9861

When people transfer their permits, to whom do they transfer them? As discussed in the last section, overall they transfer them 23.2% of the time to someone with the same last name. If they don't transfer it to a family member, then it appears that more often than not a person will transfer their permit to a friend, neighbor, or other individual from their home community or a community like it in the local region. Table summarizes transfers among and between residency categories. I have labelled each of these categories a cohort for purposes of this discussion so that when a resident of a given category transfers his permit to another resident of that same category (as printed in detail for each fishery by year in Appendix) this is termed an intra-cohort transfer. When a resident of a given category transfers his permit to a resident of another category, this is termed a cross-cohort transfer.

Table summarizes intra- and cross-cohort permanent transfers by fishery. Across all limited entry salmon fisheries, 69.7% of permanent transfers are intra-cohort while 30.3% are cross-cohort. The range is from a high of 81.7% intra-cohort transfers in the Lower Yukon fishery to a low of 36.4% intra-cohort transfers in the Prince William Sound set gillnet fishery. Only four fisheries (Prince William Sound set gillnet, Kodiak set gillnet, Chignik purse seine and Kodiak beach seine) show less than 60% intra-cohort transfers. The six purse seine fisheries average 64.5%; the five drift gillnet fisheries average 73.7%; the six set gillnet fisheries average 67.4%, and the AYK fisheries average 78.8% intra-cohort transfers.

Appendix summarizes intra- and cross-cohort intrafamilial transfers by fishery and year. Even more than the general cohort transfer pattern, intrafamilial transfers are overwhelmingly intra-cohort. Of a statewide total of 1070 intrafamilial transfers, 934 or 87.3% were intra-cohort while 126 or 12.7% were cross-cohort. The next section presents findings relevant to the question of whether or not cross-cohort transfers have altered the composition of Alaska's fishing corp by residency category in any important ways.

Table 7

Intra-Cohort and Cross-Cohort
Permanent Transfers
By Fishery

<u>Fishery</u>	<u>Intra-Cohort</u> <u>Transfers</u>	<u>(%)</u>	<u>Cross-Cohort</u> <u>Transfers</u>	<u>(%)</u>	<u>Total Transfers</u>
Southeast purse seine	125	(62.5%)	75	(37.5%)	200
Southeast drift gillnet	248	(72.3%)	95	(27.7%)	343
Statewide power troll	382	(63.7%)	218	(36.3%)	600
Yakutat set gillnet	55	(76.4%)	17	(23.6%)	72
Prince William Sound purse seine	106	(67.5%)	51	(32.5%)	157
Prince William Sound drift gillnet	202	(62.7%)	120	(37.3%)	322
Prince William Sound set gillnet	4	(36.4%)	7	(63.6%)	11
Cook Inlet purse seine	31	(86.1%)	5	(13.9%)	36
Cook Inlet drift gillnet	263	(76.7%)	80	(23.3%)	343
Cook Inlet set gillnet	295	(71.6%)	117	(28.4%)	412
Kodiak purse seine	140	(60.9%)	90	(39.1%)	230
Kodiak beach seine	18	(54.5%)	15	(45.5%)	33
Kodiak set gillnet	72	(51.4%)	68	(48.6%)	140
Chignik purse seine	8	(44.4%)	10	(55.6%)	18
Peninsula-Aleutians purse seine	34	(72.3%)	13	(27.7%)	47
Peninsula-Aleutians drift gillnet	77	(79.4%)	20	(20.6%)	97
Peninsula-Aleutians set gillnet	42	(87.5%)	6	(12.5%)	48
Bristol Bay drift gillnet	633	(76.7%)	192	(23.3%)	825
Bristol Bay set gillnet	268	(65.5%)	141	(34.5%)	409
Kuskokwim gillnet	88	(80.7%)	21	(19.3%)	109
Lower Yukon gillnet	49	(81.7%)	11	(18.3%)	60
Norton Sound gillnet	11	(68.8%)	5	(31.2%)	16
Kotzebue gillnet	35	(80.5%)	8	(19.5%)	41
Upper Yukon gillnet	6	(75.0%)	2	(25.0%)	8
Upper Yukon fishwheel	14	(67.0%)	7	(33.0%)	21
Total	3204	(69.7%)	1394	(30.3%)	4598

Table summarizes the outcomes of transfers among fishermen in different residency categories. Appendix provides detailed annual accounting of transfers among different residency categories. Statewide there has been a slight gain of resident permit holders and consequently a slight drop in the number of nonresident permit holders. The 25 decrease represents only 1.1% of nonresidents initial holdings. The primary reason for this gain is the power troll fishery of Southeast Alaska where nonresident permit holders have declined from 275 initially to 216 at present, a decrease of 59. The two other significant gains shown by residents are in the Southeast drift gillnet fishery where residents have gained 13 permits and the Kodiak purse seine fishery where they have gained 9 permits. If the power troll fishery is ignored, there would be a net loss of 34 permits or an insignificant 1.8% decline. Nonresidents have made most significant gains in the Southeast purse seine fishery where they have picked up 23 permits, and in the Bristol Bay drift and set gillnet fisheries where they have gained 29 and 10 permits respectively.

A look at residency transfer patterns by gear type reveals that nonresidents have gained permits in four of the six purse seine fisheries for a net increase of 21 permits or 5.2% of their initial holding of 401. The five drift gillnet fisheries show nonresidents gaining in two and losing in two while staying even in the fifth but gaining a net of 15 permits of a 1.4% increase over initial holdings of 1248 permits in these fisheries. Nonresidents have lost permits in four set gillnet fisheries, gained in two others and stayed even in the seventh for a net loss of 6 permits or a 2.1% decrease in their initial holdings of 284 permits in these fisheries. In the AYK fisheries nonresidents have gained 2 permits so that they now hold a total of 3 out of 2002 permits in these fisheries.

Gains and Losses
of
Permanent Permits Compared
to
Initial Issuance by Residency and Fishery
(as of 8/20/79)

Fishery	NR	ARL	Residency		AUN
			AUL	ARN	
Southeast purse seine	+23	-27	+ 1	-	+3
Southeast drift gillnet	-18	+ 5	+14	+1	-2
Statewide power troll	-59	- 4	+66	-2	-1
Yakutat set gillnet	- 2	+ 3	-	+1	-2
Prince William Sound purse seine	+ 7	- 3	-9	+2	+ 3
Prince William Sound drift gillnet	- 2	- 3	-17	+3	+14
Prince William Sound set gillnet	- 2	-	+ 1	-	+ 1
Cook Inlet purse seine	+ 1	+ 1	- 2	-	-
Cook Inlet drift gillnet	-	+14	- 9	-	- 5
Cook Inlet set gillnet	- 5	+ 4	+ 8	-1	- 6
Kodiak purse seine	- 9	+ 1	+ 7	-2	+ 3
Kodiak beach seine	+ 2	- 3	-	-1	+ 2
Kodiak set gillnet	- 7	- 4	+17	-3	- 3
Peninsula-Aleutian purse seine	+ 1	- 1	-	-	-
Peninsula-Aleutian drift gillnet	+ 6	- 7	-	+1	-
Peninsula-Aleutian set gillnet	0	0	0	0	0
Chignik purse seine	- 2	0	+ 1	-	+ 1
Bristol Bay drift gillnet	+29	-43	-	-7	+21
Bristol Bay set gillnet	+10	-46	-	+6	+30
Kuskokwim gillnet	-	- 3	+ 4	-3	+ 2
Lower Yukon gillnet	+ 1	- 8	-	-1	+ 8
Norton Sound gillnet	+ 1	- 4	+ 1	-	+ 2
Kotzebue gillnet	-	- 6	+ 7	-	- 1
Upper Yukon gillnet	-	- 2	+ 1	-	+ 1
Upper Yukon fishwheel	-	- 1	+ 2	-2	+ 1
Totals	-25	-137	+98	-8	+72
Percent Decrease	(-1.1%) (-3.5%) (+3.6%) (-1.9%) (+11.6%)				

- no permits in category

0 no change in number of permits in category

Turning now to gains and losses among various categories of state residents, Table 8 indicates that rural residents have lost 145 permits while urban residents have gained 170. Alaskan rural locals have suffered the most severe decline; their drop of 137 permits represents a 3.5% decrease from their initial holding of 3897 permits. Alaskan rural nonlocalshave lost only 8 permits or a decrease of 1.9% from their initial total of 431.

One might expect that given the predominance of rural permit holders in the AYK fisheries, that these fisheries would be the ones hardest hit by permit losses. However, as Table 8 reveals, this has not been the case as rural fishermen in the AYK fisheries have lost only 30 permits out of an initial total of 1655 or 1.8%. The most drastic reductions in rural permit holdings have occurred in fisheries (not all such fisheries, however) where there were initially a significant proportion of nonresident, Alaskan rural, and Alaskan urban fishermen. In fisheries other than the predominantly rural AYK fisheries, rural permit holders have lost 115 permits which represents a 5% decline from their initial number of 2326 permits. Fisheries in which rural Alaskans show the greatest decline in permit holdings include the Southeast purse seine fishery where rural fishermen have lost 29.7% of their permits (a decline from 91 to 64), the Bristol Bay drift gillnet fishery where they have lost 50 of their initial 763 permits (a decrease of 6.6%) and the Bristol Bay set gillnet fishery where they have lost 40 of their initial 592 permits (a decline of 6.8%). Rural residents have recorded significant gains in only the Cook Inlet drift gillnet fishery where the increase of 14 permits represents a 15.4% increase over their initial figure of 91 permits.⁷

7

The rural population of Cook Inlet is significantly different from that of nearly every other region due to its much smaller proportion of Alaskan natives.

The flip side of Alaskan rural and nonresident losses is Alaskan urban permit gains. Urban Alaskans in gaining 170 permits have increased their holdings 5.1% from 3,322 to 3,492. Urban Alaskans have gained permits in three of the six purse seine fisheries, lost in two others and held even in one for an overall gain of 8 permits. However, local urban fishermen have lost 2 permits and nonlocal urban fishermen have gained 10 permits, a slight 1.9% increase over their initial figure of 51%. The purse seine fishery in which urban local recorded the largest decrease was in Prince William Sound where the loss of 9 permits represents a 5.2% decline from the initial 172 permits. Urban locals have gained most dramatically in the Kodiak purse seine fishery where the increment of 7 permits is a 4.4% increase over the initial holder of 160. Urban nonlocal gains are fairly widely dispersed with gains of 3 permits being recorded in the Southeast, Prince William Sound, and Kodiak purse seine fisheries by Alaskan urban nonlocals.

Overall in the five drift gillnet fisheries, Alaskan urban fishermen have picked up 21 permits or a modest 2.2% from their initial level of 93%. The most impressive gains were in the Southeast and Bristol Bay drift gillnet fisheries where increases of 12 and 21 represent 5.3% and 9.3% increases respectively. However, as in the purse seine fisheries, local urban gillnetters have lost 7 permits while nonlocal have gained 28, a substantial 9.8% increase over their initial level of 28%. The Prince William Sound drift gillnet fishery is the most salient example of this trend where urban locals have lost 12 permits and urban nonlocals gained 14.

In the six set gillnet fisheries urban Alaskans have picked up 46 permits, 20 by urban nonlocals and 26 by urban locals. This is an overall increase of 5.7% from an initial figure of 812. There, as in the purse seine and drift gillnet fisheries, the urban nonlocal gain of 30 permits or an 8.2% increase

over the initial figure of 245 outstrips the urban local gain of 26 permits or 4.6% of the 567 initially awarded. Urban locals registered their largest gain in the Kodiak set gillnet fishery, where the increase of 17 permits represents a 21% increase from 80, and in the Cook Inlet set gillnet fishery, where the increase of 8 permits represents a 1.7% increase from 468. Urban nonlocals recorded all but one of their permit gains in the Bristol Bay set gillnet fishery where they picked up 30 permits, a 17.5% increase from an initial level of 171. It should be noted that there are no urban local set gillnet holders in the Yakutat, Peninsula-Aleutians or Bristol Bay fisheries because there are no communities larger than 2,000 in those areas.

Fluctuations in the proportions of permits held by various residency categories in the AYK categories have been extremely small due in large part to the later issue of permanent permits in these fisheries, the low number of transfers involved and the low gross and net earning available from these fisheries. It is perhaps noteworthy that of the 30 permits from these fisheries no longer in rural residents' hands, 28 of them are now held by urban Alaskans, 15 by urban locals and 13 by urban nonlocals. This represents a 4.5% increase from 333 permits by urban locals and an 100% increase from 13 initial permits by urban nonlocals. Proportionally the greatest shift in the residency of AYK permit holders occurred in the Kotzebue gillnet fishery where the 6 permit decline by rural locals represents 14.3% of their initial 42 while the 7 permit increase by urban locals represents a 5.2% increase above their initial 135 permits.

Do the patterns identified in the previous paragraphs among residency categories represent a trend which is continuing or are they merely a momentary anomaly caught at a down point on an oscillating cycle of minor fluctuations which could shortly rebound in the opposite direction? Table 9 presents a

Table 9

Annual Statewide Gains and Losses
of
Permanent Permits By Fishery and Residency

1975-1979
(8/20/79)

	<u>1975</u>	<u>1976</u>	<u>Year</u> <u>1977</u>	<u>1978</u>	<u>1979</u>	<u>Total</u>
NR	-62	- 2	+12	+ 1	+26	-25
ARL	+17	-13	-51	-39	-51	-137
AUL	+37	+14	+34	+19	- 6	+98
ARN	- 2	+ 4	+ 4	- 8	- 6	- 8
AUN	+10	- 3	+ 1	+27	+37	+72

summary by year of gains and losses by residency category across all the limited entry salmon fisheries. The pattern of permit flow between residents and nonresidents does not allow for any simple statement of trend or cycle because of the relatively small overall percentage shift that the number of permits involved represents. Likewise the relatively small drop in urban local permit holders during the first eight months of 1979 could easily be shifted to an increase during the last third of the year. On the other hand, there is a clear and escalating trend since 1976 for rural residents to lose permits, particularly rural locals. There is likewise a clear and escalating trend for urban nonlocals to gain permits. Further discussion of this issue will be taken up in the conclusion of this report.

III. Entry Into the Limited Salmon Fisheries

With complete implementation of limited entry, the ability to participate as a gear license holder is governed by whether or not a permit is held for a given fishery. A person without a permit may legally purchase a permit from a person with a permit or be given a permit without charge for example as an inheritance or a gift. One of the provisions of the limited entry statute as initially constructed and later amended prohibits entry permits from being "pledged, mortgaged, leased, or encumbered in any way;" however, despite the proscription of lease arrangements, this seems to be a fairly common method for entering the fishery in addition to the methods cited above. This section considers these various routes of entry, first examining the purchase, gift, and lease routes in terms of the frequency of each and then investigate relative sources of funding available for the purchase of permits. The second section will include an examination of the state commercial fishing loan program's impact on entry into the limited salmon fisheries.

Table 10 summarizes the types of permanent transfers by fishery as is based on the Commercial Fishery Entry Commission's voluntary survey data as presented in their 1978 report. Columns 1, 2 and 3 taken together can be considered as a class of transfers in which monetary value in some form is exchanged for a limited entry permit. Column 4 represents the gift (and inheritance) class of permit transfer, while column 5 likely is a good indicator of lease or return arrangements of some variety that accompanies a permanent transfer. Although the voluntary survey includes a question concerning reasons for transfers of permits, the data was not summarized in the 1978 report. However, the Commission staff member charged with processing the data estimated that the three leading indicated reasons for transfers, which accounted for 67-75% of all permanent transfers were death, illness and retirement. The fourth most frequent listing for permanent transfers was leasing. It is possible that some other types of permanent outright financial

Table 10
Types of Permanent Transfers
By Fishery¹

Fishery	Transfer Type					(1975-1978) Total Responses to CFEC Survey	(1975-1978) Total Transfers
	Purchased	Traded	Combination Buy	Free of Charge	Other		
Southeast purse seine	59	1	2	5	14	81	175
Southeast drift gillnet	85	6	6	13	18	128	293
Statewide power troll	200	5	23	25	21	274	504
Yakutat set gillnet	14	0	0	11	4	29	60
Prince William Sound							
Purse seine	30	4	4	1	4	43	120
Drift gillnet	79	2	3	17	11	115	272
Set gillnet	1	0	0	0	0	1	9
Cook Inlet purse seine	11	0	0	2	3	16	31
Cook Inlet drift gillnet	83	4	5	21	20	133	272
Cook Inlet set gillnet	77	3	21	37	16	154	333
Kodiak purse seine	45	4	3	20	10	82	190
Kodiak beach seine	6	0	0	2	3	11	26
Kodiak set gillnet	23	0	7	15	10	55	114
Chignik purse seine	2	0	0	2	4	8	17
Peninsula-Aleutians							
Purse seine	5	0	0	4	5	13	36
Drift gillnet	15	0	0	6	9	30	75
Set gillnet	7	2	0	1	5	15	38
Bristol Bay drift gillnet	170	7	20	74	65	336	645
Bristol Bay set gillnet	54	1	3	58	33	149	291
Kuskokwim gillnet	5	2	1	29	6	46	76
Lower Yukon gillnet	7	0	0	16	5	28	38

Types of Permanent Transfers

2

<u>Fishery</u>	<u>Transfer Type</u>					<u>(1975-1978) Total Responses to CFEC Survey</u>	<u>(1975-1978) Total Transfers</u>
	<u>Purchased</u>	<u>Traded</u>	<u>Combination Buy</u>	<u>Free of Charge</u>	<u>Other</u>		
Norton Sound gillnet	4	0	0	1	0	5	7
Kotzebue gillnet	1	0	0	3	4	8	24
Upper Yukon gillnet	0	0	0	0	0	0	4
Upper Yukon fishwheel	5	0	0	0	0	5	15
Total	988	45	98	363	270	1765	3665
Percentage	(56%)	(2.5%)	(5.6%)	(20.6%)	(15.3%)		

¹

Based on CFEC survey reported in 1978 annual report, Appendix 3.

transactions are included in the "other" column but the likelihood of this appears low. Therefore it is possible to very roughly consider the other column an index of lease-type permanent transfers.

On a statewide basis 64.1% of all permanent transfers (56% purchase, 2.5% trade, 5.6% combination) appear to be of the exchange of monetary value variety while 20.6% appear to be of the gift variety. This leaves a residual of 15.3% for lease-type or unusual financial transfers. On a gear-type basis, 70% of permanent transfers in the six purse seine fisheries are monetary exchanges. These range from a high of 88.4% in the Prince William Sound fishery to a low of 25% in the Chignik fishery. Gift transfers account for 13.2% of purse seine transfers ranging from a high of about 25% in the Kodiak and Chignik fisheries to 9% in the Cook Inlet fishery. The overall potential for lease residual in the purse seine fisheries is 16.8% with the Chignik fishery registering the highest, 50%, while Prince William Sound is the lowest at 10.7%. In the five drift gillnet fisheries, 65.4% of permanent transfers are of the purchase type, 17.7% are of the gift type leaving a residual of 16.9% for potential leases. Purchase percentages range from a high of 75.8% in Southeast to a low of 50% in the Peninsula-Aleutians; gift percentages range from a high of 22% in Bristol Bay to a low of 10.2% in Southeast. Lease potentials range from a high of 39% in the Peninsula-Aleutians fishery to a low of 12% in Prince William Sound. In six set gillnet fisheries, 55.4% of permanent transfers are purchases and 32.4% are gifts, leaving a residual of 12.2% for leases. Purchase percentages vary from a high of 65.6% in Cook Inlet to a low of 48% in Yakutat; gift percentages vary from a high of 38.7% in Bristol Bay to 13.3% in the Peninsula-Aleutians. Lease potential residuals are distributed from a high of 26.7% in the Peninsula-Aleutians to 10.4% in Cook Inlet. In the AYK fisheries, 27.2% of permanent transfers are

purchases and 53.3% are gifts leaving 19.5% in the potential lease residual. Four of the six fisheries had less than 10 reported survey responses which makes comparison among the fisheries impossible. The difference between the AYK fisheries and the rest of the state's fisheries is once again quite salient.

In order to purchase a permit, monetary value from some source is necessary to exchange for the permit. Table 11 summarizes sources of financing used to purchase permits which the CFEC voluntary survey on permit transfers revealed. Across all the limited salmon fisheries 53.3% of permits exchanged for value were financed in one way or another. Interestingly the most important source of financing is the permit transferor who was called on 16.3% of the time. In descending order of importance of the specific categories are banks backing 16.2% of transfers, processors backing 8.4%, credit associations backing 3.8%, and bringing up the rear is the state loan program at 2.8%. The category of "other" which accounts for 5.8% of transfers includes various combinations of financing arrangements from the other five sources as well as such additional sources as relatives, friends, BIA, village corporations, and regional corporations. As might be expected, due to the high price and traditional processor involvement in vessel ownership, the purse seine fisheries show the highest rate of processor financing of the gear types in that 18% of all permits exchanged for value included financial assistance from processors. Comparable rates in the drift and set gillnet fisheries were 8.7% and 3.3% respectively.

What of the remaining 46.7% of permits exchanged for value which were not reported in the CFEC survey as having been financed? This figure is obtained by subtracting the total of all permits financed from the total of all permits exchanged for value. The discrepancy between these two totals (528 permits or

Sources of Financing
for
Permit Purchases

Fishery	Transferor	Sources of Financing					Other	Total # of Permits Exchanged for Value	% of Permit Transfers	Total # Permits Free of Charge	% of Permit Transfers	Total Responses to CFEC Survey
		Processor	Bank	State Loan	Credit Assn.							
Bristol Bay												
Drift gillnet	27	13	40	5	12	14	197	(58.6%)	74	(22%)		336
Set gillnet	8	2	5	0	2	2	58	(38.9%)	58	(38.9%)		149
Kuskokwim gillnet	0	0	1	0	1	0	8	(17.4%)	29	(63%)		46
Lower Yukon gillnet	2	0	1	0	0	0	7	(25%)	16	(57.1%)		28
Norton Sound gillnet	1	0	2	0	0	0	4	(80%)	1	(20%)		5
Kotzebue gillnet	0	0	1	0	0	0	1	(12.5%)	3	(37.5%)		8
Upper Yukon gillnet	0	0	0	0	0	0	0	(-)	0	(-)		0
Upper Yukon fishwheel	0	0	0	0	0	2	5	(100%)	0	(-)		5
Total	184	95	183	32	43	66	1131		363			1765
(%)	(16.3%)	(8.4%)	(16.2%)	(2.8%)	(3.8%)	(5.8%)	(64.1%)		(20.6%)			

¹
Source: CFEC Annual Report 1978, Appendix 3.

Table 11
Sources of Financing
for
Permit Purchases
By Fishery (1975-1978)¹

Fishery	Transferor	Sources of Financing					Total # of Permits Exchanged for Value	% of Permit Transfers	Total # Permits Free of Charge	# of Permit Transfers	Total Responses to CFEC Survey
		Processor	Bank	State Loan	Credit Assn.	Other					
Southeast											
Purse seine	13	21	6	0	1	3	62	(76.5%)	5	(6.2%)	81
Drift gillnet	16	4	26	7	1	9	97	(75.8%)	13	(10.2%)	128
Statewide											
Power troll	34	2	47	8	6	12	228	(83.2%)	21	(7.7%)	274
Yakutat											
Set gillnet	2	0	3	0	0	2	14	(48.3%)	11	(37.9%)	29
Prince William Sound											
Purse seine	5	3	9	1	1	2	38	(88.9%)	1	(2.3%)	43
Drift gillnet	15	20	14	3	2	6	84	(73%)	17	(14.8%)	115
Set gillnet	1	0	0	0	0	0	1	(-)	0	(-)	1
Cook Inlet											
Purse seine	1	1	0	4	1	0	11	(68.8%)	0	(0%)	16
Drift gillnet	12	5	10	0	10	7	92	(69.2%)	21	(15.8%)	133
Set gillnet	17	5	8	1	12	2	101	(65.6%)	37	(24%)	154
Kodiak											
Purse seine	8	6	5	3	2	1	52	(63.4%)	20	(24.4%)	82
Beach seine	3	0	0	0	0	0	6	(54.5%)	2	(18.2%)	11
Set gillnet	10	0	1	0	1	3	30	(54.5%)	15	(27.3%)	55
Peninsula-Aleutians											
Purse seine	1	0	1	0	0	0	5	(38.5%)	4	(30.8%)	13
Drift gillnet	5	0	3	0	0	1	15	(50%)	6	(20%)	30
Set gillnet	2	0	0	0	0	0	9	(60%)	2	(13.3%)	15
Chignik purse seine	1	0	0	0	1	0	2	(25%)	2	(25%)	8

46.7%) can be interpreted in two ways. The first is that many of those surveyed did not report the type of financing obtained at all, and the second is that no financing was needed for permit purchase. It seems likely that both are included. The claim that a significant number of those not reporting financing but indicating that the permit transfer involved an exchange of value are in fact purchases is enhanced by the fact that 59.4% of purse seine transfers for value involve some financing while the comparative figures for the drift gillnet, set gillnet and AYK fisheries are 59.2%, 41.5% and 40% respectively. It is logical that the cheaper the permit the higher the incidence of outright purchase will be as these figures tend to indicate. The slight difference in reported financing between purse seine and drift gillnet permits might represent underreporting of financing in purse seine transfers due to the fact that significantly higher average value of purse seine permits (\$53,000) over drift gillnet permits (\$26,000) through 1978 would predict substantially higher finance needs in the purse seine fishery.

Additional information on various sources of financing for permit purchases was sought by means of a survey (see form in Appendix A) sent to 110 Alaskan banks, 9 Seattle banks, 54 processors, and 29 Alaskan credit associations. Of the total of 202 institutions surveyed, 150 responses were received for a return rate of 74%. The return was highest among credit associations (79%), next highest among Alaskan and Seattle banks combined (72%) and lowest among processors (48%). Of the actual total of 172 loans reported, 143 (83%) were by Alaskan banks, 22 (13%) were by processors, and 7 (4%) were by credit associations. Of the 150 responses, 65% indicated they had never financed a permit. This was highest among credit associations where 87% had never financed a permit while 81% of the processors and 58% of the banks indicated they had never made loans for permit purchases. Interestingly several credit associations were not aware it

was possible to make a loan for a permit purchase and one indicated they would like to be involved in permit loans but lacked the capital base. Even more remarkable was the surprise of several of the smaller banks to learn that other banks were making permit loans as they were unaware of the practice.

The number of bank loans reported is an underrepresentation of actual loans for permits from those institutions for several reasons. First, banks reported on active loans only so those loans already paid off are not represented. Second, several banks indicated various ways in which a loan could be made without the bank knowing how the funds were actually used. Finally, the two Seattle banks who reported involvement in permit loans did not give precise figures. One suggested that their involvement had been so limited that it would be of no consequence to new entry into the Alaskan salmon fisheries. The lion's share of bank loans for permit purchases are held by one Alaskan institution. That institution estimated that 20% of their loans were interim loans pending state loan approval.

A number of banks, credit associations, and processors indicated formal institutional policies not to loan on permits. Thirty percent of the credit unions, 23% of the processors and 13% of the banks indicated they did not loan for permits. The most elaborate policy was that of one major processing firm whose spokesman explained they did not loan for permits because the permit can not be used as collateral, the limited entry program is under constant legal assault, false market prices have been established in almost all fisheries due to several good seasons, and the firm does not take real estate as collateral. The response also indicated that few fishermen asking for assistance in permit purchases had significant equity in their vessels to secure a loan for a permit.

It is obvious from comparing the figures on processor's return rate on this survey and their rate of refusal to finance permits with those in Table 11 on

processor financing that processors are significantly underrepresented in the survey returns. One processor sent a response specifically declining to participate; another indicated that it did not keep records of these kinds of transactions, and a third did not understand how permit financing could be a legitimate function of state government let alone a subject of research by a university. Hostility of the processing industry toward state government and what they regard as excessive demands for information from them is certainly neither new nor unusual.

In the discussion above on "other" sources of financing it was noted that the BIA, village and regional corporations are potential sources of financing for Alaskan natives. Mr. Halvorson of the BIA office in Juneau stated that his office could not make economic development loans to individuals but only to tribal organizations (IRA councils). To his knowledge none of the five tribal organizations who had obtained economic development loans from the BIA since 1975 had used their funds to aid permit purchases. Given that three of the tribal governments are involved in fish processing it is possible that some BIA funds have been used for permits, but since the tribal governments involved were not contacted directly, there is no certainty of this. No survey forms were sent to village or regional corporations; however, superficial indications suggest very limited involvement by the native corporations in permit purchases. Several individuals indicated a desire and hope that these institutions would become more involved in fisheries than they have been to date.

The survey requested information on requirements for the financing of permit loans including the number of years experience in a fishery, whether the individual is a boat owner or not, the types of collateral required and whether or not the individual had to have a history of loans or fishing with the firm.

Only banks and processors provided enough concrete responses to these questions to be meaningful. Of the nine Alaskan banks responding, seven indicated that a specific number of years experience was necessary - two required five years, two required three, two required two and one required one-year experience. Two of the seven required that the applicant be a previous boat owner while five did not. All of those responding required collateral at least equal to the value of the permit in the form, usually, of vessels and real estate although tangible, unsecured assets were acceptable to most. One indicated that in certain rare cases no collateral might be required. Perhaps of greatest significance was the data on whether an applicant had to have held a previous loan with the institution. Eight of the nine Alaskan banks indicated that this was indeed a requirement for a loan to purchase a permit. It should be noted that the nine responses represent a large number of banks because each individual branch of a given institution is represented in the total figure of 110 contacted and 78 responding.

Fish processors ranged widely in their requirements for permit loans. Only one of five required more than three years experience in the specific fishery for which the permit was being requested while three only required one year. Two of the five required the person to have been a previous boat owner and four of five required the applicant to have fished for the firm previously. Two indicated that in certain cases no collateral would be required while all five accepted vessels and gear as collateral. One firm also listed real estate as acceptable collateral. Interestingly one firm indicated a stiffening of its years of experience policy due to difficulties with permit loanees.

One source of financing for the purchase of limited entry permits with data more readily available for analysis is the state's commercial fishing loan program. Tables 12, 13, 14 and 15 summarize information gathered from the state's

files on commercial fishing loans involving limited entry permits. Before turning to a discussion of the tables, an introduction to the loan program in general is in order. The purpose of the State's commercial fishing loan program established in 1973 is to promote the rehabilitation of the State's fisheries, develop a predominantly resident fishery, help maintain commercial fishing gear and vessels throughout the State, and since 1978 finance the purchase of limited entry permits by means of long-term financing. Prior to 1978, very few loans were made for the purchase of permits through the loan program. This was due to the relatively small amount of money in the program, and the fact that the state loan program was similar to private sources of financing in that since the permit could not be foreclosed on, the applicant had to have unsecured collateral sufficient to cover the loan. The total amount loaned for vessels in FY 1975 was \$2,400,000, while by FY 79 it had skyrocketed to \$28,000,000, over 1000% increase! In 1978 the legislature amended the law so that the state could foreclose on permits. This new provision was built into the commercial fishing loan program by allowing limited entry permits to be used as collateral for up to 75% of their value as appraised through the Entry Commission's voluntary survey. This legislative step was the result of the realization that only persons with significant assets were able to purchase permits using private financing sources. It was hoped that through the new procedure more of the aspiring, experienced yet undercollateralized fishermen would have a way to get into the fishery. During the 1979 legislative session, loan values against permits were relaxed to allow 90% of the value of the permit to be loaned and experience in the fishery provisions were also reduced to one year. This step was taken because rapid escalation in permit prices was resulting in considerable lag between market price in one quarter and the state's appraised value from the previous quarter. This discrepancy plus the 75%

provision meant that an individual might have to provide over 50% of the purchase price of a permit out of pocket.⁹

As a result of these provisions, the number of state loans for permits has increased dramatically since mid-1978 as Table 12 indicates. If the number of loans awarded during the first four months of FY 80 were extrapolated over the remainder of the year, the total would be 48. It is possible that this number could be exceeded by as much as 50% since the first quarter of the calendar year generally sees a great deal of loan activity. However, the relative portion of the state loan program in the overall picture of limited entry permit purchasing must be assessed. Using the earlier projected rate of 1400 permanent transfers in FY 80 and assuming, based on the CFEC voluntary survey, that 53.3% of all permanent permit transfers involve financing then approximately 750 permit transfers with financing will occur in FY 80. A conservative figure of 48 state loans would amount to 6.4% of financial transfers while it would take 75 loans to give the state 10% of the total number financed.

The geographic distribution of state loans involving permits is skewed toward the Southeastern region of the state. Of the 82 loans involving permits which the Division of Business Loans lists, 45 or 55% are in Districts 1, 2, 3 and 4 with District 4 accounting for 23 of the 45. The next highest number of loans for permits is District 13 (Kenai, Homer) whose residents have received 11 of the 82 permit loans.

Table 12 summarizes how loans for permit purchases are distributed by fishery. As might be expected from the geographic distribution of state loans involving permits, the Southeastern purse seine, drift gillnet, and power troll fisheries account for a large portion of the total. The 15 loans for permits in the power troll fishery alone account for 23.1% of all loans for permit purchases

⁹

This 90% provision is, of course, applicable across the board to all permits, even those issued initially to individuals who own few or no other assets. This circumstance is cause for some concern among some officials of the state's loan program

Table 12

43

State Commercial Fishing Loans
For Permit Purchases
By Fishery and Fiscal Year

<u>Fishery</u>	<u>FY 76</u>	<u>FY 77</u>	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80¹</u>	<u>Total²</u>
Southeast purse seine	0	0	0	3	0	3
Southeast drift gillnet	1	1	1	4	3	10
Statewide power troll	0	0	0	8	7	15
Yakutat set gillnet	0	0	0	0	0	0
Prince William Sound purse seine	1	0	0	4	1	6
Prince William Sound drift gillnet	0	0	0	2	1	3
Prince William Sound set gillnet	0	0	0	0	0	0
Cook Inlet purse seine	0	0	0	1	0	1
Cook Inlet drift gillnet	0	0	0	6	3	9
Cook Inlet set gillnet	0	0	0	0	0	0
Kodiak purse seine	0	0	1	4	0	5
Kodiak beach seine	0	0	0	1	0	1
Kodiak set gillnet	0	0	0	1	0	1
Chignik purse seine	0	0	0	0	0	0
Peninsula-Aleutians purse seine	0	0	0	0	0	0
Peninsula-Aleutians drift gillnet	0	0	0	0	0	0
Peninsula-Aleutians set gillnet	0	0	0	0	0	0
Bristol Bay drift gillnet	0	0	0	10	1	11
Bristol Bay set gillnet	0	0	0	0	0	0
NO STATE LOANS FOR AYK PERMITS						
Totals	2	1	2	44	16	65

¹
As of November 1, 1979.

²State Division of Business Loan records list 82 loans involving permits from 1976 to November 1, 1979. Of those 82, 72 files were examined. Of the remaining 10, 2 not reviewed were housed in Fairbanks, 1 was unavailable in the Anchorage office, and 5 were unavailable in the Juneau office. 3 from the Anchorage office were apparently in Juneau.

while the combined total with the Southeast purse seine and gillnet loans comes to 43.1%. The next most popular fishery for state loans is the Bristol Bay drift gillnet fishery where 11 loans make up 16.9% of the total loans for permit purchases. It is also the only fishery west and north of Kodiak for which a state loan has been used to purchase a permit.

How have state loans been distributed by gear type? Of the 65 state loans for permit purchases 15 have been for power trolling, 15 for purse seining, 33 for drift gillnetting, 1 for beach seining, and 1 for set gillnetting. This pattern compares fairly closely to the overall distribution of financing by gear type. Analysis of data in Table 11 from the CFEC voluntary survey reveals that of 392 reported cases of financing of permits 288 or 48.6% were in the drift gillnet fisheries, 109 or 18.4% were in the power troll fishery, 101 or 17.1% were in the purse seine fisheries, 89 or 15% were in the set gillnet fisheries and 11 or 1.9% were in the AYK fisheries. The only major discrepancy from this pattern in the state program is in the set gillnet fisheries where only 1.5% of loans for permit purchases have occurred.

There is however an important reason for this which has implications for the general practice of financing for permit purchases. The Division's position in making loans for permit purchases (or any commercial fishing loan for that matter) is that applicants must have the capability of meeting the debt service from their fishing income alone.¹⁰ It is obvious from Table that most set gillnet applicants would be hard pressed to make a case for making their debt service out of fishing income alone. The broader implications of this situation are that transferors and banks, the two major private sources of financing are much less concerned about where the funds are going to come from to pay off their loans

¹⁰

Obviously the loan examiners are not totally oblivious to applicants' alternate sources of income but formally such considerations are not supposed to affect their determinations.

Table 13

Classification of State Commercial Fishing Loans
Involving Permits

By House District¹

House District	New Entry (including vessel in some cases)	Collateral for vessal and/or gear	Obtain Additional Permit(s)	Refinance	Other	Total ²
1	5	0	2	0	2	9
2	3	0	4	2	0	9
3	1	1	0	1	0	3
4	7	2	6	0	0	15
5	4	0	5	0	0	9
6	1	0	0	0	0	1
7-12	4	0	0	0	0	4
13	4	0	6	0	0	10
14	5	0	1	0	0	6
16	1	2	1	0	0	4
Total (%)	35 (50%)	5 (7.1%)	25 (35.8%)	3 (4.2%)	2 (2.9%)	70

¹
Two of the 72 files examined did not have sufficient information to make a determination for this classification.

²
Not enough information in the file to make this classification on one permit purchase from district 3 and one from district 5.

46

than the state is. This point is reinforced by the fact that banks appear to place greater weight on applicants' past loan performance with their institution and general credit rating than on the specifics of their fishing performance. The upshot is that those with sources of income other than fishing are more attractive candidates in the private market for permit financing than are those for whom fishing is their sole source of income. If this is a tendency the state wishes to offset, then the state loan program must be expanded and modified (see below).

In the previous paragraphs on the state loan program two different terminologies were used. The first is state loans involving permits and the second is state loans for permit purchases. Table 13 provides an explanation for the difference between the two. Because the regulation for the use of a permit as collateral in obtaining a state commercial fishing loan does not specify that the permit can only be used as collateral on itself or another permit, some applicants have used their permits as collateral on vessel upgrade, new vessels, and purchasing of other permits. In addition, Division personnel indicate that it would be possible to use the permits as collateral in the Small Businesses program as well, although apparently no one has tried to date. Another use of the program is refinancing earlier permit purchases. Because the state loan program's lower rate of interest (9.5% after June 1, 1979; 7.5% before that) than prevailing market rates, many applicants are attracted to the program to refinance their earlier permit purchases. The Division's position is that they will not grant a loan if more than 50% of the total request is refinanced. Nevertheless, considerable leeway for refinancing is present as the following example points out. Say an individual purchased a Southeast drift gillnet permit in 1978 for \$35,000 with a bank loan of 11% and paid off \$20,000 by August of 1979. In September of 1979 the person applies for a state loan for a new vessel costing \$60,000 plus the remaining \$15,000 on his permit note at the state's lower rate of 9.5%. The permit and the new vessel are put up as collateral and

In terms of the residency categories developed earlier for examination of transfer trends, what has been the distribution of state loans for permit purchases? Table 15 reveals that 86% of all state loans have gone to urban residents. Urban locals have obtained 71% and urban nonlocals 15%. The most striking finding in this regard is the urban nonlocal purchases in the Bristol Bay drift gillnet fishery where state loans have aided in the purchase of eight permits. These are nearly all examples of diversification by predominantly nonlocal Alaskan gillnetters who are purchasing Bristol Bay permits in addition to permits held in other fisheries. The 14% of state loans going to rural residents is startlingly below their initial issuance level of 34% in the non-AYK fisheries.

In general the state's loan program can be seen to reflect the basic transfer pattern trends by residency discussed earlier; however a good case could be made that it has accentuated the trend of urban gain and rural decline in permit holdings among Alaskans. There is no data for determining what the impact of the state loan program on resident-nonresident percentages of permit holders has been, but this could be collected by tracking down the residency of persons from whom permits have been purchased using state loan funds. Some shift has occurred but there is no simple way of estimating how much. Obviously it has not been a major factor in resident-nonresident flow to this date. Nor is it possible to make any precise statement about the geographic distribution among Alaskans of state loan recipients compared with the geographic distribution of Alaskan recipients of other types of financing since the CFEC voluntary survey did not include this information. However, distribution of financing for permits to regional fisheries might provide a rough comparative index to apply to state and other sources of financing. Using this measure, permits in the three Southeast fisheries (purse seine, drift gillnet, power troll) make up 43.1% of state loans and are 31.7% of all other financed permit purchases.

Table 14

Net Worth of Individuals
Obtaining State Commercial Fishing Loans
Involving Permits

By House District¹

House District	\$30,000 or less	\$30-50,000	\$50-100,000	\$100-150,000	\$150-200,000	\$200-250,000	Greater than \$250,000	Total
1	1	0	2	1	2	1	0	7
2	0	0	2	2	2	1	2	9
3	0	1	0	2	0	0	0	3
4	1	1	4	2	4	2	1	15
5	0	0	1	1	3	0	3	8
6	0	0	0	0	0	0	0	0
7-12	1	2	0	0	1	0	0	4
13	0	0	2	2	3	1	2	10
14	0	0	2	0	1	0	3	6
16	0	1	2	0	0	1	0	4
Total (%)	3 (4.5%)	5 (7.6%)	15 (22.7%)	10 (15.2%)	16 (24.2%)	6 (9.1%)	11 (16.7%)	66

¹

Of the 72 files examined, 66 had sufficient information for classification.

Table 15
Residency of Recipients
of
State Commercial Fishing Loans
For Permit Purchases by Fishery

Fishery	ARL	Residency		AUN
		AUL	ARN	
Southeast purse seine	0	3	0	0
Southeast drift gillnet	1	9	0	0
Statewide power troll	3	12	0	0
Yakutat set gillnet	0	0	0	0
Prince William Sound purse seine	0	5	0	0
Prince William Sound drift gillnet	0	2	0	1
Prince William Sound set gillnet	0	0	0	0
Cook Inlet purse seine	0	1	0	0
Cook Inlet drift gillnet	2	7	0	0
Cook Inlet set gillnet	0	0	0	0
Kodiak purse seine	0	4	0	1
Kodiak beach seine	0	1	0	0
Kodiak set gillnet	0	1	0	0
Chignik purse seine	0	0	0	0
Peninsula-Aleutians purse seine	0	0	0	0
Peninsula-Aleutians drift gillnet	0	0	0	0
Peninsula-Aleutians set gillnet	0	0	0	0
Bristol Bay drift gillnet	3	0	0	8
Bristol Bay set gillnet	0	0	0	0

NO STATE LOANS FOR AYK PERMITS

Totals	9	46	0	10
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Comparative figures for the three Prince William Sound fisheries were 13.8% of state loans and 12.9% of all other sources of financing. The Cook Inlet regional fisheries received 15.4% of state loans for permit purchases while their rate from all other sources of financing was 14.8%. In Kodiak the figures are 10.8% of state loans, 6.6% from all other sources while in Bristol Bay the figures are 16.9% of state loans and 20.7% of all other financing. These figures indicate that for the most part state financing of permits by regional fisheries diverges from the pattern of their financing only in Southeast where state loans make up a substantially larger portion of financing than are made available from other sources and in Bristol Bay where state loans make up a somewhat smaller portion of financing than are made available from other sources.



Is it possible that the low number of loans for permits and the relative distribution of loans for permits is related to state loan program requirements which result in an inordinately large number of refusals to applicants in general or from certain areas seeking funds for permit purchases? Division personnel consider the overall commercial fishing loan rate of refusal of completed applications to be low, between one in four or five (20-25%). The two most frequent reasons for refusal they cited were lack of sufficient collateral to cover the loan and inability to service the debt from fishing income. Data on refusals of applications for state loans for permit purchases indicate that 13 loans were turned down in FY 79 and 13 have been refused thus far in FY 80. These figures represent 17.6% of all applications for state loans involving permits in FY 79 but a much more substantial 41.9% in FY 80. District 13 has the highest number and rate of refusals with 4 of 13 in FY 79 and 7 of 13 thus far in FY 80. Although loan committee minutes do not indicate what fishery applications involving permits are from, it can be assumed that the District 13 applications include a high percentage of Cook Inlet drift gillnet permits. Given the Division's requirement for debt servicing out of fishing income it is not surprising that there would be a high rate of refusal for permit purchases in this fishery due to the high appraised permit value in relation to the low gross and net earned in this fishery in 1979.

There are other aspects of the data on the state loan program and its overall integration with the tremendously diverse potential user group it is required to serve that require comment. First, note in the preceding paragraph that the phrase "of completed applications" is underlined. The intent of this was to highlight the fact that the application process, although made as simple as possible yet still reflect accepted financing procedures, is a complicated and time consuming task which many people begin and fewer complete.

At present the commercial fishing loan application check-off list includes the following items: application form, letter of intent, list of collateral offered to secure loan (including marine survey, construction bid and/or appraisal), photos of vessel(s) or other assets being offered as collateral, current financial statement, pro forma financial statement, credit authorization forms (3), authorization to verify financial information, tax returns (last 3 years), personal resume, and accident report. The data cited above on refusals refer only to applications that passed the hurdle of submitting all the above paperwork. It seems reasonable to assume that a good percentage of people who submit an application for a state loan never reach the point of having their application sent forward to the loan review committee for approval simply because they fail to secure some of the items listed above. It would be difficult to argue that state funds are equally accessible to all state residents since state residents are not equally able to comprehend let alone comply with administrative requirements of the state loan program. The procedure is neither undecipherable nor excessively burdensome to those with educational skills to understand the application and with some experience with bank loans or loans from other financial institutions. However, without these skills and/or experience, the state loan application becomes a significant obstacle to overcome.¹¹ It would appear rural residents are least likely to have the skills necessary for completion of an application.

A second point related to the first has to do with dissemination of information about the state loan program for permit purchases and outreach capabilities of the Division to provide services to all Alaskans. At present

11

Data on use of the state loan program in Districts 17, 18, 19, 21 and 22 indicate that residents of those rural areas are getting little benefit from the program. Rural residents of Districts 15 and 16 make extensive use of the program for vessel purchases but virtually no use for permit purposes. No simple explanation for this is apparent.

the Division has 5 loan examinees stationed in Juneau, 4 in Anchorage and 1 in Fairbanks. Anchorage office personnel indicate they made trips to the regional centers (Kodiak, Dillingham, Bethel, etc.) on a demand basis when applications from those areas are received. It may be that a more extensive dissemination and outreach program in conjunction with further simplification of the application procedure could increase rural Alaskan use of the state loan program for permit purchases.

A third item from the state loan application which may have some differential impact on certain segments of the population is the loan costs item. At present the applicant must pay for credit reports, title insurance, appraisals, surveys, and other direct costs out of pocket. These expenses might be an additional deterrent to some applicants but no data was collected on what costs associated with these items usually amount to.

In regard to the question raised at the beginning of this discussion on state loan requirements, it would seem that the issue is not one of excessively restrictive financial residential, experiential requirements but probably more a question of administrative requirements and the structural integration of the loan program with the characteristics of the applicant population. It is not a question of whether potential applicants can meet the financial requirements nor are the financial, residential, experiential requirements themselves necessarily to be questioned but rather are potential applicants aware of the program, do they understand the application process, and are they able to get the information necessary to meet the Division's requirements. It would seem that the latter elements are more crucial in explaining the distribution of state loans for permit purchases to urban and rural fishermen than are the former.

In closing this discussion of the state loan program and its impact on entry into the limited entry salmon fisheries, one problem presently confronting Division personnel in implementing the commercial fishing loan program should be addressed. Presently the state loan program requires a person to be a resident of the state for five years preceding their application. Division personnel indicated that determination of residency present a problem in approximately 20% of commercial fishing applications. One of the operating rules used by the Division to combat ambiguity surrounding this term if questions arise is to use a rule of permanent abode. In other words, has the applicant maintained a continuous permanent abode in the state during the past five years. Part of the Division's difficulty in residency determination stems from the wide variety of definitions used within state government, none of which seem to suit their purposes. For example, in the Division's view, the Department of Revenue has no significant stake in whether a person claims to be a resident or not so they generally accept whatever category (resident or nonresident) a person claims. This lack of precise consistent objective application of a standard makes Department of Revenue data on residency of little use to the Division of Business



Loans. Although infrequent because applicants making dubious claims usually drop their applications when asked for additional evidence of residency, Division personnel stated that several persons who contested the state's denial of a loan on grounds of not meeting the residency requirement have been rebuffed.

The major source of financing available for permit purchases is the transferor. This fact alone means that permit purchases are regarded as shaky ventures at best by most traditional sources of financing. There is little information to go with regard to nature of permit purchases in which the transferor provides the financing. One major processing firm indicated that it had helped draw up contracts between permit sellers and permit buyers even though it was not financially involved in the transaction. The firm's spokesman indicated that the transferors were willing to carry contracts after receiving downpayments of 25% to 35% of the purchase price; however, he gave no indication if the contracts were secured by collateral or not. Hypothetically it would seem that transferors must act in general like other sources of private financing, i.e. require unsecured collateral to cover the value of the permit. However because of misunderstandings about what one can and cannot do legally with a permit with regard to leasing, mortgaging and foreclosing, and because it would seem probable that transferors finance permit transfers more readily for relatives, friends, and fishing acquaintances whose participative history and performance are well known to them, it is possible that many transferor financing arrangements are unsecured. This probably doesn't present a problem for purchases on the upswing of the last several years in fish prices and permit values but could become a problem in fisheries where permit purchase prices have exceeded the present earning power of the permit. A notable example of such a situation is the Cook Inlet drift gillnet fishery. It will be instructive to see how defaults in instances of transferor financing are handled should they begin to occur in this fishery.

IV. Socioeconomic Impacts of Transfer Patterns in the Limited Salmon Fisheries

This section considers what the impact of the transfer patterns discussed in Section II have been on various segments of the Alaskan population in terms of income from and employment in the limited salmon fisheries. A brief comment on the distribution of the rent from the fisheries, which is an important topic but not one addressed by this report, closes the section.

Income

In order to analyze income shifts due to transfer patterns, data on net earnings from limited salmon fisheries compiled by Dr. George Rogers and Jack Kreinheder for 1977 were taken from their preliminary report, "Socioeconomic Data Base for Fishery Areas and Census Divisions." Table 16 presents a gross estimate of the net value of each limited salmon fishery for which data was available. Table 17, using figures from Tables 8 and 16, estimate the loss or gain of net earnings to various residency groupings using net earnings from 1977 and permit totals from 1979.

The most important socioeconomic impacts are those dealing with the distribution of net earnings by residency category. First how have the distribution of net earnings between residents and nonresidents been impacted by transfer patterns? Tables 7 and 8 indicate that nonresidents held 28.1% of permits initially issued in the non-AYK fisheries and have lost 23 or 1% of those permits since that time. Based on the proportion of permits initially issued to nonresidents, their share of net earnings in the non-AYK fisheries

12

Obviously net earnings from most Alaskan fisheries fluctuate widely from year to year. The most important change in Table 17 if net earnings from 1979 were available would be in the Southeast purse seine fishery where net earnings would drop significantly and in the Bristol Bay drift gillnet fishery where net earnings would rise significantly. These two would likely offset each other so that the overall picture of gains and losses by residents, nonresidents, Alaskan urban and Alaskan rural fishermen would probably be fairly close to the totals presented in Table 17.

Table 16

57.

Net Value
of
Limited Entry Salmon Fisheries
in
1977¹

<u>Fishery</u>	<u>Number of Permits (A)² in 1977 (Permanent & Interim)</u>	<u>Average Net Earnings (B)</u>	<u>(A) X (B) = (C) Total Net Value of Fishery</u>
Southeast purse seine	412	56,560	(371) 20,983,760
Southeast drift gillnet	473	14,340	(426) 6,108,840
Statewide power troll	976	1,834	(878) 1,610,252
Yakutat set gillnet	158	624	(142) 88,608
Prince William Sound purse seine	273	17,147	(246) 4,218,162
Prince William Sound drift gillnet	531	8,433	(478) 4,030,974
Prince William Sound set gillnet	29	n/a	(26) n/a
Cook Inlet purse seine	82	24,500	(74) 1,813,000
Cook Inlet drift gillnet	574	9,029	(517) 4,667,993
Cook Inlet set gillnet	731	3,545	(658) 2,332,610
Kodiak purse seine	376	29,627	(338) 10,013,926
Kodiak beach seine	n/a	n/a	n/a
Kodiak set gillnet	185	14,905	(166) 2,474,230
Chignik purse seine	91	161,682	(82) 13,257,924
Peninsula-Aleutians purse seine	113	20,408	(102) 2,081,616
Peninsula-Aleutians drift gillnet	154	10,400	(139) 1,445,600
Peninsula-Aleutians set gillnet	108	4,758	(97) 461,526
Bristol Bay drift gillnet	1722	10,071	(1550) 15,610,050
Bristol Bay set gillnet	835	869	(751) 652,619

NO DATA AVAILABLE ON AYK FISHERIES

Total	91,851,690
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1

Source: Rogers and Kreinheder (1979)

2

A random sample of 150 Bristol Bay drift gillnet permanent permit holders and 110 Bristol Bay set gillnet permanent permit holders revealed that approximately 10% of permit holders in these fisheries made no landings in 1975, 1976 and 1977. Using this gross and admittedly problematic figure, the permanent permit figure has been reduced by 10% for each fishery in order to control for the factor of permit non-use.

in 1977 would have been 30.5%. Despite the nonresident decline in permits since initial issue due to transfers, their overall share of net earnings has increased to 31.3% of the \$91,851,690 figure presented in Table 16. The \$725,329 net gain shown in Table 17 represents a 2.6% increase in nonresident net earnings. As discussed earlier in this report, the explanation for the fact that even though nonresident permit holdings have declined, nonresident net earnings have increased is because nonresident permit holdings have declined in the power troll and set gillnet fisheries where net earnings are comparatively low and have increased in the purse seine and drift gillnet fisheries where net earnings are comparatively high. It is especially noteworthy that nonresident permit gains in the Southeast purse seine fishery and the Bristol Bay drift gillnet fishery account for 87% of nonresident gains.

How have transfer patterns in permit holdings by various classes of Alaskan residents affected income distribution to those residency classes? Tables 7 and 8 indicate that in the non-AYK rural fisheries rural residents were issued 34% of initial permanent permits and urban residents were issued 37.9%. The rural loss of 115 permits in non-AYK fisheries represents a 6.9% decrease while the urban gain of 132 permits represents a 4.4% increase. With their initial proportion of permits Alaska's rural residents would have garnered 29.1% of net earnings and urban residents 40.4%. The net earnings decline of \$2,051,904 resulting from transfers by rural residents found in Table 17 represents a drop of 7.7%, and the net earnings increase of \$1,326,575 resulting from transfers to urban residents represents an increase of 3.6%. Losses in the Southeast purse seine and Bristol Bay drift gillnet account for 88% of the rural decline. Urban gains are much more evenly distributed with the Chignik, Kodiak and Southeast purse seine fisheries plus the Bristol Bay drift gillnet fishery accounting for 57% of urban gains.

Table 17

Gains and Losses in Net Earnings
By Fishery and Residency for 1979¹

Fishery	ARL	AUL	Residency Categories		
			ARN	AUN	NR
Southeast purse seine	-1,518,750	+56,250	-	+168,750	+1,293,750
Southeast drift gillnet	+71,700	+200,760	+14,340	-28,680	-258,120
Statewide power troll	-7,336	+121,044	-3,668	-1,834	-108,206
Yakutat set gillnet	+1,872	-	+624	-1,248	-1,248
Prince William Sound purse seine	-51,441	-154,323	+34,294	+51,441	+120,029
Prince William Sound drift gillnet	-25,299	-101,196	+25,299	+118,062	-16,866
Prince William Sound set gillnet	n/a	n/a	n/a	n/a	n/a
Cook Inlet purse seine	+24,500	-49,000	-	-	+24,500
Cook Inlet drift gillnet	+126,406	-81,261	-	-45,145	-
Cook Inlet set gillnet	+14,180	+28,360	-3,545	-21,270	-17,725
Kodiak purse seine	+29,627	+207,389	-59,254	+88,881	-266,643
Kodiak beach seine	n/a	n/a	n/a	n/a	n/a
Kodiak set gillnet	-59,620	+253,385	-44,715	-44,715	-104,335
Peninsula-Aleutians purse seine	-20,408	-	-	-	+20,408
Peninsula-Aleutians drift gillnet	-72,800	-	+10,400	-	+62,400
Peninsula-Aleutians set gillnet	-	-	-	-	-
Chignik purse seine	-	+161,682	-	+161,682	-323,364
Bristol Bay drift gillnet	-433,053	-	-70,497	+211,491	+292,059
Bristol Bay set gillnet	-39,974	-	+5,214	+26,070	+8,690

NO DATA AVAILABLE ON AYK FISHERIES

Totals	Gain	+268,285	+1,028,870	+90,171	+826,377	+1,821,836
	Loss	-2,228,681	-385,780	-181,679	-142,892	-1,096,507
	Net	-1,960,396	+643,090	-91,508	+683,485	+725,329

¹

Based on 1977 data from Rogers and Kreinheder (1979).

Employment

Most of Alaska's limited salmon fisheries require several persons to operate the gear effectively in addition to the permit holder or operator. Some portion of the net (or gross in some fisheries) earnings discussed above are distributed to the other persons employed. These earnings are commonly termed labor costs. Table 18, derived from data compiled by Rogers and Krein- heder, provides an estimate of the proportion of the gross earnings which labor costs represent in the various limited fisheries. Another way to think about labor costs is as jobs, part-time and seasonal for the most part, but neverthe- less representing a certain number of income earning opportunities in each fishery. Each fishery varies in the number of persons required to effectively manage the gear, yet it is also true that there is a modal or typical crew for each fishery as well. Crew sizes for purse seining tend to be largest (as the labor costs in Table 18 indicate) with six being the standard crew size (including permit holder/operator) in Southeast and for in the other areas. Most of the drift gillnet fisheries are considered two-person operations (with the exception of Prince William Sound) as is the power troll fishery. The set gillnet fisheries, based on comparative figures from Table 18, also appear to involve two-persons in most areas.

The importance of transfer patterns for crew employment stems from the question of who gets the crew positions when a permit is transferred. Just as permit holders tend to transfer permits to relatives, friends, and mem- bers of the same or similar communities, so to permit holders tend to hire relatives, friends, and persons they are in contact with frequently. If permit transfers sustain the continuity of residency distribution, then it follows that crew employment patterns will more than likely also be sustained. How- ever, if there are substantial modifications in permit distribution then crew

61.

Rank Order
of
Limited Entry Salmon Fisheries
On Various Measures, 1975-1977

<u>Fishery</u>	<u>Average Gross Earnings</u>	<u>(Rank)</u>	<u>Average Net¹ Earnings</u>	<u>(Rank)</u>	<u>Percent Nonresident</u>	<u>(Rank)</u>	<u>Labor Costs as % of Gross</u>
Chignik purse seine	94,856	(1)	70,593	(1)	21.1%	(11)	42.3%
Southeast purse seine	48,714	(2)	26,750	(2)	55.1%	(1)	49.8%
Kodiak purse seine	39,151	(3)	21,982	(3)	25.9%	(6)	42.8%
Peninsula-Aleutians purse seine	31,343	(4)	17,424	(4)	12.8%	(14)	34.2%
Prince William Sound purse seine	29,999	(5)	12,161	(6)	24%	(8)	29%
Cook Inlet purse seine	27,980	(6)	13,491	(5)	1.3%	(18)	50.6%
Southeast drift gillnet	19,296	(7)	8,303	(7)	29.9%	(5)	17.7%
Peninsula-Aleutians drift gillnet	18,836	(8)	6,850	(11)	32.1%	(4)	23.4%
Cook Inlet drift gillnet	17,882	(9)	6,026	(12)	33%	(3)	19%
Prince William Sound drift gillnet	16,650	(10)	6,884	(10)	25.4%	(7)	2.4%
Bristol Bay drift gillnet	14,577	(11)	7,081	(8)	44.1%	(2)	31.7%
Kodiak set gillnet	14,120	(12)	6,979	(9)	22.7%	(10)	55.6%
Kodiak beach seine	12,328	(13)	No Data		12.1%	(15)	No Data
Statewide power troll	11,318	(14)	-449	(16)	23.2%	(9)	33.7%
Yakutat set gillnet	10,157	(15)	-1961	(17)	9.6%	(16)	25%
Cook Inlet set gillnet	9,963	(16)	-141	(15)	6.6%	(17)	42.8%
Peninsula-Aleutians set gillnet	8,709	(17)	1,851	(13)	0	(21)	38.5%
Kotzebue gillnet	4,291	(18)	No Data		0	(21)	No Data
Bristol Bay set gillnet	4,093	(19)	38	(14)	17.4%	(13)	21.6%
Lower Yukon gillnet	3,724	(20)	No Data		.3%	(20)	No Data
Kuskokwim gillnet	2,775	(21)	No Data		0	(21)	No Data
Upper Yukon fishwheel	2,536	(22)	No Data		0	(21)	No Data
Norton Sound gillnet	2,324	(23)	No Data		.6%	(19)	No Data
Upper Yukon gillnet	1,702	(24)	No Data		0	(21)	No Data
Prince William Sound set gillnet	No Data		No Data		0	(21)	No Data

¹

Source: Rogers and Kreinheder (1979)

employment will more than likely reflect the new distribution. In fact there is a multiplier effect on crew employment if permit transfers deviate from their initial distribution; the multiplier is different for each fishery and is a function of 1) the average crew size in a given fishery and 2) the proportion of crewmen from different residency classes who fish with permit holders from different residency classes. An example will help explain this pattern. In the Southeast purse seine fishery, six is the normal crew size. Let us suppose that of the five crewmen needed in addition to the captain (permit holder), four are usually drawn from the same residency cohort as the captain. Now taking the example into the real world, Table 8 indicates that Alaskan rural permit holders have declined by 27 in the Southeast purse seine fishery since 1975, and nonresident permit holders have increased their holdings by 23 permits. Using the multiplier of 4 mentioned above, Alaskan rural locals have lost 108 crew positions (in addition to the 27 captain positions represented by the permits) while nonresidents have gained 92 crew positions.

The previous example, although hypothetical, is based on research experience in the Southeast purse seine fishery and is fairly realistic. Unfortunately data on the demographic characteristics of crewmen are unavailable for the various fisheries so that attempts to estimate the overall impact of permit transfers on employment would be highly speculative. It is also likely that multiplier figures are highly variable from fishery to fishery which further complicates attempts at estimating the employment impacts of permit transfer patterns.

Rent

In briefest and simplest terms, rent from the limited salmon fisheries is the purchase price of a permit bought from an initial issuee. Who has benefited from, or to put it another way, extracted the rent from Alaska's salmon fisheries, is not addressed in this report but it is an important issue. In

its present form, the chief (if not sole) beneficiaries of Alaskan limited entry will be the select group who initially received permits. G. Alex Fraser, research economist with the British Columbia Salmon Enhancement Program has noted in a recent paper, that in British Columbia, "The only clear winners are the original group of license holders." This is due to the fact that since the total rent is capitalized into the price of the permit, the initial holder captures all of the the rent when the permit is sold. There are however many other alternative forms of transfer which have different outcomes with regard to who gets the rent. One alternative form of transfer can provide initial and subsequent holders of permits (not just initial holders) with the rent from the fishery during the time the permit is held and fished. Another can return a portion of the rent to the people, the actual owners of the common property resource. These issues and alternatives are vitally important and must be given open and direct consideration by the legislature if the entire rent from the Alaskan limited salmon fisheries is not to be transferred to initial permit holders by default.

V. Conclusion

Findings about transfers in the limited salmon fisheries must be considered a mixed bag. On the one hand, the data indicate that

- note* {
- 1) females have been able to increase their percentage of permits,
 - 2) younger people have been able to enter the fisheries,
 - 3) a fairly high rate of family transfers has occurred, and
 - 4) residents have made a slight gain in the number of permits held relative to nonresidents.

On the other hand, the data indicate that

- note* {
- 1) nonresidents have gained permits in the high value fisheries so that their net incomes and probably employment has increased,
 - 2) continuity in the residency make-up of permit holders in certain fisheries has been disrupted and Alaskan rural permit holders have declined,
 - 3) the state loan program has had relatively little impact on permit purchases to date by new entrants, and
 - 4) financing availability for the purchase of permits is highly skewed toward the upper end of the wealth distribution curve.

Values, attitudes, and assumptions of different Alaskans will vary significantly about the relative importance of these elements in deciding what is to be done about limited entry and what is to be the proper place of Alaska's fisheries in the fabric of Alaskan society. However, any public policy dealing with a common property resource that systematically, whether intentionally or unintentionally, places one group of Alaskan citizens at a disadvantage relative to another requires close scrutiny and, if warranted, changes to ameliorate the disadvantages that do occur. With that principle in mind the tremendously high cost of permits coupled with the availability of financing and the loss of permits by rural Alaskans are the two most important public policy issues that emerge from this study of transfer patterns in the limited salmon fisheries.

With regard to the loss of permits by rural Alaskans, three interrelated questions are why has this pattern developed, will it continue, and is it serious.

Average Annual Price of Permanent Permit
By Fishery, 1975-1979¹

<u>Fishery</u>	<u>1975</u>	<u>1976</u>	<u>Year</u> <u>1977</u>	<u>1978</u>	<u>1979</u>
Southeast purse seine	10,633	9,222	16,667	30,929	42,500
Southeast drift gillnet	9,211	10,213	16,262	34,604	43,000
Statewide power troll	5,303	5,065	8,831	15,457	28,667
Yakutat set gillnet	750	6,000	7,000	10,480	22,500
Prince William Sound purse seine	8,000	10,700	29,800	24,272	31,667
Prince William Sound drift gillnet	3,089	4,500	13,750	27,742	3,722
Prince William Sound set gillnet	-	-	-	-	15,000 (est.)
Cook Inlet purse seine	-	7,500	10,625	40,000	47,500
Cook Inlet drift gillnet	3,911	5,552	9,643	36,825	92,500
Cook Inlet set gillnet	2,250	1,778	4,821	9,824	16,000
Kodiak purse seine	4,571	9,736	17,611	47,611	75,000
Kodiak beach seine	-	-	15,000	29,250	35,500
Kodiak set gillnet	5,380	3,900	6,600	19,800	41,250
Peninsula-Aleutians purse seine	-	-	-	15,667	48,333
Peninsula-Aleutians drift gillnet	-	6,333	10,286	15,000	64,500
Peninsula-Aleutians set gillnet	-	5,000	5,150	10,150	no data or est.
Chignik purse seine					175,000 (est.)
Bristol Bay drift gillnet	1,166	2,536	6,180	21,638	69,667
Bristol Bay set gillnet	-	2,755	2,694	8,507	19,455
Kuskokwim gillnet		-	-	6,100	7,333
Lower Yukon gillnet		-	550	6,700	8,500
Norton Sound gillnet		-	-	4,350	7,250
Kotzebue gillnet		-	-	-	5,720
Upper Yukon gillnet		-	-	-	7,500
Upper Yukon fishwheel		-	-	7,500	11,500 (est.)

1

Based on Commercial Fisheries Entry Commission data - third quarter (10/22/79) price.

First, why has this occurred? In general, it is hypothesized that the market value of a permit reflects the long-term average net earning potential of a fishery. Given this relationship a second proposition holds that the value of the permit when invested in a bank or some other income-returning investment, is equivalent to the earnings potential of the permit. Therefore the transaction is theoretically of equal benefit to each party. Fishermen do not all earn average amounts from a fishery and, in fact, in most fisheries most of the total earnings are taken by a relatively small percentage of the fishermen. This means that a high proportion of fishermen fall below average net earnings in most fisheries. For this group, the prospect of selling the permit for a price equivalent to the average potential earnings from the fishery would be attractive. This is because they would increase their net earnings which in a world populated by profit maximizing actors with no other utilities is an eminently rational decision. If a given group of fishermen consistently fall below the average earnings in a fishery, for whatever reason, it is predictable that member of that particular group would be more likely to sell their permits than members of groups who are collectively above the average. In fisheries which initially had some relatively balanced proportion of nonresident, Alaskan rural, and Alaskan urban fishermen and it was the case that rural fishermen as a group, for whatever reason, were below average in net earnings, then it is likely that they would be more willing to part with their permits than their urban and nonresident counterparts.²⁰

Of significant importance here are the reasons for lower than average net earnings by rural residents. It may be in some fisheries a result of historical factors which have precluded rural fishermen from reaching parity with urban

²⁰

Due to the fact that those below average in net earnings are more likely to sell their permits, estimates of income loss in Table 18 are probably overestimated. Those figures still represent lost potential earnings had the permit been transferred to a new entrant with average fishing abilities from the same cohort.

and nonresident fishermen in the technological realm of vessels and equipment. A survey conducted by the Limited Entry Commission in the Bristol Bay drift gill-net fishery in 1977 gives evidence of this type of situation in that fishery. It maybe, in other fisheries that a variety of factors including biological conditions and management decisions might unite to close traditional fishing grounds and fishermen's hesitancy to move to new grounds might result in a group of fishermen systematically falling below average earnings in a fishery making them more willing to sell. Such a situation might partially account for transfer patterns in the Southeast purse seine fishery. The other side of the coin is availability of financing for purchasing by different groups.

In the foregoing discussion it was assumed that the various groups of fishermen were the same on a number of characteristics to meet the condition of "all other things being equal." These characteristics would include initial levels of income distribution, understanding the implications of transferability, similar age distributions, access to sources of capital for permit purchases, access to information about permits for sale, and similar utility preferences. If these characteristics are not similar among groups of fishermen then there will be a resulting impact on willingness to sell and/or ability to buy. For example, if a person is operating under the assumption that his son, who does not have a permit, will be able to obtain one through points gained participating in the fishery, then he will be much more willing to sell his permit than if he realizes that no more permits will be issued. This seems to have occurred in Bristol Bay among some rural local fishermen. It is well recognized by the Commission that there has been a significant communication gap with rural Alaskans about limited entry and that gap has apparently worked to the disadvantage of rural Alaskans.

Other important points of departure between various residency classes of fishermen are income levels and demand schedules. Just as in the case discus-

To the extent that the value of passing the permit to someone in the family or community is reinforced, there will be some lessening in the potential for decline. The efficacy of this strategy by itself would not appear to be a conclusive remedy.

Factors on the buying side of importance are the availability of capital for permit purchases, and the ability of rural residents to meet requirements necessary to gain access to financing for permit purchases. Rising costs of technology and permits both will make outright purchases of permit less and less possible so that entry into the fisheries will become more and more dominated by the availability of financing. The discussion on financing requirements of the private sector as well as the examination of the operation of the State loan program to date revealed a gloomy picture indeed of access to financing by rural residents. Without major modifications in permit financing requirements by the private sector, major intervention in some fashion by the State, and/or new sources of capital made available to rural residents, then even if significantly fewer permits are put up for sale by rural residents in the future, other rural residents will not be able to purchase even those few permits. Financial conditions in rural Alaska make it unlikely that they will be able to reverse the outflow of permits that has occurred to date thus the only strategy available becomes stabilization of what remains by emphasizing intrafamilial and intracommunity transfers, presumably at some rate considerably below the prevailing market price.

The preceding discussion is based on an economic model which assumes that decision people make about entry and exit from a fishery are based purely on the relative profitability, in monetary terms, of each course of action. The entire logic of limited entry, however, is based on the premise that this model of economic decision-making fails when used on common property resources. Is there any evidence that it is more suited to entry and exit from limited

68

sed above, if in general income levels of a given group are lower than the entire population, members of the group will tend to sell their permits at below market value. This pattern will be accentuated if their demand schedules are similar to the general populations so that there is a situation of relative deprivation felt by one group. In this case future potential earnings are discounted at a high rate in order to obtain short run gains of high utility.

In sum, systematic disadvantage on a number of "external" conditions, relatively low earnings in several fisheries, and perhaps most importantly little access to capital for purchasing permits likely account in large part for the decline in rural Alaskan permit holdings. The second part of the question is will this pattern continue.

Prognosticating about fisheries related matters, be you biologist, market analyst, or social scientist is considerably less than precise. Nevertheless an attempt will be made to assess what the likely factors affecting transfers and the effects of transfers on distribution of permits by residency category will be. There are two sides of the transfer issue to be addressed: selling and buying. In theoretical terms, the selling of permits by rural residents will be primarily a function of the demand for those permits and the relative standing of rural fishermen's earnings from a fishery vis a vis other participants in that fishery. If most of the marginal fishermen substantially below average in net earnings have already transferred their permits, then a stabilization in holdings should occur. If however, there are still significant numbers of permit holders below average in net earnings, then the outflow will likely continue due to factors on the buying side as well. Other factors that would contribute to rural residents loss of permits are a high percentage of elderly permit holders and substantial differential in earnings between rural residents and the remainder of the population in the same region.

fisheries? The population of commercial fishermen and the possibilities of different fisheries are not equivalent in their adherence to pure economic decision-making or their inherent capacity for profitability respectively. For example, review of the Rogers and Kreinheder data on average net earnings and returns to operator (if the data are correct) in the Yakutat set gillnet, Southeast hand troll, Cook Inlet set gillnet, Kodiak set gillnet, and Bristol Bay set gillnet fisheries would lead to the conclusion that very few should be participating in these fisheries if profitability was the sole criteria for deciding whether to fish or not. Obviously people continue to participate, and as Tables 2, 10, and 19 reveal, other persons are willing to pay ever increasing amounts to lose money at an astonishingly high rate and with predictable certainty. Clearly some commercial fishermen are obtaining alternate utilities from participating in commercial fishing other than economic return alone.

Another fishery for which the utility of ends other than economic return appears high is the power troll fishery. In a recent appraisal of goals of salmon fishing among Oregon fishermen, C.L. Smith notes that pleasure, identity, and general personal well-being are goals which a substantial number of Oregon commercial trollers hold in addition to the economic one. Many of Alaska's limited salmon fisheries also would seem to be characterized by these additional, nonmonetary values which could be expanded to include life-style, recreation, and food preferences (desire to salmon as a food staple). Persons who place a significant value on these additional utilities and who have access to the capital to purchase permits are the ones who enter these fisheries, and those who do not value these additional utilities will exit the fisheries. The set gillnet fisheries seem to follow this pattern, and there are implication for transfer patterns in the AYK fisheries which follow from these considerations as well.

To a great extent, demand for AYK permits by urban, nonlocal and nonresident persons has been limited due to the distance from these areas to the AYK fisheries,

74 .

lack of profitability, and lack of knowledge about those fisheries. As a result, little attrition in permit holdings by rural residents has occurred to date. To the extent that these conditions change in terms of easier access, higher profitability, and greater dissemination of information about these fisheries, then the probability of outflow of permits will increase. Location of increasing numbers of State and federal salaried employees in the AYK region with the additional utilities addressed earlier could make a significant dent in local holdings of permits in this region in the near future.

The final question raised earlier about the loss of permits by rural Alaskans was does it represent a serious problem? If it were the case that the rural population had declined in the recent past, if it were the case that an expanding rural population was migrating to urban centers (Anchorage, Fairbanks, Juneau, etc.) at a higher rate than the rate of natural increase, if it were the case that employment opportunities in the local regions and on a statewide basis were expanding more rapidly for rural residents than their rate of loss of permits, then one might be able to argue that the decline merely represents natural attrition due to a greater integration of the rural population into the Alaskan economy. Since most of these ameliorating conditions do not appear to be taking place, the outflow of permits that has occurred and that potentially can occur must be regarded as significant threat to the rural Alaskan economic base and the well-being of rural Alaskans.

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PRELIMINARY REPORT ON
TRANSFER PATTERNS OF ALASKAN
LIMITED ENTRY FISHERIES
PERMIT HOLDERS

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ALASKA STATE LEGISLATURE

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