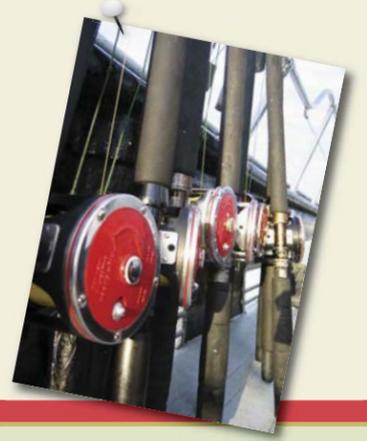


Demographics of Recreational Fishing in Alaska

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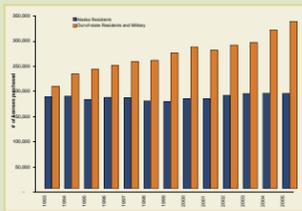


Recreational fishing engenders significant participation, generates considerable revenue, may have substantive ecosystem impacts, and adds further complexity to allocation decisions. Here, a demographic profile of recreational fishing in Alaska is presented, based on data from the Alaska Department of Fish and Game's license sales database from 1993-2005 and a NOAA Fisheries survey of licensed marine anglers in Alaska in 2002. The typical angler from Alaska differed notably from the out-of-state angler when basic characteristics such as age, gender, income, race/ethnicity, education, income, and number of days fished were evaluated. Additionally, expansion in the recreational fishery over the last decade, as indicated by increase in license sales, was driven almost entirely by out-of-state participants. These demographic differences and growth trends help shape a fuller understanding of the fishery that is the basis for informed management decisions. Observations presented here also fuel questions about linkages between angler characteristics and fishing behavior, causes for growth in the recreational fishery, and underlying critical social links between West Coast and North Pacific ecosystems

License Sales

Nearly 450,000 licenses to sport fish in Alaska were purchased each year on average from 1993-2005, which generated over \$9 million gross revenue¹ annually. Purchase of sport fishing licenses by Alaskan residents varied little (0.3% average annual growth rate) over that period, in contrast to a steady increase of license purchases by non-residents and military sport fishers (4.2% average annual growth rate). From 1993-2005, 59% of licenses were purchased by out-of-state and military anglers. As license fees are higher for out-of-state and military anglers, their license sales accounted for 64% of adjusted gross revenues¹.

¹ adjusted to 2005\$ using Gross Domestic Product Implicit Price Deflator



Data Source: State of Alaska Department of Fish and Game, Division of Administrative Services, License Accounting. Duplicate licenses excluded, combination fishing/hunting/trapping licenses included.

Growth in license sales since 1993 was driven almost entirely by out-of-state and military anglers.

Residency

2002 sportfishing licenses were purchased by Alaska residents from 254 Alaskan communities, but over 40% of all sales to state residents were to Anchorage area residents. The two most populous states in the U.S. – California and Texas – were the source of 1/5 of out-of-state license holders, with Washington, and Oregon completing the top five states. However, when ranked as per capita license purchases by state, Montana, Idaho, and Wyoming join Alaska and Washington in the top five states. Licenses were sold to resident of all 50 states in 2002.

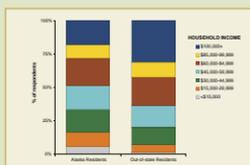
2002 Rank	Total Number of Licenses Purchased	Per Capita Licenses Purchased
1	Alaska	Alaska
2	California	Montana
3	Washington	Washington
4	Texas	Idaho
5	Oregon	Wyoming

Data Source: State of Alaska Department of Fish and Game, Division of Administrative Services, License Accounting; 2000 U.S. Census.

The majority of saltwater anglers in Alaska come from western states.

Income

Respondents from Alaska and out-of-state residents had similar distributions of household income. The principal difference was that a larger proportion of out-of-state residents earned an annual income greater than \$100,000, compared to Alaska residents (χ^2 ; $p < 0.01$). This discrepancy may be even greater, as the number of residents per household was slightly higher for respondents from Alaska, making the per capita income lower.

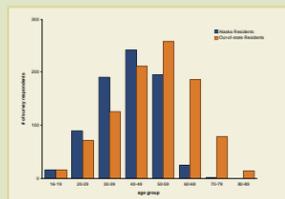


Data Source: Alaska Marine Sportfishing Economic Survey, 2003

Out-of-state respondents had higher household incomes than respondents from Alaska.

Age

The median age of survey respondents from the sample of 2002 license holders was 47 (range: 15-89). Alaska residents median age was 43 (range: 15-76) and out-of-state licensees was 51 (range: 17-89). Although Alaska residents' median age was younger, Alaskan residents over 60 are permitted to purchase a license only once, rather than annually. Therefore there are likely more age 60+ Alaskan fishers than represented in the pool of license purchasers.

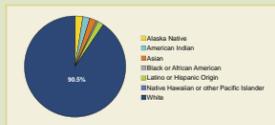


Data Source: Alaska Marine Sportfishing Economic Survey, 2003

Out-of-state participants appear to be older, but this may be a remnant of different license requirements for the two groups.

Race and Ethnicity

Over 90 percent of survey respondents identified their racial and ethnic make-up as white. There are low percentages of Alaska Native, American Indian, Asian, Black or African American, Latino or Hispanic origin, Native Hawaiian or Other Pacific Islander participants. As separated by state residence, respondents from Alaska were significantly more diverse than out-of-state respondents (χ^2 ; $p < 0.01$). Anglers from Alaska were a more diverse group, with proportionally more respondents from all race and ethnicity categories, aside from Native Hawaiian or other Pacific Islander; the largest difference was the presence of more Alaskan Natives.

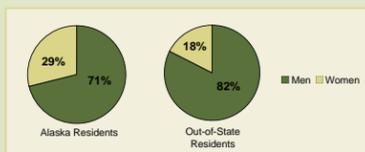


Data Source: Alaska Marine Sportfishing Economic Survey, 2003; 2000 U.S. Census.

The vast majority of respondents identified themselves as white.

Gender

Of survey respondents, disproportionately more men than women participated in recreational fisheries in Alaska (77% male, 23% female). Of Alaska resident anglers, that distribution was significantly less skewed than for out-of-state residents (χ^2 ; $p < 0.01$), although the majority of licensees were still male.

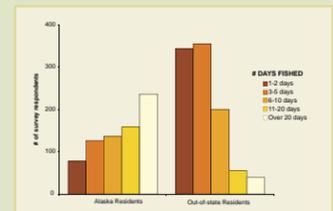


Data Source: Alaska Marine Sportfishing Economic Survey, 2003

The majority of 2002 survey respondents were men; proportionally more women anglers came from Alaska than from out-of-state.

Number of Days Fished

The amount of fishing activity (days) for resident versus out-of-state respondents was markedly different – those from out of state fished 5.18 days on average in 2002, whereas Alaska residents fished much more (12.0 days). Assuming the survey respondents ($n=1,781$, an 0.41% random sample of all 2002 licensees) are representative of all licensees in Alaska, then sport fishermen fished a conservatively estimated total of 3.4 million days in 2002, 63% of which were fished by Alaska residents. This is particularly notable since, in 2002, only 39% of license sales were to Alaska residents. If catch per unit effort is similar for Alaskans and non-resident fishermen, then Alaskans are also catching more of the fish.

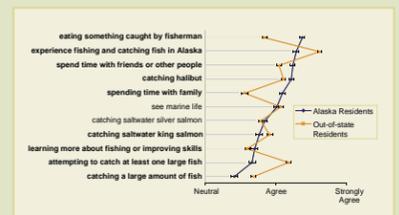


Data Source: Alaska Marine Sportfishing Economic Survey, 2003

Although there are fewer Alaska residents licensed to fish, survey respondents from Alaska fished far more than out-of-state anglers.

Why are Anglers Fishing?

Respondents were asked to rate eleven reasons for fishing from strongly agree to strongly disagree – the mean score (and standard errors) are shown below. Generally, preferences were similar, however Alaska residents more highly valued eating something caught by a fisherman, and spending time with family, friends or other people as main reasons for fishing, whereas out-of-state residents ranked reasons such as experiencing fishing and catching fish in Alaska, and attempting to catch at least one large fish higher.



Data Source: Alaska Marine Sportfishing Economic Survey, 2003. Bold indicates significant difference between means (t-test, $p < 0.05$).

Respondents from Alaska and from out-of-state rated reasons for fishing similarly, with some distinct differences.

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