

Shageluk (SHAG-uh-look)



People and Place

*Location*¹

Shageluk is located on the east bank of the Innoko River, approximately 20 miles east of Anvik and 34 miles northeast of Holy Cross. The Innoko is a tributary of the Yukon River. Shageluk is located in the Mt. McKinley Recording District, the Yukon-Koyukuk Census Area, and is not located within an organized borough. The city boundaries encompass 10.6 square miles of land and 1.4 square miles of water.

*Demographic Profile*²

In 2010, there were 83 residents in Shageluk, making it the 265th largest of 352 total Alaskan communities with recorded populations that year. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents fell by 24.81%. The average annual growth rate during this period was -2.42%, indicating a steady population decline. The change in population from 1990 to 2010 is provided in Table 1.

In 2010, almost all of Shageluk residents identified themselves as American Indian or Alaska Native (90.4%), with small percentages of the population identifying themselves as White (3.6%) and two or more races (6%). Between 2000 and 2010, the percentage of the population identifying themselves as American Indian or Alaska Native decreased by 6.5%, with corresponding increases in the percentages of the population identifying themselves as White and as two or more races. Changes in racial and ethnic composition between 2000 and 2010 are shown in Figure 1.

In 2010, the average household size in Shageluk was 2.31, a decrease from 3.3 persons per household in 1990 and 3.58 in 2000. The total number of households in Shageluk decreased from 42 in 1990 to 36 in both 2000 and 2010. Of the 53 total housing units surveyed for the 2010 Decennial Census, 20 were owner-occupied, 16 were renter-occupied, and 17 units were vacant. Throughout this period no residents of Shageluk were reported to be living in group quarters.

In 2010, the gender makeup of Shageluk was fairly even, at 50.6% male and 49.4% female, less skewed than the state as a whole (52% male, 48% female). However, the population is skewed towards males in the 0 to 9, 10 to 19 and 50 to 59 age groups. The median age was estimated to be 37.8 years, higher than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010 the largest percentage of residents fell within the age group 40 to 59 years old, with the next largest percentage of residents in the age group 0 to 19 years old. The overall population structure of Shageluk in 2000 and 2010 is shown in Figure 2.

¹ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

² U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census and the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

Table 1. Population in Shageluk from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	139	-
2000	129	-
2001	-	144
2002	-	141
2003	-	141
2004	-	131
2005	-	129
2006	-	124
2007	-	118
2008	-	102
2009	-	97
2010	83	-

¹ (1) U.S. Census Bureau (1990). *CP-1: General Population Characteristics of all places within Alaska*. Retrieved November 1, 2011 from <http://www.census.gov/prod/www/abs/decennial/1990.html>. (2) U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census and the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

² Alaska Department of Labor. (2011). *Current population estimates for Alaskan Communities*. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

Figure 1. Racial and Ethnic Composition, Shageluk: 2000-2010 (U.S. Census).

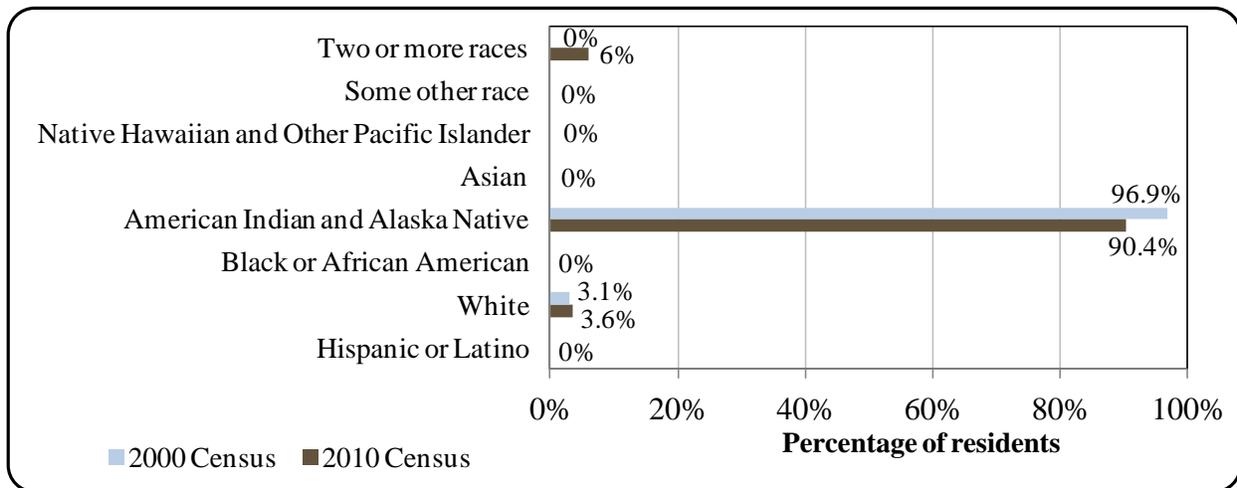
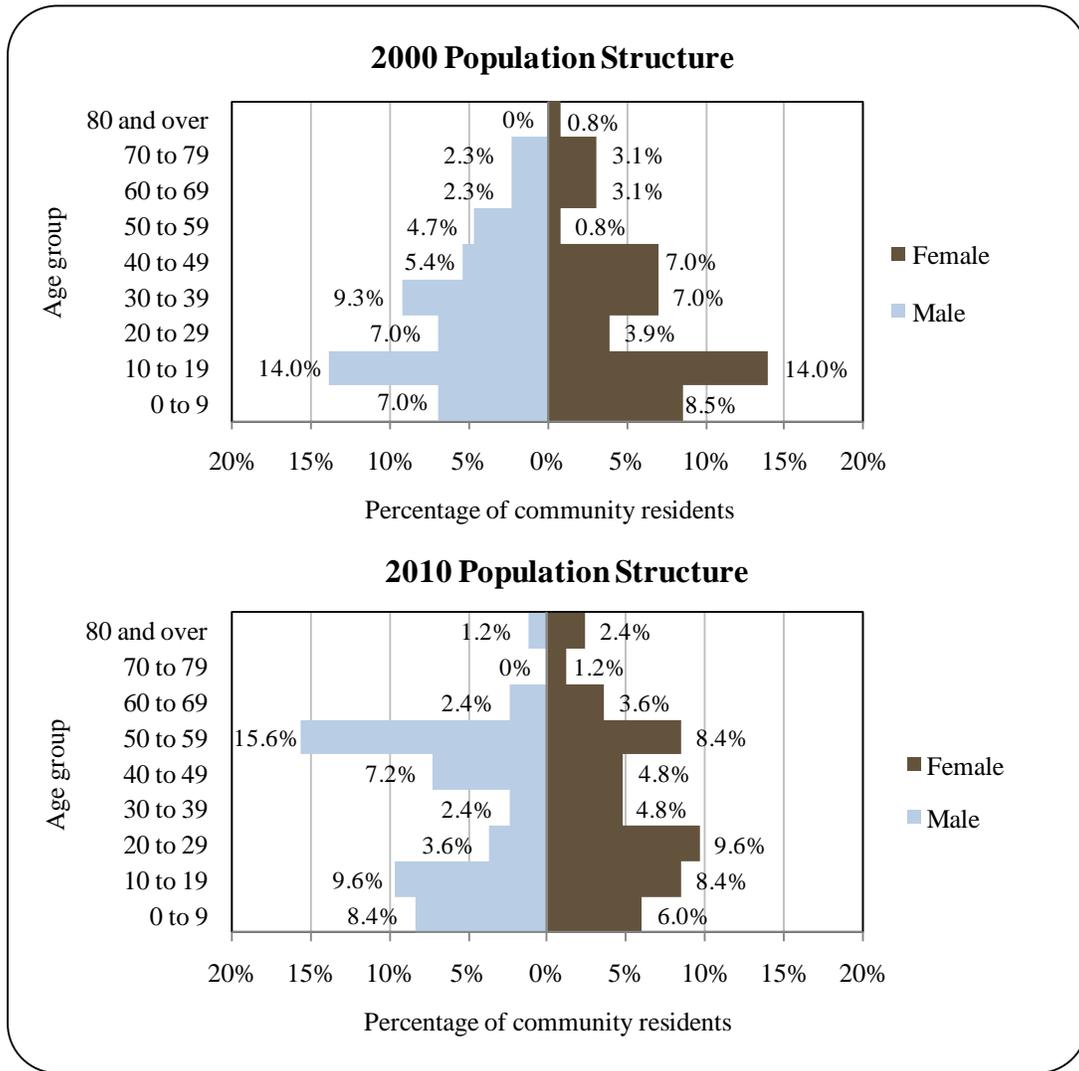


Figure 2. Population Age Structure in Shageluk Based on the 2000 and 2010 U.S. Decennial Census.



In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),³ 73.1% of Shageluk residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaskan residents overall. Also in 2010, 11.5% of residents aged 25 and older were estimated to have less than a ninth grade education, compared to 3.5% of Alaskan residents overall; 15.4% were estimated to have a ninth to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 55.8% were estimated to hold a high school diploma or equivalent, compared to 27.4% of Alaskan residents overall; 11.5% were estimated to have some college but no degree, compared to 28.3%

³ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

of Alaskan residents overall; and 5.8% were estimated to have a Bachelor's degree, compared to 17.4% of Alaskan residents overall. There were no residents of Shageluk estimated to hold an Associate's degree or a graduate or professional degree in 2010.

History, Traditional Knowledge, and Culture

Shageluk is a Deg Hit'an Athabascan village, within the Ingalik language group.⁴ Early ethnographic studies of Ingalik speakers identified several subdivisions, including a group of people known as the Anvik-Shageluk group, centered around the village of Anvik on the Yukon and settlements along the Innoko River including Shageluk. The culture of the Lower Yukon Deg Hit'an people was heavily influenced by the neighboring Kwikpagmiut Eskimos, whose territory began just downriver from Holy Cross. The mouth of the Innoko River is thought to have been one of the primary locations of trade exchanges between the Yukon Eskimos and the Deg Hit'an.⁵ With regard to material culture, the Deg Hit'an Athabascan people's reliance of salmon fishing more closely resembled Eskimo tradition than that of Athabascan people living further inland.⁶

The Russian explorer Andrey Glazunov provided the first population estimate of the Anvik-Shageluk area following his 1833-34 explorations in region, when approximately 1,000 people resided in villages he visited or was told about. A later explorer, Lt. Alekseevich Zagoskin of the Russian Navy, counted 699 people in the Anvik-Shageluk area, and reported that the population had been reduced following smallpox epidemics in 1838 and 1839.⁷ In 1850, Lt. Zagoskin recorded the name of the village at Shageluk as "Tie'goschitno," while the group of villages on the Innoko River were collectively referred to as the "Chageluk settlements" by the Russian Navy in 1861.⁸

Of the various settlements along the Innoko River, Shageluk became one of the permanent communities in the area. The U.S. government established a post office in the community 1924. In 1966, the community was forced to relocate to a less flood-prone location two miles southeast of the original village site. Following the Indian Reorganization Act, the Bureau of Indian Affairs (BIA) constructed 20 homes and a school at the new site, and the City of Shageluk was incorporated in 1970. Today, Shageluk remains a Deg Hit'an Athabascan community. Subsistence harvest of wild resources is of primary importance in the local culture and economy. The sale of alcohol is banned in the village.⁹

⁴ Alaska Native Knowledge Network. (2006). *Appendix A: Brief Description of Alaskan Athabascan Culture*. Retrieved March 22, 2013 from http://www.ankn.uaf.edu/curriculum/athabascan/athabascans/appendix_a.html.

⁵ VanStone, James. 1979. "Ingalik Contact Ecology: An Ethnohistory of the Lower-Middle Yukon, 1790-1935." *Fieldiana. Anthropology*. 71, pp. i, iii, v-vii, ix-xii, 1-273. (Retrieved October 3, 2012 from <http://www.jstor.org>.)

⁶ VanStone, James. 1976. "The Yukon River Ingalik: Subsistence and the Fur Trade, and a Changing Resource Base." *Ethnohistory*. 23(3), pp. 199-212.

⁷ See footnote 5.

⁸ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

⁹ Ibid.

Natural Resources and Environment

Shageluk has a cold, continental climate. Summer temperatures average from 42 to 80 °F (5.6 to 26.7 °C), and winters can range from -62 to 0 °F (-52.2 to -17.8 °C). Annual precipitation averages 67 inches, with average snowfall of 110 inches. The Innoko River is generally ice-free from June through October.¹⁰ Lowlands along the Yukon and Innoko river are made up of vast marshy flatland, with some forest cover of balsam poplar, willow, and alder within active floodplains. Well drained, south-facing upland slopes host forests of white spruce, paper birch, and quaking aspen, while permafrost, stunted black spruce, and tundra is typical of the poorly drained cold soils of north-facing slopes.¹¹

Shageluk is located several miles south of the southern boundary of the Innoko National Wildlife Refuge (NWR). One of the primary motivations for creation of the NWR was its importance as a waterfowl area in interior Alaska, noted for its wetlands that provide nesting, resting and staging areas. In addition, the NWR offers excellent raptor and moose habitat. The Innoko Refuge is made up of two units, totaling 4.6 million acres. The area was also established to fulfill treaty obligations and provide the opportunity for continued subsistence uses. NWR lands are open to sport and subsistence hunting and fishing, as well as trapping.¹²

Local terrestrial wildlife includes moose, bear, wolves, lynx, wolverine, river otter, beaver, porcupine, caribou, snowshoe hare, red fox, red squirrel, marten, muskrat, weasel, mink, shrews, voles, and mice.¹³ Anadromous fish species found in the Shageluk area include all five salmon species, Arctic lamprey, smelt, Arctic cisco, and additional freshwater species include northern pike, blackfish, stickleback, burbot and five species of whitefish.¹⁴ Edible and useful plants include cranberries, blueberries, salmon or cloud berries, rose hips, Indian potatoes, wild celery, wild onion, wild rhubarb, and sour dock.¹⁵

The Yukon-Kuskokwim delta is rich in mineral deposits. Gold was discovered in the Klondike area of the upper Yukon River in 1896, and prospectors began searching closer to Grayling – along the Innoko River – in 1898. Commercial quantities of gold were discovered in the Innoko Valley in 1906.¹⁶ As of 2010, the Iditarod and Innoko mining districts have produced more than 2.3 million ounces of gold.¹⁷ Currently, a large-scale gold operation is being developed by Donlin Gold north of Crooked Creek, to the southeast of Grayling. The mine is projected to operate for 25 years, with over 33 million ounces of gold speculated to be in the area.¹⁸ Additional mineral deposits in the region include Wolf Creek Mountain

¹⁰ Ibid.

¹¹ Interior Rivers Resource Conservation and Development Council. (1997). *Area Plan*. Retrieved October 24, 2012 from <http://www.commerce.state.ak.us/oed/>.

¹² U.S. Fish and Wildlife Service. (2010). *Innoko National Wildlife Refuge*. Retrieved October 4, 2011 from <http://innoko.fws.gov/>.

¹³ Ibid.

¹⁴ See footnote 11.

¹⁵ City of Anvik. (2004). *Anvik Comprehensive Community Plan*. Retrieved December 23, 2011 from: <http://www.commerce.state.ak.us/dca/plans/Anvik-CP-2004.pdf>.

¹⁶ VanStone, James. (1979). "Ingalik Contact Ecology: An Ethnohistory of the Lower-Middle Yukon, 1790-1935." *Fieldiana. Anthropology*. 71, pp. i, iii, v-vii, ix-xii, 1-273. (Retrieved October 3, 2012 from <http://www.jstor.org>.)

¹⁷ Szumigala, D.J., L.A. Harbo, and J.N. Adleman. (2010). *Alaska's Mineral Industry 2010*. Alaska Dept. of Natural Resources and Alaska Dept. of Commerce, Community and Economic Development, Special Report 65.

¹⁸ Donlin Gold. (n.d.) *Homepage*. Retrieved December 27, 2011 from: <http://www.donlingold.com/>

mercury/antimony deposit and Stuyahok and Arnold Kako gold deposits to the southwest, and McLeod copper/molybdenum deposits to the northeast.¹⁹

Natural hazard risks in the Yukon-Koyukuk Census Area include flooding, wildfire, earthquakes, snow and avalanche, severe weather, landslides and erosion. Shallow earthquakes in the region would be considered ‘intraplate’ earthquakes, which can have a magnitude of up to 7.0 on the Richter scale.²⁰

According to the Alaska Department of Environmental Conservation, there were no notable active environmental cleanup sites located in the Shageluk area as of March 2013.²¹

Current Economy²²

Wage employment in Shageluk is generally limited to the City and the school. In addition, summer construction projects often provide seasonal employment. Residents rely upon subsistence activities, as well as trapping and gardening. Salmon, moose, bear, small game, and waterfowl are important food sources. In 2010, one resident held a commercial fishing permit. There is also a village store.²³

According to the 2006-2010 ACS,²⁴ the per capita income in Shageluk in 2010 was estimated to be \$10,703 and the median household income was estimated to be \$28,281, compared to \$7,587 and \$26,667 in 2000, respectively. Taking inflation into account by converting the 2000 values to 2010 dollars,²⁵ the real per capita income in 2000 was \$9,977 and the real median 2000 household income was \$35,067. This shows that per capita income increased between 2000 and 2010, while household income decreased. However, Shageluk’s small population size may have prevented the ACS from accurately portraying economic conditions.²⁶ A potentially more accurate understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Decennial Census, the resulting per capita income estimate for Shageluk in 2010 is

¹⁹ Alaska Dept. of Comm. (n.d.). *Mineral Resources of Alaska*. Retrieved December 21, 2011 from: <http://commerce.alaska.gov/ded/dev/minerals/mining.htm>

²⁰ State of Alaska. (2002). *Hazard Mitigation Plan*. Retrieved February 8, 2012 from <http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf>.

²¹ Alaska Dept. of Environmental Conservation (n.d.). *List of Contaminated Sites by Region*. Retrieved March 5, 2013 from <http://dec.alaska.gov/spar/csp/list.htm>.

²² Unless otherwise noted, all monetary data are reported in nominal values.

²³ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

²⁴ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

²⁵ Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved October 18, 2011 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

²⁶ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

\$8,665.^{27,28} This alternative 2010 per capita estimate is lower than the 2000 Census per capita income estimate, suggesting that caution is warranted when citing an increase in per capita income in Shageluk between 2000 and 2010.

Both the U.S. Census and alternative ALARI per capita estimates are relatively low, reflected in the fact that the community was recognized as “distressed” by the Denali Commission. This designation indicates that over 70% of residents aged 16 and older earned less than \$16,120 in 2010.²⁹ However, it should be noted that ACS and DOLWD data are based on wage earnings and do not take into account the value of subsistence within the local economy.

In 2010, Shageluk ranked 262nd out of 305 Alaskan communities with per capita income that year, and 254th out of 299 Alaskan communities with household income data. In that same year, 64.6% of the population age 16 and older was estimated to be in the civilian labor force, compared to the statewide rate of 68.8%. The local unemployment rate was 16.7%, compared to the statewide unemployment rate of 5.9%. Approximately 22.1% of local residents were living below the poverty line in 2010, compared to 9.6% of Alaskans overall. It should be noted that income and poverty statistics are based on wage income and other money sources; the relatively low income figures and high poverty rates reported for Shageluk are not reflective of the value of subsistence to the local economy. In addition, these unemployment and poverty statistics are likely inaccurate given the small population of Shageluk. A more accurate estimate is based on the ALARI database, which indicates that the unemployment rate in 2010 was 22.9%.³⁰

Based on household surveys conducted for the 2006-2010 ACS, the greatest number of workers was employed in the public sector (77.1%), along with 22.9% in the private sector. Out of 35 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest percentage was estimated to work in educational services, health care, and social assistance (37.1%), along with 25.7% working in transportation, warehousing, and utilities, 22.9% in public administration, and 14.3% in retail trade. Compared to 2000, the percentage of the workforce employed in retail trade and in transportation, warehousing and utilities both increased by more than 50%, while there were declines in the percentage employed in public administration and in educational services, health care, and social assistance industries. Information about employment by industry is presented in Figure 3.

When viewing employment in terms of occupation, in 2010, the greatest percentages of the labor force were employed in management/professional (48.6%) and (28.6%) service occupations. Compared to 2000, shifts included an 82% increase in the percentage of the workforce employed in management/professional occupations, and a 100% decrease in employment in natural resource, construction, and maintenance occupations. Employment information is broken down by occupation in Figure 4.

No individuals characterized themselves as working in fishing-related occupations or industries in Shageluk in either 2000 or 2010. However, it is important to note that employment in the fishing industry may be underestimated by census statistics as fishermen may hold another job and characterize their employment accordingly.

²⁷ Alaska Department of Labor and Workforce Development (n.d.). *Alaska Local and Regional Information Database*. Retrieved April 23, 2012 from <http://live.laborstats.alaska.gov/alari/>.

²⁸ See footnote 24.

²⁹ Denali Commission. 2011. *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

³⁰ See footnote 27.

Figure 3. Local Employment by Industry in 2000-2010, Shageluk (U.S. Census).

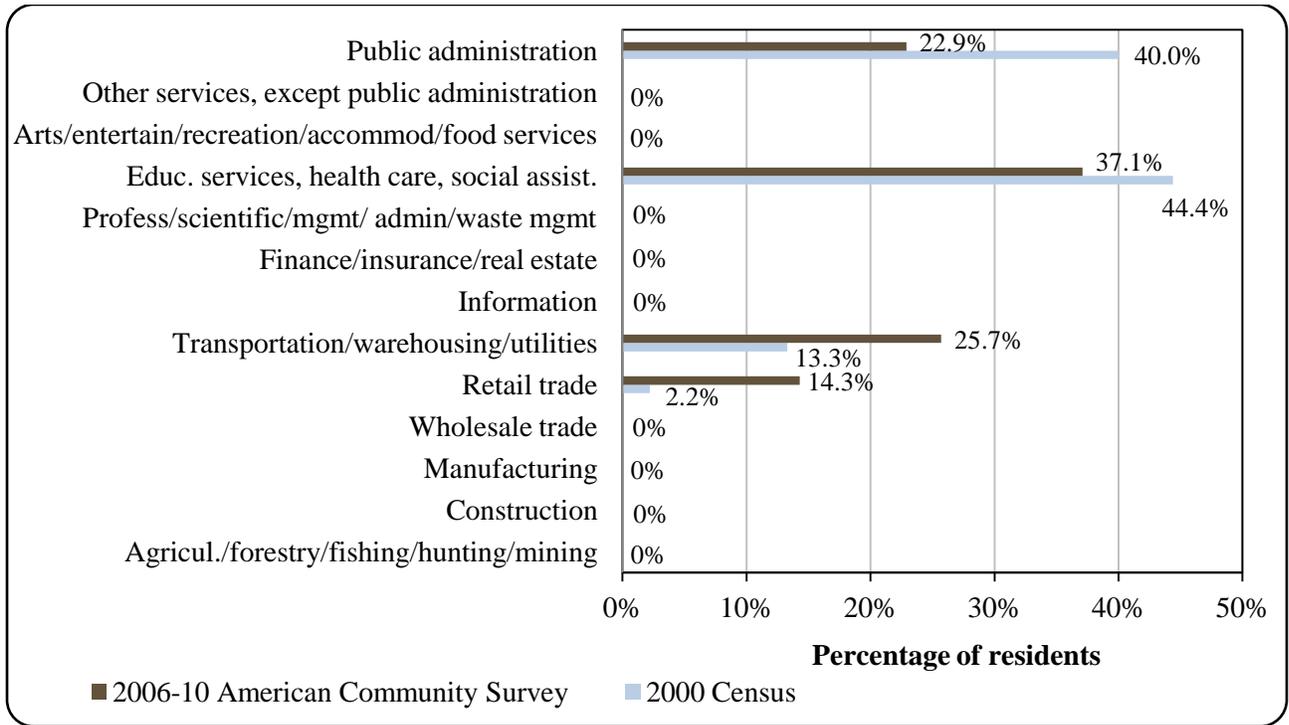
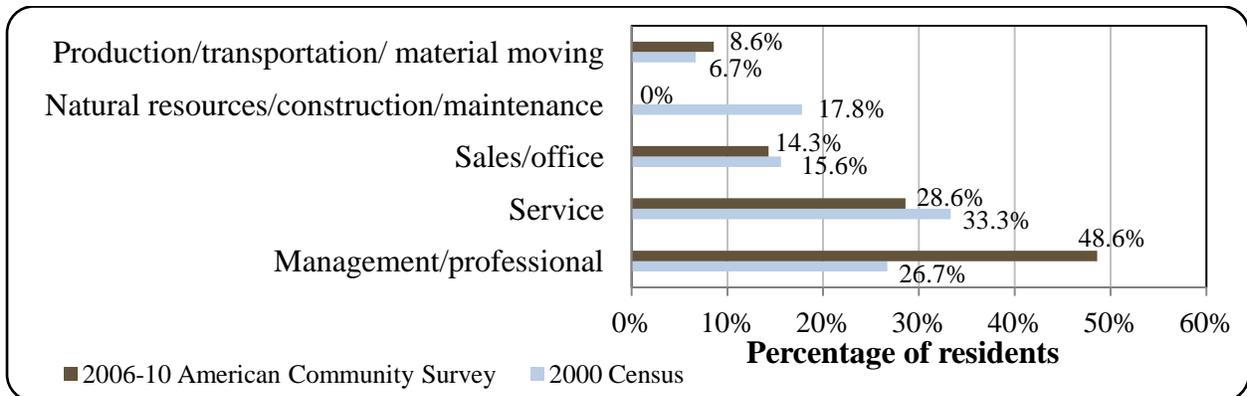


Figure 4. Local Employment by Occupation in 2000-2010, Shageluk (U.S. Census).



Governance³¹

Shageluk is a 2nd Class City that is not located within an organized borough. Annual municipal revenue received by the City of Shageluk varied between \$100,000 and just over \$300,000 per year during the 2000-2010 period. No sales tax was collected in any year during the decade. Locally-generated income sources in Shageluk between 2000 and 2010 included contracted services, enterprise revenues, building and equipment rentals, and a land lease to Bush

³¹ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

Tell, Inc., a telephone company. Contracts included operation of the electric utility, health clinic, and U.S. post office. Enterprise revenues were received from washeteria/sauna, garbage collection, and internet café use fees. Outside revenue sources included revenue sharing and grants. Sources of shared funds from the State of Alaska included the State Revenue Sharing program from 2000 to 2003 (over \$25,000 per year), the Community Revenue Sharing program in 2009 and 2010 (approximately \$100,000 each year), the SAFE Communities program (public safety, utilities, infrastructure, etc.), and telephone / electric co-op refunds. Some federal revenue sharing was also received from the Payment In Lieu of Taxes program. State of Alaska capital project grants were received in some years for projects such as landfill fencing, bridge repair, design of water and sewer improvements, heavy equipment purchase and repair, and a recreation center. A State Municipal Energy Assistance Program grant was also received. No fisheries-related grants were reported during the 2000-2010 period. Information on selected municipal, state, or federal revenue streams for Shageluk from 2000 to 2010 is shown in Table 2.

Shageluk was included under the Alaska Native Claims Settlement Act (ANCSA), and is federally recognized as a Native Village. The authorized traditional entity, recognized by the BIA, is the Shageluk Native Village. The Native village corporation is the Zho-Tse, Incorporated, which manages 92,160 acres of land. The regional Native corporation to which Shageluk belongs is the Doyon, Limited.³²

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Shageluk from 2000 to 2010.

Year	Total Municipal Revenue ¹	Sales Tax Revenue ²	State/Community Revenue Sharing ^{3,4}	Fisheries-Related Grants (State and Federal) ⁵
2000	\$266,840	n/a	\$27,661	n/a
2001	\$128,538	n/a	\$26,393	n/a
2002	\$233,501	n/a	\$26,502	n/a
2003	\$245,099	n/a	\$26,503	n/a
2004	\$146,653	n/a	n/a	n/a
2005	\$108,897	n/a	n/a	n/a
2006	\$183,334	n/a	n/a	n/a
2007	\$198,134	n/a	n/a	n/a
2008	\$253,879	n/a	n/a	n/a
2009	\$259,782	n/a	\$102,081	n/a
2010	\$322,288	n/a	\$101,203	n/a

¹ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Financial Documents Delivery System*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

² Alaska Dept. of Comm. and Econ. Dev. (n.d.). *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

³ Alaska Dept. of Rev. (n.d.). *(2000-2009) Taxes and Fees Annual Report*. Retrieved April 15, 2011 from <https://www.tax.state.ak.us>.

⁴ The State Revenue Sharing program ceased in 2003 and was replaced by the Community Revenue Sharing program starting in 2009.

⁵ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Funding Database*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm.

³² Ibid.

Shageluk is also a member village of the Tanana Chiefs Conference, a tribal 501(c)(3) non-profit organization headquartered in Fairbanks. It is a consortium of 42 villages of Interior Alaska that works to meet “the health and social service challenges for more than 10,000 Alaska Natives spread across a region of 235,000 square miles in Interior Alaska.” The non-profit provides health and tribal development services, as well as educational and employment services to individuals of member tribes.³³ The Tanana Chiefs Conference is one of the 12 regional Alaska Native nonprofit organizations that were identified under ANCSA and charged with naming incorporators to create regional for-profit corporations. Today, these regional Native Associations receive federal funding to administer a broad range of services to villages in their regions.³⁴

The nearest offices of the Alaska Department of Fish and Game (ADF&G) and the Department of Commerce, Community, and Economic Development are located in Bethel. The nearest office of the Alaska Department of Natural Resources is located in McGrath, and the nearest offices of the National Marine Fisheries Service (NMFS), Bureau of Citizenship and Immigration Services, and U.S. Immigration and Customs Enforcement are located in Anchorage.

Infrastructure

Connectivity and Transportation

Access to Shageluk is by air or water only. A state-owned 3,400 ft long by 75 ft wide gravel airstrip and a seaplane base are available. Locals use all-terrain vehicles, snowmobiles, and dog sleds for local transportation. Every other year, Shageluk is a checkpoint for the Iditarod dogsled race.³⁵ In June of 2012, round-trip airfare to Anchorage was \$646.³⁶

*Facilities*³⁷

Residents haul treated well-water and dispose of honeybuckets³⁸ in pit privies or bunkers. Residents are dependent upon the washeteria³⁹ for bathing, laundry, and water, since no homes are fully plumbed. The City provides water to the school and the washeteria. Law enforcement services are provided by state troopers in Aniak, and fire and rescue services are provided by a city volunteer fire department. Shageluk has a youth center and a community hall, as well as a school/community library.

³³ Tanana Chiefs Conference website.2007. *History*. Retrieved January 9, 2012 from <http://www.tananachiefs.org/>.

³⁴ U.S. Government Accountability Office. 2005. *Alaska Native Villages: Report to Congressional Addressees and the Alaska Federation of Natives*. Retrieved February 7, 2012 from <http://www.gao.gov/new.items/d05719.pdf>.

³⁵ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

³⁶ Airfare was obtained on the travel website <http://www.travelocity.com> for a round-trip ticket for travel from June 1 to June 8, 2012. Retrieved on December 1, 2011.

³⁷ See footnote 35.

³⁸ A “honeybucket” is an indoor bucket used as a toilet in houses without plumbing.

³⁹ “Washeteria” is another word for laundromat. In Alaska, washeterias often include shower facilities.

*Medical Services*⁴⁰

Medical services are provided by the Shageluk Clinic, which is owned by the City and operated by the Yukon Kuskokwim Health Corporation. The clinic is a Community Health Aid Program site. Emergency services have river, floatplane, and air access and are provided by a health aide. The nearest clinic with a qualified Emergency Care Center is located in Unalakleet.

*Educational Opportunities*⁴¹

The Innoko River School provides instruction to students from pre-school through 12th grade. In 2011, the school had 20 students and 2 teachers.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Subsistence salmon fishing has long provided a basis for life in Deg Hit'an communities of the Lower Yukon River. Chinook salmon were the most important food fish, while chum and coho salmon were processed into dried fish, and chum salmon was an important food for sled dogs. The Deg Hit'an primarily used large basket traps for salmon harvest. They also used dipnets, which they would hold in the water as they drifted down river with the current in canoes. Villagers from Koserefsky and Anilukhtakpuk (formerly located near Holy Cross) most often had fish camps on the eastern bank of the Yukon River.⁴²

The first recorded commercial harvest of salmon on the Yukon River took place in 1918, and early harvests were relatively large. Concerns about providing sufficient salmon resources for subsistence harvest led to limitations on commercial salmon fishing during several periods, including a complete commercial fishing closure on the Yukon River between 1925 and 1931. In the 1980s, concerns about possible overharvest of Chinook runs led to reduced commercial fisheries in the late 1980s and 1990s.⁴³

Poor returns of Chinook salmon in the late 1990s and early 2000s resulted in restrictive management of the commercial fishery and complete closure in 2001 to ensure subsistence resources.⁴⁴ Yukon River Chinook runs showed signs of improvement for several years following the 2001 commercial closure, but restricted commercial harvest in 2008 and complete closure of Chinook harvest in 2009 led to declaration of a fishery disaster that year.⁴⁵ A fishery disaster was again declared for the 2012 season, when the commercial Chinook salmon fishery was closed and subsistence fishery was significantly restricted. ADF&G, the Alaska Board of

⁴⁰ See footnote 35.

⁴¹ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

⁴² VanStone, James. 1979. "Ingalik Contact Ecology: An Ethnohistory of the Lower-Middle Yukon, 1790-1935." *Fieldiana. Anthropology*. 71, pp. i, iii, v-vii, ix-xii, 1-273. (Retrieved October 3, 2012 from <http://www.jstor.org>.)

⁴³ Clark, McGregor, Mecum, Krasnowski, and Carroll. 2006. "The Commercial Salmon Fishery in Alaska." *Alaska Fisheries Research Bulletin* 12(1):1-146. Alaska Dept. of Fish and Game. Retrieved January 4, 2012 from <http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1.pdf>.

⁴⁴ Ibid.

⁴⁵ Upton, H.F. 2010. *Commercial Fishery Disaster Assistance*. Congressional Research Service Report for Congress. Retrieved October 3, 2012 from <http://www.fas.org/sgp/crs/misc/RL34209.pdf>.

Fisheries, and constituents are working together to develop a conservation plan that restricts Chinook harvest while allowing for greater harvest of more abundant species, including gear and other management restrictions.⁴⁶

Like Yukon Chinook salmon runs, chum salmon runs have seen poor returns since 1998. A relatively strong run in 2007 led to some effort to redevelop the Yukon chum fishery, but this process is challenged by the need to reduce incidental harvest of co-migrating Chinook salmon. Further, beginning in 2008, the fall chum salmon run has not been large enough to provide for commercial opportunity. From 2008 to 2010, management actions have been taken to delay commercial fishing to provide for escapement and subsistence use.⁴⁷

In years when commercial salmon fishing is open, fishing is allowed along the entire 1,200 miles of the main stem of the Yukon River, as well as 225 miles of the Tanana River. There are 7 fishing districts, 10 subdistricts, and 28 statistical areas. Fishing takes place with set and drift gillnets, and fish wheels are also allowed in Upper Yukon districts (Districts 4, 5, and 6). Subsistence fishermen also most often utilize these gear types. Many subsistence fishermen are also commercial fishermen.⁴⁸

In addition to salmon, one permit was held by a Shageluk resident in a ‘freshwater fish’ fishery in some years during the 2000-2010 period. Commercial freshwater fish fisheries may target species such as Arctic char, pike, rainbow trout, Dolly Varden, and sheefish.⁴⁹

Shageluk is located on the Innoko River, which joins the Yukon River within District 3 of the Lower Yukon River salmon fishery. It is also important to note that the ocean area into which the Yukon River flows is encompassed by Federal Statistical and Reporting Area 514, Pacific Halibut Fishery Regulatory Area 4E, and the Bering Sea Sablefish Regulatory Area. Because Shageluk is located more than 50 miles from the coast, the community is not eligible for the Community Development Quota. In addition, Shageluk is not eligible to participate in the Community Quota Entity program.

Processing Plants

According to ADF&G’s 2010 Intent to Operate list, Shageluk does not have a registered processing plant. The nearest processing plant is located in Bethel.

Fisheries-Related Revenue

Shageluk received a very small amount of fisheries related revenue from 2007 to 2010, from the Shared Fisheries Business Tax. In each of those years, the revenue received from fisheries-related sources was minimal compared to the total municipal revenue received by the

⁴⁶ Alaska Dept. of Fish and Game. 2012. *2012 Alaska Chinook Salmon Fishery Disaster – FAQ*. Retrieved October, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=hottopics.federalChinookdisaster>.

⁴⁷ Wolfe, R.J. and C. Scott. (2010). *Continuity and Change in Salmon Harvest Patterns, Yukon River Drainage, Alaska*. Final Report for Study 07-253, U.S. Fish and Wildlife Service.

⁴⁸ See footnote 43.

⁴⁹ Alaska Dept. of Fish and Game. 2006. *Our Wealth Maintained: A Strategy for Conserving Alaska’s Diverse Wildlife and Fish Resources*. Retrieved June 21, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=species.wapview>.

City.⁵⁰ Information on known fisheries-related revenue received by Shageluk is presented in Table 3.

Commercial Fishing

From 2000 to 2010, was one permit holder in Shageluk held one Commercial Fisheries Entry Commission (CFEC) salmon permit in the Lower Yukon gillnet fishery. However, the permit was only reported as actively fished in 2000 and 2003. In 2004 and 2006, there was one permit holder with a CFEC permit for other finfish, and that permit was reported as fished in 2006. Information regarding permits and permit holders by species in Shageluk between 2000 and 2010 is presented in Table 4.

There was one crew license holder in Shageluk in 2010, and prior to that one crew license holder in 2002, 2003, and 2004. However for the other years between 2000 and 2010, there were no crew license holders in Shageluk. Between 2000 and 2010 there were no fish buyers or shore-side processing facilities in Shageluk, nor were there any vessels homeported or landing catch in Shageluk. Between 2000 and 2002 there were between one and two vessels owned primarily by Shageluk residents, however there were no vessels owned primarily by Shageluk residents between 2002 and 2010. Information on characteristics of the commercial fishing sector in Shageluk between 2000 and 2010 is presented in Table 5.

There were no quota share account holders in Shageluk between 2000 and 2010 for federal halibut (Table 6) or sablefish (Table 7) fisheries, and there were no quota share account holders for federal crab fisheries in Shageluk between 2005 and 2010 (Table 8). Given the lack of processing capacity, there were no commercial landings or associated ex-vessel revenue reported in Shageluk between 2000 and 2010 (Table 9) and no commercial landings or associated ex-vessel revenue reported by Shageluk residents between 2000 and 2010 (Table 10).

⁵⁰ A direct comparison between fisheries-related revenue and total municipal revenue cannot reliably be made as not all fisheries-related revenue sources are included in the municipal budget.

Table 3. Known Fisheries-Related Revenue (in U.S. Dollars) Received by the Community of Shageluk: 2000-2010.

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a										
Shared Fisheries Business Tax ¹	n/a	\$43	\$44	\$52	\$54						
Fisheries Resource Landing Tax ¹	n/a										
Fuel transfer tax ²	n/a										
Extraterritorial fish tax ²	n/a										
Bulk fuel transfers ¹	n/a										
Boat hauls ²	n/a										
Harbor usage ²	n/a										
Port/dock usage ²	n/a										
Fishing gear storage on public land ³	n/a										
Marine fuel sales tax ³	n/a										
<i>Total fisheries-related revenue</i> ⁴	<i>n/a</i>	<i>\$43</i>	<i>\$44</i>	<i>\$52</i>	<i>\$54</i>						
<i>Total municipal revenue</i> ⁵	<i>\$266,840</i>	<i>\$128,538</i>	<i>\$233,501</i>	<i>\$245,099</i>	<i>\$146,653</i>	<i>\$108,897</i>	<i>\$183,334</i>	<i>\$198,134</i>	<i>\$253,879</i>	<i>\$259,782</i>	<i>\$322,288</i>

Note: n/a indicates that no data were reported for that year.

¹ Alaska Dept. of Comm. and Econ. Dev. (n.d.) *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

² Alaska Dept. of Comm. and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

³ Reported by community leaders in a survey conducted by the AFSC in 2011.

⁴ Total fisheries related revenue represents a sum of all known revenue sources in the previous rows.

⁵ Total municipal revenue represents the total revenue that the City reports each year in its municipal budget. Alaska Dept. of Comm. and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

Table 4. Permits and Permit Holders by Species, Shageluk: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Crab (LLP) ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Federal Fisheries Permits ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Crab (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Other shellfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Halibut (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Herring (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0

Table 4 Cont. Permits and Permit Holders by Species, Shageluk: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Groundfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	-	-	-	-	-	-	-	-	-	-	-
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Other Finfish (CFEC) ²	Total permits	0	0	0	0	1	0	1	0	0	0	0
	Fished permits	0	0	0	0	0	0	1	0	0	0	0
	% of permits fished	-	-	-	-	-	-	100%	-	-	-	-
	Total permit holders	0	0	0	0	1	0	1	0	0	0	0
Salmon (CFEC) ²	Total permits	1	1	1	1	1	1	1	1	1	1	1
	Fished permits	1	0	0	1	0	0	0	0	0	0	0
	% of permits fished	100%	-	-	100%	-	-	-	-	-	-	-
	Total permit holders	1	1	1	1	1	1	1	1	1	1	1
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Fished permits</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>% of permits fished</i>	<i>100%</i>	<i>-</i>	<i>-</i>	<i>100%</i>	<i>-</i>	<i>-</i>	<i>50%</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
	<i>Permit holders</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>

¹National Marine Fisheries Service. 2011. Data on License Limitation Program, Alaska Federal Processor Permits (FPP), Federal Fisheries Permits (FFP), and Permit holders. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

²Alaska Commercial Fisheries Entry Commission. 2011. Alaska commercial fishing permits, permit holders, and vessel licenses, 2000 – 2010. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 5. Characteristics of the Commercial Fishing Sector in Shageluk: 2000-2010.

Year	Crew Licenses Holders ¹	Count Of All Fish Buyers ²	Count Of Shore-Side Processing Facilities ³	Vessels Primarily Owned By Residents ⁴	Vessels Homeported ⁴	Vessels Landing Catch In Shageluk ²	Total Net Pounds Landed In Shageluk ^{2,5}	Total Ex-Vessel Value Of Landings In Shageluk ^{2,5}
2000	0	0	0	2	0	0	0	\$0
2001	0	0	0	2	0	0	0	\$0
2002	1	0	0	1	0	0	0	\$0
2003	1	0	0	0	0	0	0	\$0
2004	1	0	0	0	0	0	0	\$0
2005	0	0	0	0	0	0	0	\$0
2006	0	0	0	0	0	0	0	\$0
2007	0	0	0	0	0	0	0	\$0
2008	0	0	0	0	0	0	0	\$0
2009	0	0	0	0	0	0	0	\$0
2010	1	0	0	0	0	0	0	\$0

¹ Alaska Department of Fish and Game. 2011. Alaska sport fish and crew license holders, 2000 – 2010. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

² Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. 2011. Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

³ Alaska Department of Fish and Game. (2011). Data on Alaska fish processors. ADF&G Division of Commercial Fisheries. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

⁴ Alaska Commercial Fisheries Entry Commission. 2011. Alaska commercial fishing permits, permit holders, and vessel licenses, 2000 – 2010. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

⁵ Totals only represent non-confidential data.

Table 6. Halibut Catch Share Program Participation by Residents of Shageluk: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Pounds)
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0

Source: National Marine Fisheries Service. 2011. Alaska Individual Fishing Quota (IFQ) permit data. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 7. Sablefish Catch Share Program Participation by Residents of Shageluk: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Pounds)
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0

Source: National Marine Fisheries Service. 2011. Alaska Individual Fishing Quota (IFQ) permit data. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 8. Bering Sea and Aleutian Island Crab Catch Share Program Participation by Residents of Shageluk: 2000-2010.

Year	Number of Crab Quota Share Account Holders	Crab Quota Shares Held	Crab IFQ Allotment (Pounds)
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0

Source: National Marine Fisheries Service. 2011. Alaska Individual Fishing Quota (IFQ) permit data. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 9. Landed Pounds and Ex-vessel Revenue, by Species, in Shageluk: 2000-2010.

	<i>Total Net Lbs¹</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	0	0	0	0	0	0	0	0	0	0	0
Finfish	0	0	0	0	0	0	0	0	0	0	0
Halibut	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0
Other Groundfish	0	0	0	0	0	0	0	0	0	0	0
Other Shellfish	0	0	0	0	0	0	0	0	0	0	0
Pacific Cod	0	0	0	0	0	0	0	0	0	0	0
Pollock	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0
<i>Total²</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Ex-vessel Value (nominal U.S. dollars)</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Finfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Halibut	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Herring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Groundfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Shellfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pacific Cod	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pollock	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sablefish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Salmon	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Total²</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>

Source: Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. 2011. Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

¹ Net lbs refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Shageluk Residents: 2000-2010.

	<i>Total Net Lbs¹</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	0	0	0	0	0	0	0	0	0	0	0
Finfish	0	0	0	0	0	0	0	0	0	0	0
Halibut	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0
Other Groundfish	0	0	0	0	0	0	0	0	0	0	0
Other Shellfish	0	0	0	0	0	0	0	0	0	0	0
Pacific Cod	0	0	0	0	0	0	0	0	0	0	0
Pollock	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0
<i>Total²</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Ex-vessel Value (nominal U.S. dollars)</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Finfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Halibut	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Herring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Groundfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Shellfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pacific Cod	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pollock	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sablefish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Salmon	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Total²</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>

Source: Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. 2011. Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

¹ Net lbs refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Recreational Fishing

Very little recreational fishing takes place in Shageluk or by Shageluk residents. There were no active sport fish guide businesses or individuals holding sport fish guide licenses in Shageluk between 2000 and 2010. In 2010, two sportfishing licenses were sold to Shageluk residents (irrespective of the location of the point of sale), which represents an overall decrease in the number of sportfishing licenses sold to residents between 2000 and 2010. There were not any sportfishing licenses sold within Shageluk between 2000 and 2010, indicating that community residents likely pursue sportfishing in other communities (Table 11).

Shageluk is located within the Yukon River Drainage Alaska Sport Fishing Survey Area. No saltwater angler days were reported in this survey area between 2005 and 2010. Earlier in the decade, between 2000 and 2004, the number of saltwater angler days fished by non-Alaska residents decreased from 81 in 2000 to 17 in 2004, though no angler days were reported for non-Alaska residents in either 2002 or 2003. In contrast, the number of saltwater angler days fished by Alaska residents was highly variable between 2000 and 2003, and no saltwater angler days were reported for Alaska residents between 2004 and 2010. During this period, freshwater angler

days fished varied considerably for both Alaska residents and non-Alaska residents. Alaska residents fished consistently more angler days in freshwater in this region between 2000 and 2010, averaging 7,355 angler days fished per year compared to an average of 3,861 angler days fished by non-Alaska residents. Information about the sportfishing sector in and near Shageluk is presented in Table 11.

Table 11. Sport Fishing Trends, Shageluk: 2000-2010.

Year	Active Sport Fish Guide Businesses ¹	Sport Fish Guide Licenses ¹	Sport Fishing Licenses Sold to Residents ²	Sport Fishing Licenses Sold in Shageluk ²
2000	0	0	17	0
2001	0	0	16	0
2002	0	0	9	0
2003	0	0	10	0
2004	0	0	20	0
2005	0	0	16	0
2006	0	0	1	0
2007	0	0	17	0
2008	0	0	20	0
2009	0	0	20	0
2010	0	0	2	0

Year	Saltwater		Freshwater	
	Angler Days Fished – Non-Residents ³	Angler Days Fished – Alaska Residents ³	Angler Days Fished – Non-Residents ³	Angler Days Fished – Alaska Residents ³
2000	81	45	3,345	7,878
2001	29	14	4,063	6,454
2002	0	89	5,761	9,194
2003	0	17	3,344	5,756
2004	17	0	5,479	7,613
2005	0	0	4,182	4,783
2006	0	0	3,607	7,816
2007	0	0	3,168	8,226
2008	0	0	2,573	10,400
2009	0	0	2,969	7,639
2010	0	0	3,983	5,151

¹ ADF&G (2011). Alaska sport fish guide licenses and businesses, 2000 – 2010. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

² ADF&G (2011). Alaska sport fish and crew license holders, 2000 – 2010. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

³ ADF&G (2011). Alaska Sport Fishing Survey results, 2000 – 2010. ADF&G Division of Sport Fish, Alaska Statewide Harvest Survey project. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sf/sportfishingsurvey/> (Accessed September 2011).

Subsistence Fishing

Historically, subsistence harvest has been foundational to the economy and culture of the Deg Hit'an Athabascan people. Salmon were of primary importance, as well as a secondary dependence on large and small game animals.⁵¹ Because no Chinook or coho salmon return to the Innoko River, people living in Shageluk have historically traveled to summer fish camps along the Yukon River to participate in salmon harvest.⁵² Today, subsistence and fishing-related activities remain important to the economy and way of life of Shageluk residents.⁵³ Fish are the most reliable subsistence resource in the lower-middle Yukon River region. In addition to salmon, non-salmon fish are a vital component of the subsistence fish harvest, partly due to their year-round availability. Non-salmon fish species harvested by residents of Shageluk include whitefish, sheefish, northern pike, grayling, longnose sucker, burbot, Alaska blackfish, and Arctic lamprey.⁵⁴

Information was not available regarding the percentage of Shageluk households participating in subsistence by species between 2000 and 2010, with the exception of data showing that approximately 83% of households participated in non-salmon fish subsistence (not including halibut) in 2002 (Table 12). However, data are available regarding the number of subsistence salmon permits issued to Shageluk households between 2000 and 2010. The total number of permits initially declined from 40 in 2000 to 29 in 2005, and then rebounded to 38 by 2008 (the last year for which data were available). The number of subsistence salmon permits reported as actively fished remained relatively stable between 2000 and 2008. The number of Chinook salmon harvested per year showed a decreasing trend over this period, while chum salmon harvest was highly variable from year to year. Small numbers of coho and pink salmon were reported as harvested in some years during the 2000-2008 period as well. Table 13 displays information about salmon subsistence. Table 13 also notes a substantial harvest of non-salmon fish in 2002, the year ADF&G Division of Subsistence conducted a subsistence survey. No information was reported by ADF&G regarding marine invertebrate harvest that year. ADF&G reported that the following species of non-salmon fish were used for subsistence in Shageluk in 2002: Arctic char, Arctic grayling, northern pike, sheefish, trout, and whitefish.⁵⁵

No information was reported by management agencies regarding subsistence halibut fishing participation between 2003 and 2010 (Table 14) or subsistence harvest of marine mammal resources between 2000 and 2010 (Table 15).

⁵¹ VanStone, James. 1976. "The Yukon River Ingalik: Subsistence and the Fur Trade, and a Changing Resource Base." *Ethnohistory*. 23(3), pp. 199-212.

⁵² VanStone, James. (1979). "Ingalik Contact Ecology: An Ethnohistory of the Lower-Middle Yukon, 1790-1935." *Fieldiana. Anthropology*. 71, pp. i, iii, v-vii, ix-xii, 1-273. (Retrieved October 3, 2012 from <http://www.jstor.org>.)

⁵³ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

⁵⁴ Brown, C, Burr, J., Elkin, K., and Walker, R. 2005. *Contemporary Subsistence Use and Population Distribution of Non-Salmon Fish in Grayling, Anvik, Shageluk, and Holy Cross*. Alaska Dept. of Fish and Game, Tech. Paper No. 289. Retrieved October 4, 2012 from <http://www.subsistence.adfg.state.ak.us/TechPap/tp289.pdf>.

⁵⁵ Alaska Department of Fish and Game. 2011. *Community Subsistence Information System (CSIS)*. ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sb/CSIS/> (Accessed February 2011).

Table 12. Subsistence Participation by Household and Species, Shageluk: 2000-2010.

Year	% Households Participating in Salmon Subsistence	% Households Participating in Halibut Subsistence	% Households Participating in Marine Mammal Subsistence	% Households Participating in Marine Invertebrate Subsistence	% Households Participating in Non-Salmon Fish Subsistence	Per Capita Subsistence Harvest (lbs)
2000	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a	83%	n/a
2003	n/a	n/a	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a

Note: n/a indicates that no data were reported for that year.

Source: Alaska Department of Fish and Game. 2011. Community Subsistence Information System (CSIS). ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sb/CSIS/> (Accessed February 2011).

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Shageluk: 2000-2010.

Year	Subsistence Salmon Permits Issued ¹	Salmon Permits Returned ¹	Chinook Salmon Harvested ¹	Chum Salmon Harvested ¹	Coho Salmon Harvested ¹	Pink Salmon Harvested ¹	Sockeye Salmon Harvested ¹	Lbs of Marine Inverts ²	Lbs of Non-Salmon Fish ²
2000	40	26	805	1,838	n/a	n/a	n/a	n/a	n/a
2001	37	28	222	684	n/a	n/a	n/a	n/a	n/a
2002	33	24	439	1,956	n/a	n/a	n/a	n/a	19,756
2003	32	26	550	5,587	35	130	n/a	n/a	n/a
2004	29	19	418	1,848	106	n/a	n/a	n/a	n/a
2005	29	22	420	4,136	n/a	n/a	n/a	n/a	n/a
2006	32	26	358	1,386	48	n/a	n/a	n/a	n/a
2007	41	18	448	1,124	267	n/a	n/a	n/a	n/a
2008	38	25	397	453	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Note: n/a indicates that no data were reported for that year.

¹ Fall, J.A., C. Brown, N. Braem, J.J. Simon, W.E. Simeone, D.L. Holen, L. Naves, L. Hutchinson-Scarborough, T. Lemons, and T.M. Krieg. 2011, revised. Alaska subsistence salmon fisheries 2008 annual report. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 359, Anchorage. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

² Alaska Department of Fish and Game. 2011. Community Subsistence Information System (CSIS). ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sb/CSIS/> (Accessed February 2011).

Table 14. Subsistence Halibut Fishing Participation, Shageluk: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	n/a	n/a	n/a
2004	n/a	n/a	n/a
2005	n/a	n/a	n/a
2006	n/a	n/a	n/a
2007	n/a	n/a	n/a
2008	n/a	n/a	n/a
2009	n/a	n/a	n/a
2010	n/a	n/a	n/a

Note: n/a indicates that no data were reported for that year.

Source: Fall, J.A. and D. Koster. 2011. Subsistence harvests of Pacific halibut in Alaska, 2009. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 357, Anchorage. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

Table 15. Subsistence Harvests of Marine Mammal Resources, Shageluk: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Note: n/a indicates that no data were reported for that year.

¹ Frost, K.J., and R.S. Suydam. 2010. Subsistence harvest of beluga or white whales (*Delphinapterus leucas*) in northern and western Alaska, 1987–2006. *J. Cetacean Res. Manage.* 11(3): 293–299. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

² U.S. Fish and Wildlife Service. 2011. Marking, Tagging and Reporting Program data bases for northern sea otter, Pacific walrus and polar bear. Office of Marine Mammals Management. Anchorage, Alaska. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

³ Wolfe, R.J., Fall, J.A. and M. Riedel. 2009. The subsistence harvest of harbor seals and sea lions by Alaska Natives in 2008. Alaska Native Harbor Seal Commission and Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 347, Anchorage.