

Gambell (GAM-bull)



People and Place

*Location*¹

Gambell is located on the northwest cape of St. Lawrence Island, 200 miles southwest of Nome, in the Bering Sea. The city is 36 miles from the Chukotka Peninsula, Siberia. Gambell is located in the Nome Census Area and the Cape Nome Recording District. The area encompasses 10.9 square miles of land and 19.5 square miles of water.

*Demographic Profile*²

In 2010, there were 681 residents in Gambell, ranking it the 90th largest community in Alaska in terms of population size. Overall, between 1990 and 2010, the population has increased by 29.7%. Between 2000 and 2009, the population increased by 2.62% with an average annual growth rate of 0.21%, which was under the statewide average of 0.75% (Table 1).

Very little change occurred in the distribution of races in the local population between 2000 and 2010. In 2010, the majority of Gambell residents identified themselves as American Indian and Alaska Native (95.6%), compared to 95.7% in 2000. Additionally, 3.8% identified themselves as White in 2010, compared to 3.5% in 2000; 0.4% identified themselves as Hispanic or Latino in 2010, compared to 0.3% in 2000; 0.4% identified themselves as of two or more races in 2010, compared to 0.3% in 2000; and 0.1% identified themselves as Asian in 2010, compared to 0.5% in 2000. The change in population from 1990 to 2010 is provided in Table 1 below, and changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

In 2010, the average household size in Gambell was 4.15, compared to 4.82 in 2000 and 4.30 in 1990. Also in 2010, there were a total of 164 occupied housing units, compared to 159 in 2000. Of those households surveyed in 2010, 68.5% were owner-occupied and 13.5% were renter-occupied. In that same year, 18% were vacant, compared to 14.9% in 2000. There were no residents living in group quarters in 2000 and 2010.

In 2010, the gender makeup in Gambell was 52.5% male and 47.4% female, very similar to the state as a whole (52% male, 48% female). The median age was estimated to be 24.4 years, lower than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, males outnumbered females in all age groups except 0-9 years, and there were very similar numbers of males and females in the 50-59 and 60-69 age groups. In 2010, 8.9% of the Gambell population was age 60 or older. The overall population structure of Gambell 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 Gambell from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	525	-
2000	649	-
2001	-	642
2002	-	641
2003	-	646
2004	-	651
2005	-	660
2006	-	644
2007	-	661
2008	-	673
2009	-	666
2010	681	-

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, Gambell: 2000-2010 (U.S. Census).

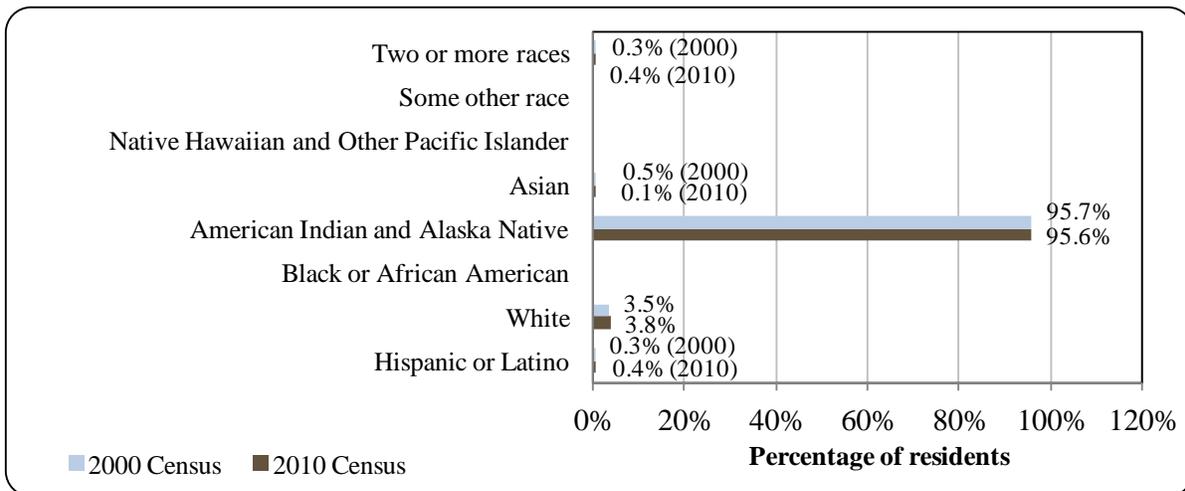
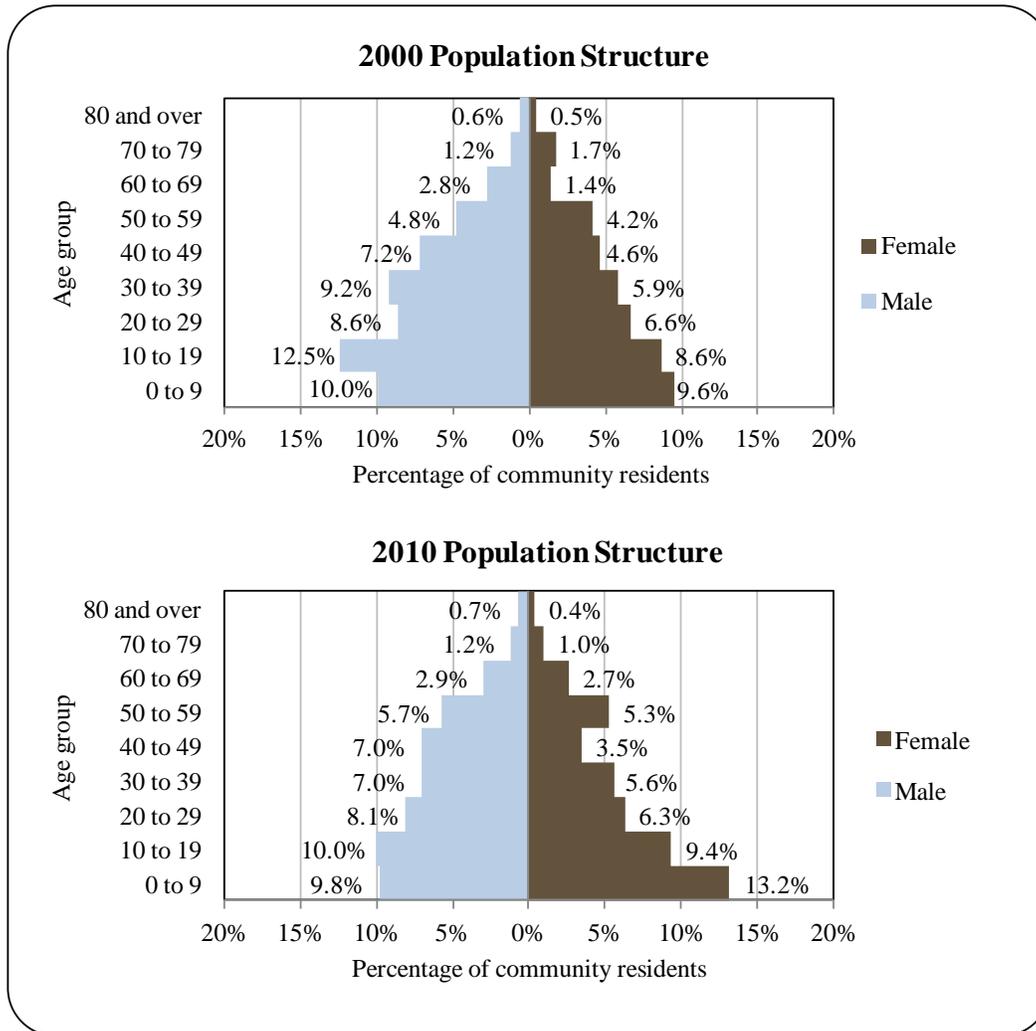


Figure 2. Population Age Structure in Gambell Based on the 2000 and 2010 U.S. Decennial Census.



In terms of educational attainment, the U.S. Census' 2006-2010 American Community Survey (ACS)³ estimated that significantly fewer (75.3%) of Gambell residents aged 25 and over held a high school diploma or higher degree in 2010, compared to 90.7% of Alaskan residents overall. Also in 2010, 16.7% of residents aged 25 and older were estimated to have less than a 9th grade education, compared to 3.5% of Alaskan residents overall; 8% were estimated to have a 9th to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 20.2% were estimated to have some college but no degree, compared to 28.3% of Alaskan residents overall; 1% were estimated to have an Associate's degree, compared to 8% of Alaskan residents overall; 1.3% were estimated to have a Bachelor's degree, compared to 17.4% of Alaskan

³ While ACS estimates can provide a good snap shot 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.

residents overall; and 1.3% were estimated to have a graduate or professional degree, compared to 9.6% of Alaskan residents overall.

History, Traditional Knowledge, and Culture

St. Lawrence Island has been inhabited intermittently for the past 2,000 years by Yup'ik Eskimos. In the 18th and 19th centuries, over 4,000 people inhabited the Island in 35 villages. Sivuqaq is the Yup'ik name for the village and for the Island. The City was renamed for Mr. and Mrs. Vene C. Gambell, who were missionaries to the town.⁴ Between 1878 and 1880, a tragic disease (unknown causes or illness) decimated the population and contributed to a potential famine due to ill hunters unable to fully provide for the remaining residents. Survivors gathered together at the present location and many settlements were discontinued as primary living areas. In 1900, reindeer were introduced for local use, and remain on the island today. In 1903, President Roosevelt established a reindeer reservation by proclamation. The City of Gambell was incorporated in 1963, joining the existing tribal government.⁵

Because of its proximity to the former Soviet Union, St. Lawrence Island has been an important defense site since World War II. The U.S. Army and the U.S. Navy independently built and maintained radar, sonar, and communication installations on the island, not only at Northwest Cape where Gambell is located, but at Northeast Cape as well. During World War II an airstrip and a facility with six houses and support buildings were constructed. With the beginning of the Cold War in 1946 St. Lawrence was selected for an Aircraft Control and Warning facility. The U.S. Army built a camp on the north side of Troutman Lake and other facilities on the gravel beach ridges between Gambell and Sevuokuk Mountain. The U.S. Air Force built a radar installation at the north end of Sevuokuk Mountain. The Gambell radar was used to track Soviet shipping.⁶ An Aircraft Control and Warning Station was operated by the U.S. Air Force in Gambell from 1948 to 1956 when it was abandoned. A similar facility was built at Northeast Cape which included a White Alice Communication Site.⁷

In the years leading up to the passage of the 1971 Alaska Native Claims Settlement Act (ANCSA), St. Lawrence Island's status as a federal reserve meant that Gambell and the neighboring community of Savoonga underwent a different process during land claims settlement than other Alaska Native villages. Under ANCSA, most Alaska Native villages received a combination of money and land entitlement. In addition, previous federal reserves were granted land ownership under ANCSA and controlled by Native corporations. Because Savoonga and Gambell were located within the St. Lawrence Island Reserve, they had the option to choose a larger land entitlement in lieu of the monetary portion of the ANCSA settlement.

⁴ 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.

⁵ Northwest Planning and Grants Development (2003). *Community Strategic Development Plan for Gambell 2004-2009*. Report prepared for Community of Gambell and Kawerak Community Economic Development. Retrieved October 22, 2012 from <http://www.kawerak.org/ledps/gambell.pdf>.

⁶ Denfeld, D. Colt. (1994). *The Cold War in Alaska: A Management Plan for Cultural Resources*. U.S. Army Corps of Engineers Alaska District, Anchorage.

⁷ Alaska Dept. of Environmental Conservation 2012. *List of Contaminated Site Summaries By Region: Starrigavan Bay Sediments*. Retrieved October 22, 2012 from <http://dec.alaska.gov/spar/csp/sites/stlawrence.htm>.

Together, the communities of Gambell and Savoonga received title to the entire 1.136-million acres of land that made up the former St. Lawrence Island Reserve.⁸

Today, St. Lawrence Island remains jointly owned by Savoonga and Gambell. Gambell is a traditional St. Lawrence Yup'ik village with a subsistence lifestyle based on walrus and whale hunting. Due to the island's isolation, most residents are bilingual – Siberian Yup'ik is still the first language, with English as the second language. The sale, importation, and possession of alcohol are banned in the village.⁹

Natural Resources and Environment

Gambell has a maritime climate with continental influences in the winter. Wind and fog are common, and precipitation occurs 300 days per year. Average annual precipitation is 15 inches, with 80 inches of snowfall. The Bering Sea freezes during mid-November, with break-up at the end of May. Average summer temperatures range from 34 to 48 °F, and average winter temperatures vary between -2 and 10 °F. Extreme temperatures have been recorded from -30 to 65 °F.¹⁰

St. Lawrence Island is about 90 miles long and between 8 and 22 miles wide. The Island has no trees, and the only woody plants are Arctic Willow, standing no more than a foot (30 cm) high. The Island's abundance of seabirds and marine mammals is due largely to the influence of the Anadyr Current, an ocean current which brings cold, nutrient-rich water from the deep waters of the Bering Sea shelf edge. Reindeer were introduced on the island in 1900 in an attempt to bolster the economy. The reindeer herd grew to about 10,000 animals by 1917, but has since declined. Reindeer are herded as a source of subsistence meat to this day. To the south of the island is a persistent "polynya"—areas of open water in the sea ice which form in the lee of islands and coasts.¹¹ The St. Lawrence Island Polynya are "most often created during northerly winds, but may also occur during southerly wind events, and they usually occur in the same places every year. The St. Lawrence Island Polynya is a very large, important polynya that covers hundreds of kilometers. Polynyas work like conveyor belts for ice creation. When a polynya appears, it exposes a large area of water to the cold wind. This water quickly cools and ice forms on the surface. The wind then blows this ice away from the coast, and more water appears so that new ice is constantly being formed and moved around by the wind. All this ice formation creates cold, salty, more dense water... This dense salty water sets up ocean currents that transport water, and possibly organic matter, to the south and then west of St. Lawrence Island, providing important conditions for creating healthy life on the bottom of the ocean, called the benthos."¹²

The St. Lawrence Island Reserve was created to protect and promote Siberian Yup'ik rights to the Island. This is one of the largest reserves in Alaska. The tribal government controls

⁸ Cook Inlet Region, Incorporated. 2012. *ANSCA – LAND*. Retrieved July 11, 2012 from http://www.ciri.com/content/history/anca_land.aspx.

⁹ See footnote 4.

¹⁰ Ibid.

¹¹ Grebmeier, J.M., and L.W. Cooper. (1995). Influence of the St. Lawrence Island Polynya on the Bering Sea benthos. *Journal of Geophysical Research* 100:4439-4460.

¹² McNutt, Lyn. (n.d.). *How does ice cover vary in the Bering Sea from year to year?* Retrieved August 6, 2012 from http://www.beringclimate.noaa.gov/essays_mcnutt.html.

access to and use of the island. It is the 6th largest island in the country and the 113th largest island in the world.¹³

Two Formerly Used Defense Sites (FUDS) are located on Saint Lawrence Island. The U.S. military stationed forces in and around Gambell during and after World War II. The Air Force operated an Aircraft Control and Warning Station in Gambell from 1948 to 1956. The site was abandoned after a similar facility was constructed at Northeast Cape on the island. Located about 50 miles from Savoonga, the nearest village, the Northeast Cape site included a White Alice Communication Site and operated from 1957 to 1972. The landowners are the Sivuqaq Native Corporation (Gambell) and Savoonga's Native village corporation, Kukulget, Incorporated. The U.S. Army Corps of Engineers is responsible for cleanup at the sites through its FUDS program.¹⁴

The Gambell site is subdivided into 38 separate areas. The majority of contamination was petroleum-impacted soil. There were also areas of low concentrations of dioxin (below cleanup standards) and reported unexploded ordnance in Troutman Lake. Construction debris, military equipment and small quantities of hazardous substances have been removed through the Native American Lands Environmental Mitigation Program. Additional areas with buried material are reported to exist around the village and an investigation of the groundwater near the village water supply detected a low-level concentration of diesel range organics (DRO) in one monitoring well in 1998. Subsequent sampling has not found DRO in the well, and testing of the water supply well shows no detectable contamination. Groundwater samples near the village water supply detected a low-level concentration toxic substances in one well in 1998. Subsequent sampling has not detected harmful contaminants.¹⁵

The Alaska Department of Environmental Conservation continues to work with the community and the U.S. Army Corps of Engineers on the characterization and cleanup. As individual sites are addressed, they are cleaned to meet current environmental standards. The community has had concerns throughout cleanup and has been active during the process. The Restoration Advisory Board received federal "Technical Assistance for Public Participation" grants from 2001 to 2008 to hire someone to help residents understand the technical aspects of the process and to help review the many associated documents.¹⁶

Current Economy¹⁷

The economy in Gambell is largely based upon harvests from the sea, including seal, walrus, fish, and whales (bowhead and gray). Historically in the 1960s (although not common today), foxes were trapped as a secondary source of cash income. Some reindeer roam free on the Island, but most harvesting occurs near Savoonga. Ivory carving is a popular source of

¹³ City of Gambell. (n.d.) *The Native Village of Gambell*. Retrieved August 28, 2010 from <http://www.kawerak.org/tribalHomePages/gambell/index.html>

¹⁴ Alaska Dept. of Environmental Conservation 2012. *List of Contaminated Site Summaries By Region: Starrigavan Bay Sediments*. Retrieved October 22, 2012 from <http://dec.alaska.gov/spar/csp/sites/stlawrence.htm>.

¹⁵ Hogan, M., S. Christopherson, and A. Rothe. (2006). *Formerly Used Defense Sites (FUDS) in the Norton Sound Region: Location, History of Use, Contaminants Present, and Status of Clean Up Efforts*. Report prepared for Alaska Community Action on Toxics.

¹⁶ Alaska Department of Environmental Conservation. (n.d.). *Spill Prevention and Response*. Retrieved August 6, 2012 from <http://dec.alaska.gov/spar/csp/sites/stlawrence.htm>.

¹⁷ Unless otherwise noted, all monetary data are reported in nominal values.

income. The abundant number of sea and land bird colonies provides an opportunity for tourism by bird-watchers, particularly during the spring and fall migrations.¹⁸

Based on household surveys conducted for the 2006-2010 ACS,¹⁹ in 2010, per capita income in Gambell was estimated to be \$11,022 and the estimated median household income was \$23,958, compared to \$8,764 and \$31,458 reported in 2000, respectively. If inflation is taken into account by converting 2000 values into 2010 dollars,²⁰ the real per capita income in 2000 is shown to have been \$11,525, and the real median household income \$41,367. These numbers suggest that per capita income remained stable over the period while median household income decreased. In 2010, Gambell ranked 256th of 305 communities for which per capita income was estimated, and 263rd of 299 communities for which median household income was estimated.

Gambell's small population size may have prevented the ACS from accurately portraying economic conditions.²¹ An alternative estimate of per capita income is provided by 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. Census, the resulting per capita income estimate for Gambell in 2010 is \$5,680.^{22,23} This estimate is lower than the 2000 per capita income reported in by the U.S. Census, suggesting that caution is warranted when citing per capita income stability in Gambell between 2000 and 2010. The lower per capita income estimate derived from the ALARI database is reflected in the fact that the community was recognized as "distressed" by the Denali Commission in 2011,²⁴ indicating that over 70% of residents aged 16 and older earned less than \$16,120 in 2010. It should be noted that both ACS and DOLWD data are based on wage earnings, and these income statistics do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS, in 2010, 58.4% of the Gambell population age 16 and older was estimated to be in the civilian labor force, lower than the statewide rate of 68.8%. That year, approximately 42.4% of local residents were living below the poverty line, more than 4 times the rate of Alaskans overall (9.6%), and the unemployment rate was estimated to be 16.7%, almost 3 times the statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in

¹⁸ Northwest Planning and Grants Development (2003). *Community Strategic Development Plan for Gambell 2004-2009*. Report prepared for Community of Gambell and Kawerak Community Economic Development. Retrieved October 22, 2012 from <http://www.kawerak.org/ledps/gambell.pdf>.

¹⁹ 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>.

²⁰ Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved January 5, 2012 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

²¹ 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.

²² See footnote 19.

²³ 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/>.

²⁴ Denali Commission. (2011). *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

Gambell in 2010 was 25.4%, more than twice the ALARI statewide unemployment rate estimate of 11.5%.²⁵

Also based on the 2006-2010 ACS, just over half of the Gambell workforce was estimated to be employed in the private sector (51.9%), while 45.4% was estimated to be in the public sector, and 2.7% was estimated to be self-employed. Out of 183 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest number worked in educational services, health care and social services (35%), retail trade (18%), arts, entertainment, recreation, accommodation, and food services (13.7%), transportation, warehousing and utilities (8.2%), and public administration (7.7%) industries (Figure 3). In 2010, 2.2% of the workforce was also estimated to be working in the agriculture, forestry, and fishing industries. The number of individuals employed in the fishing industry is probably underestimated in census statistics; fishermen may hold another job and characterize their employment accordingly.

Compared with 2000, significant proportional increases occurred in employment in finance, insurance, and real estate, construction, and agriculture, forestry, fishing, hunting, and mining industries in 2010. Over the same period, there was a significant drop in the percentage of those estimated to be employed in transportation, warehousing, and utilities and arts, entertainment, recreation, accommodation, and food service industries between 2000 and 2010 (Figure 3). Similar changes were seen in the distribution of occupations held by residents in 2000 compared to 2010, with the greatest increases in the percentage of the workforce employed in service and natural resource/construction/maintenance occupations and the greatest decrease in management/professional occupations (Figure 4).

Economic data compiled in the ALARI database indicate that there were 437 employed residents in Gambell in 2010, of which 61.7% were employed in local government, 9.5% in education and health services, 6.8% in construction, 6.1% in leisure and hospitality, 4.9% in trade, transportation, and utilities, 2.7% in financial activities, 2.3% in professional and business services, 2.3% in state government, 0.4% in information, and 3.4% in other industries.²⁶ ACS estimates conflict somewhat with economic data compiled in the ALARI database, which shows the greatest number of Gambell residents employed in education, health care, social assistance, transportation, utilities, and warehousing industries, and a much smaller number employed in public administration. It should also be noted that ACS and DOLWD employment statistics do not reflect residents' activity in the subsistence economy.

²⁵ See footnote 23.

²⁶ Ibid.

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

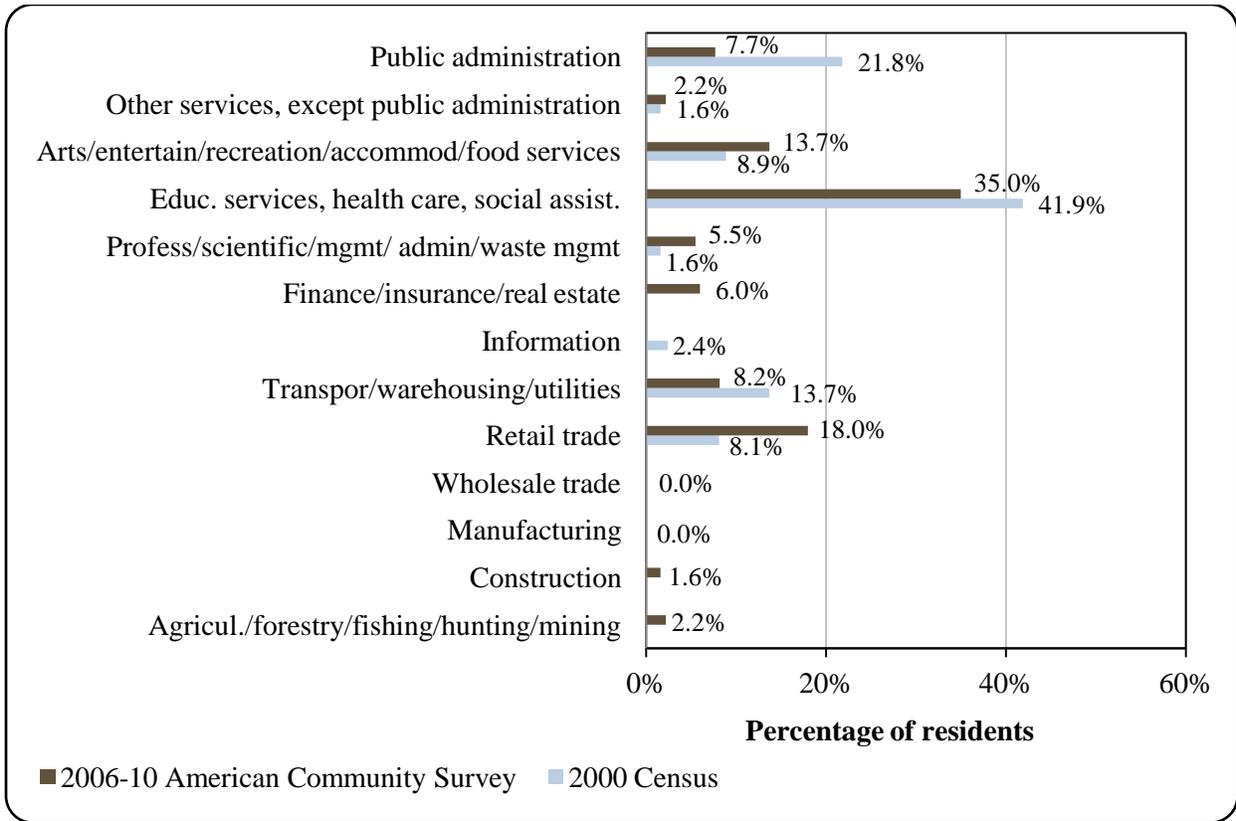
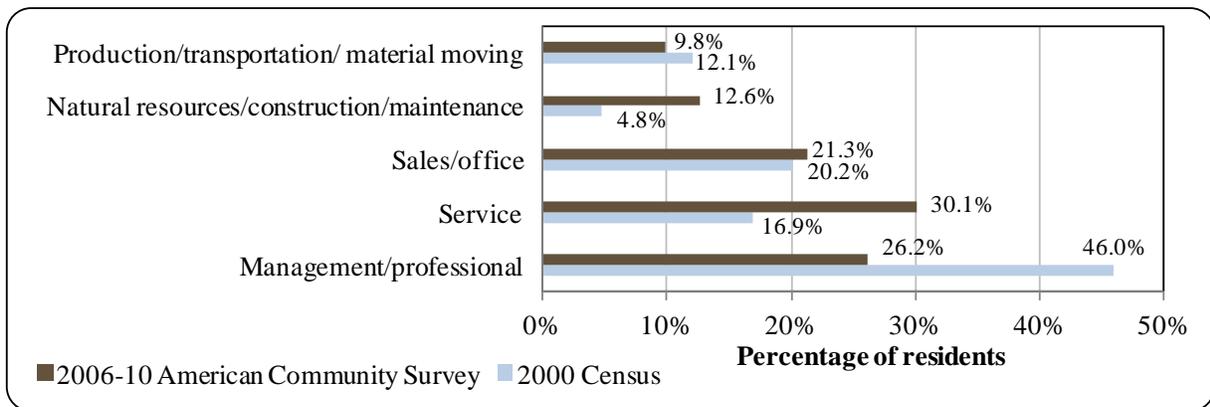


Figure 4. Local Employment by Occupation in 2000-2010, Gambell (U.S. Census).



Governance

Gambell is a 2nd Class City and is not located within an organized borough. The City was incorporated in 1963. The City administers a 3% sales tax and there is no property tax.²⁷ In addition to sales tax revenues, other locally-generated income sources in Gambell between 2000 and 2010 included building and equipment rentals, contracted services, building leases, water, sewer and washeteria service fees, bingo and pull tab receipts, and proceeds from an ivory cooperative run by the City. Outside revenue sources included shared funds from various state and federal revenue sharing programs and grants in some years. The City of Gambell received contributions from the State Revenue Sharing program from 2000 to 2003 (just under \$30,000 per year) and larger contributions from the state Community Revenue Sharing program in 2009 and 2010. Other state revenue sharing came from the SAFE Communities program and fish tax refunds (see the *Fisheries-Related Revenue* section for more information). Federal shared revenues came from the Payment in Lieu of Taxes and COPS programs (Community Oriented Policing Services). State-funded capital project grants were received during the 2000-2010 period for projects including construction of a fire hall, landfill relocation, and equipment purchases. See Table 2 below for details on selected municipal, state, or federal revenue streams for Gambell from 2000 to 2010.

Table 2. Selected Municipal State, or Federal Revenue Streams for the Community of Gambell 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	\$1,970,048	\$82,055	\$28,992	n/a
2001	\$1,894,455	\$73,525	\$28,500	n/a
2002	\$2,454,367	\$65,630	\$26,000	n/a
2003	\$956,594	\$65,989	\$28,147	n/a
2004	\$942,384	\$65,989	n/a	n/a
2005	\$1,802,597	\$71,593	n/a	n/a
2006	\$1,842,287	\$61,174	n/a	n/a
2007	\$2,355,135	\$70,248	n/a	n/a
2008	\$1,920,258	\$70,357	n/a	n/a
2009	\$1,878,205	\$87,099	\$129,000	n/a
2010	\$1,215,983	\$87,463	\$150,000	n/a

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

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

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

³ Alaska Dept. of Rev. (n.d.). *(2000-2009) Taxes and Fees Annual Report*. Accessed at www.tax.state.ak.us. Data retrieved April 15, 2011.

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 at http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm. Data retrieved April 15, 2011.

²⁷ 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.

The Bureau of Indian Affairs (BIA) recognized traditional council for the community is the Native Village of Gambell. The local Native village corporation is Sivuqaq, Incorporated. The regional Native corporation to which Gambell belongs is the Bering Strait Native Corporation.²⁸ Because of the unique history of St. Lawrence Island as a federal reindeer reserve (the St. Lawrence Island Reserve), the communities of Savoonga and Gambell opted to receive title to all 1,135,843 acres of the St. Lawrence Island Reserve in lieu of the monetary portion of ANCSA land claims (see the *History, Traditional Knowledge, and Culture* section).²⁹ These combined lands are still held in common between Gambell and Savoonga, and are managed by the St. Lawrence Island Economic Development Corporation.³⁰

Gambell is also a member of Kawerak Inc., a tribal non-profit organization with a mission to “assist, promote and provide programs and services to improve the social, economic, educational, cultural and governmental self-sufficiency for the betterment of the Native people within the region, and to preserve the traditional culture, languages and values.”³¹ Kawerak, Inc. is one of the 12 regional Alaska Native 501(c)(3) 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.³² Kawerak, Inc. offers children and family services, community services, and education, employment and training opportunities for residents of the 18 member villages located in the Bering Strait region. The non-profit also includes a Natural Resources Division, which incorporates the Eskimo Walrus Commission, Reindeer Herders Association, and Subsistence Resources Division.³³

Offices of the Alaska Department of Fish and Game (ADF&G) and the Alaska Department of Commerce, Community, and Economic Development are located in Nome. The closest offices of the Alaska Department of Natural Resources, National Marine Fisheries Service (NMFS) and U.S. Bureau of Citizenship and Immigration Services are in Anchorage.

Infrastructure

Connectivity and Transportation

Gambell’s isolated location on an island with no port results in heavy dependence upon air transport. The state-owned airport has a 4,500 feet long by 96 feet wide asphalt runway. Regular flights from Nome and charters from Unalakleet are available.³⁴ As of June 2012, roundtrip airfare from Anchorage to Gambell costs \$881.³⁵ Barge service is also available to bring freight from, Kotzebue, Nome, or Shishmaref.^{36,37} Residents use personal boats for local

²⁸ See footnote 27.

²⁹ Franklin, Jonathan. 1993. “Digging for Ivory: The Challenge of Preserving Native Alaskan Archaeological Sites.” *Stanford Environmental Law Journal*, 12 (164-210). Retrieved July 11, 2012 from <http://heinonline.org>.

³⁰ See footnote 27.

³¹ Kawerak, Inc.. 2006. *Homepage*. Retrieved February 17, 2012 from <http://www.kawerak.org/>.

³² 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>.

³³ See footnote 31.

³⁴ See footnote 27.

³⁵ Airfare was calculated using lowest fare retrieved on November 22, 2011 from <http://www.travelocity.com>.

³⁶ See footnote 27.

travel by sea, and snowmobiles for overland travel in winter. Currently, Gambell is connected to Savoonga via an unimproved road.³⁸ In the community's strategic development plan, priority projects were identified to improve transportation accessibility and reduce costs. These priorities included meeting with airlines and the U.S. Post Office to discuss reduced freight costs, construction of additional roadways within the community, construction of an evacuation road from the shore to higher ground, construction of an improved road between Gambell and Savoonga, and development of a boat harbor and port to allow local residents to become involved in fisheries.³⁹

Facilities

Water in Gambell is sourced from community wells as well as from Troutman Lake. It is filtered and chlorinated and stored in three water tanks. A city-operated piped water and sewer system distributes water to 116 homes, and sewage is collected in a community septic tank. A smaller number of homes (37) are not connected to the pipe system. These residents haul water and honeybuckets. Both the school buildings and the washeteria have individual water wells and septic tank systems. The City operates an unpermitted landfill but does not provide refuse collection services. Residents haul their own garbage to the landfill site. Electricity in Gambell is provided by a diesel powerhouse operated by the Alaska Village Electric Cooperative. Local police services are provided by the City Police Department, the Village Police Officer, and a Village Public Safety Officer. The nearest state trooper post is located in Nome. Fire and rescue services are provided by the Gambell Volunteer Fire Department, the City, and Project Code Red Equipment. Additional community facilities include a City Jail, a teen center, a community hall, and the school library. Telephone and cable service is available locally. Internet is available at the school only.⁴⁰

With regard to fisheries-related infrastructure, no dock facilities are available in Gambell.⁴¹ Construction of a dock and port facilities has been identified as a development priority to provide greater opportunity for Gambell residents to participate in fisheries.⁴²

Medical Services

The Bessie A. Kaningok Health Clinic is the primary healthcare facility in Gambell. The clinic is operated by the Norton Sound Health Corporation and is a Community Health Aid Program site.⁴³ The nearest hospital is the Norton Sound Regional Hospital in Nome, which is about 206 miles away.

³⁷ Rodney P. Kinney Associates, Inc. 2007. *Gambell Long Range Transportation Plan*. Retrieved October 22, 2012 from <http://www.kawerak.org/servicedivisions/csd/trans/index.html>.

³⁸ Ibid.

³⁹ Northwest Planning and Grants Development (2003). *Community Strategic Development Plan for Gambell 2004-2009*. Report prepared for Community of Gambell and Kawerak Community Economic Development. Retrieved October 22, 2012 from <http://www.kawerak.org/ledps/gambell.pdf>.

⁴⁰ 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.

⁴¹ Ibid.

⁴² See footnote 39.

⁴³ See footnote 40.

Educational Opportunities

Gambell is located in the Bering Strait School district. There is one school in Gambell which offers preschool through 12th grade education. As of 2011, the Gambell School had 201 students and 20 teachers.⁴⁴

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

The St. Lawrence Island Yup'ik people have long depended on subsistence hunting and gathering, practices which continue to this day. Historically, whales and other marine mammals were hunted, pink and chum salmon, inconnu, whitefish, herring, crab, and halibut were harvested, and birds and eggs were also an important part of the diet.⁴⁵ Today, Gambell is a traditional St. Lawrence Yup'ik village with a subsistence lifestyle based on walrus and whale hunting. Whale, seal, walrus, and reindeer comprise 80% of islanders' diets. Seal, polar bear, caribou, and fish are also important for subsistence purposes.⁴⁶ Gambell is located within Federal Statistical and Reporting Area 524, Pacific Halibut Fishery Regulatory Area 4D, and the Bering Sea Sablefish Regulatory Area. Gambell participates in the Community Development Quota (CDQ) program through the Norton Sound Economic Development Corporation (NSEDC). The community is not eligible for the Community Quota Entity program.

Gambell is a member of the Alaska Eskimo Whaling Commission (AEWC), which was formed to represent whaling communities in an effort to convince the United States Government to take action to preserve the Eskimos subsistence hunt of bowhead whales. The AEWC exists today as a tax-exempt non-profit corporation with several purposes: to preserve and enhance a vital marine resource, the bowhead whale, including the protection of its habitat; to protect Eskimo subsistence bowhead whaling; to protect and enhance the Eskimo culture, traditions, and activities associated with bowhead whales and subsistence bowhead whaling; and to undertake research and educational activities related to bowhead whales. The members of the AEWC are registered whaling captains and their crew members from ten whaling communities: Gambell, Savoonga, Wales, Little Diomedea, Kivalina, Point Hope, Wainwright, Barrow, Nuiqsut, and Kaktovik.⁴⁷

Gambell is also a member of the Kawerak Corporation's Eskimo Walrus Commission (formed in 1978).⁴⁸ The Marine Mammal Protection Act (MMPA) includes specific text providing a legislative basis for these and other cooperative management agreements. Specifically, in 1994, Section 119 of the reauthorization for the MMPA provided a legislative

⁴⁴ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

⁴⁵ Alaska Native Heritage Center. (2008). *Inupiaq & St. Lawrence Island Yupik People – Who We Are*. Retrieved July 11, 2012 from http://www.alaskanative.net/en/main_nav/education/culture_alaska/inupiaq/.

⁴⁶ See footnote 40.

⁴⁷ Alaska Eskimo Whaling Commission. (n.d.) *Overview of the Alaska Eskimo Whaling Commission*. Retrieved at <http://www.bluediamondwebs.biz/Alaska-aewc-com/aboutus.asp> (Accessed June 27, 2012).

⁴⁸ Kawerak Corporation. (n.d.). *Eskimo Walrus Commission*. Retrieved July 15, 2012 from <http://www.kawerak.org/servicedivisions/nrd/ewc/>.

basis for cooperative agreements between state and federal management agencies and Alaska Native organizations.⁴⁹

Processing Plants

According to the ADF&G's 2010 Intent to Operate list, Gambell does not have a registered processing plant. The nearest shore-side processing plant is located in Savoonga. According to a survey of plant managers conducted by the Alaska Fisheries Science Center in 2011, the Savoonga Norton Sound Seafood Products (NSSP) plant processes halibut, red king crab, salmon, and herring, and was founded in 1992. NSSP is a subsidiary of the NSEDC, with plants located in Savoonga, Unalakleet, and Nome, and buying stations at Elim, Golovin, and Shaktoolik.⁵⁰ According to the plant managers survey, the Savoonga NSSP plant employs between 4 and 10 employees, with the largest number of workers in the month of August.

Fisheries-Related Revenue

Between 2000 and 2010, the City of Gambell generated very little fisheries-related revenue, with total annual fisheries-related revenue ranging from \$88 to \$573 during that time period (Table 3).⁵¹ In 2010, fisheries-related revenues totaled \$108, compared to \$414 in 2000. It is important to note that the NSEDC uses fisheries revenue from its share of the CDQ program to provide grants for infrastructure, fuel and electrical assistance to member communities. The NSEDC also offers educational scholarships, vocational training, and fishing permit acquisition and financing assistance to residents of its member communities.

Commercial Fishing

Between 2000 and 2010, no Gambell residents were recorded as participating in commercial fisheries in the state, with one exception. During that time period, the number of crew license holders ranged from zero to two. Further information regarding commercial fishing trends can be found in Tables 4 through 10.

⁴⁹ Glenn Gray and Associates. June 2007. *North Slope Borough Coastal Management Plan*. Retrieved February 29, 2012 from http://www.co.north-slope.ak.us/programs/coastal_management/NSB_Coastal_Management_Plan.pdf.

⁵⁰ Norton Sound Economic Development Corporation. (n.d.). *Norton Sound Seafood Products (NSSP)*. Retrieved July 11, 2012 from <http://www.nsedc.com/nssp.html>.

⁵¹ 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 Gambell: 2000-2010.

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	\$330	\$400	\$279	\$112	\$113	\$94	\$284	\$275	\$0	\$0	\$0
Shared Fisheries											
Business Tax ¹	\$84	\$173	\$244	\$112	\$93	\$236	\$283	\$221	\$117	\$88	\$108
Fisheries Resource											
Landing Tax ¹	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0
Harbor usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0
Fishing gear storage on public land ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0
Marine fuel sales tax ³	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0
<i>Total fisheries-related revenue⁴</i>	<i>\$414</i>	<i>\$573</i>	<i>\$523</i>	<i>\$225</i>	<i>\$206</i>	<i>\$331</i>	<i>\$568</i>	<i>\$496</i>	<i>\$117</i>	<i>\$88</i>	<i>\$108</i>
<i>Total municipal revenue⁵</i>	<i>\$1,970,048</i>	<i>\$1,894,455</i>	<i>\$2,454,367</i>	<i>\$956,594</i>	<i>\$942,384</i>	<i>\$1,802,597</i>	<i>\$1,842,287</i>	<i>\$2,355,135</i>	<i>\$1,920,258</i>	<i>\$1,878,205</i>	<i>\$1,215,983</i>

Note: n/a indicates that no data were reported for that year. -*indicates that due to inconsistencies between submitted budget and Alaska Taxable, a percentage total of municipal revenue from fisheries-related revenue could not be determined.

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.

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Table 4. Permits and Permit Holders by Species, Gambell: 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'd. Permits and Permit Holders by Species, Gambell: 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	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
Salmon (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
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>0</i>										
	<i>Fished permits</i>	<i>0</i>										
	<i>% of permits fished</i>	<i>-</i>										
	<i>Permit holders</i>	<i>0</i>										

¹ National Marine Fisheries Service. (2011). Data on Limited Liability Permits, 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.]

² 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.]

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

Year	Crew License 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 Gambell ²	Total Net Pounds Landed In Gambell ^{2,5}	Total Ex-Vessel Value Of Landings In Gambell ^{2,5}
2000	0	0	0	0	0	0	0	\$0
2001	1	0	0	0	0	0	0	\$0
2002	0	0	0	0	0	0	0	\$0
2003	2	0	0	0	0	0	0	\$0
2004	2	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	2	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	2	0	0	0	0	0	0	\$0

Note: n/a indicates that no data were reported for that year. Cells showing – indicate that the data are considered confidential.

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 National Marine Fisheries Service. (2011). Alaska processors' Weekly Production Reports (WPR) 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.]

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 Gambell: 2000-2010.

Year	Number of Halibut Quota Share 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 Gambell: 2000-2010.

Year	Number of Sablefish Quota Share 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 Gambell: 2000-2010.

Year	Number of Crab Quota Share 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 Gambell: 2000-2010.

	<i>Total Net Pounds¹</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 pounds 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 Gambell Residents: 2000-2010.

	<i>Total Net Pounds¹</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 pounds refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Recreational Fishing

As seen with commercial fisheries, recreational fishing activity by Gambell residents is also minimal. Between 2000 and 2010, there were no active sport fish guide business or licensed sport fish guides present in the community, and no sport fishing licenses sold in the community. During that time period, the number of sport fishing licenses purchased by Gambell residents (irrespective of point of sale) ranged from 2 in 2008 and 2010 to 10 in 2006 (Table 11). Additionally, no charter fishing activity was documented in Gambell between 2000 and 2010.

The ADF&G Statewide Harvest Survey does not include St. Lawrence Island (including Gambell) within a survey region; therefore there are no data available from the Statewide Harvest Survey for this area. The nearest survey area is Area W-Seward Peninsula and Norton Sound.

Table 11. Sport Fishing Trends, Gambell: 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 Gambell ²	Saltwater Angler Days Fished – Non-residents ³	Saltwater Angler Days Fished – Alaska Residents ³
2000	0	0	8	0	n/a	n/a
2001	0	0	8	0	n/a	n/a
2002	0	0	6	0	n/a	n/a
2003	0	0	7	0	n/a	n/a
2004	0	0	4	0	n/a	n/a
2005	0	0	5	0	n/a	n/a
2006	0	0	10	0	n/a	n/a
2007	0	0	7	0	n/a	n/a
2008	0	0	2	0	n/a	n/a
2009	0	0	7	0	n/a	n/a
2010	0	0	2	0	n/a	n/a

¹ Alaska Department of Fish and Game. (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 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.]

³ Alaska Department of Fish and Game. (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/sport_fishingsurvey/ (Accessed September 2011).

Subsistence Fishing

Yup'ik peoples of St. Lawrence Island are strongly dependent on subsistence and consider fishing an integral part of their culture. Traditional subsistence patterns depend upon location and seasonal availability of resources, such as whales, marine mammals, fish, caribou, and plants. Subsistence on the Island is largely based on the hunting of whales and sea mammals; fishing for pink and chum salmon, herring, crab, and halibut, as well as cod and whitefish when coastal sea ice forms; and birds and eggs form an important part of the diet.⁵² When hunting for bowhead whales, residents have historically used toggle-headed harpoons, lances, lines, and seal bladder and seal skin floats. Other tools used for subsistence fishing include scratching boards for attracting seals to breathing holes, bows, arrows, spears, spear throwers, bolas for taking birds, and snares. Fishing gear includes nets, traps made from branches and roots, and hooks.⁵³

According to one Yup'ik elder from Gambell, “I’m here today because my forefathers depended on marine mammals. That’s the source of food that we have. Everything my body needs is in the food chain. Fish, seals, walrus ... it’s good for you. So here in the cold climate, eating marine mammal matches our body needs.”⁵⁴ Pacific walrus, seals, whales, eiders, fish, and

⁵² Alaska Native Heritage Center (2008). *Inupiaq & St. Lawrence Island Yupik People – Who We Are*. Retrieved July 11, 2012 from http://www.alaskanative.net/en/main_nav/education/culture_alaska/inupiaq/.

⁵³ Ibid.

⁵⁴ Active, John (1999). Why Subsistence is a Matter of Cultural Survival: A Yupik Point of View. *Alaska Native Writers, Storytellers and Orators* (Expanded Edition). Ronald SPatz, ed. Alaska Quarterly Review.

shellfish are all seasonal sources of subsistence for many St. Lawrence Yup'ik residents living in both Gambell and Savoonga.⁵⁵

Data are not available regarding per capita subsistence harvest and the percentage of Gambell households that utilized various marine resources for subsistence purposes between 2000 and 2010 (Table 12). However, some data are available regarding annual subsistence harvests of salmon, halibut, and marine mammals during this time period. Between 2000 and 2010, harvest numbers were reported in 2005 only, when a small number of pink, chum, and coho salmon were reported harvested (Table 13). Gambell residents have also participated in subsistence halibut fishing. From 2003 to 2007, six or seven Subsistence Halibut Registration Certificates (SHARC) were issued each year to Gambell residents, while only one SHARC card was reportedly issued each year from 2008 to 2010. The only year in which data were reported regarding harvest was 2003, when all seven SHARC cards were returned and a total of 105 pounds of halibut were harvested for subsistence (Table 14).

By far the most important subsistence resources to local residents are marine mammals, especially walrus and polar bears. In 2010, Gambell residents harvested 509 walrus, representing 40% of all walrus taken in the state that year. Between 2000 and 2010, 60 polar bears were harvested for subsistence, representing 10.7% of polar bears taken during that time period. Each whale provides thousands of pounds of meat and “muktuk” (or blubber and skin), which is shared by all the people in the community. Portions of each whale are saved for celebrations at Nalukataq (the blanket toss or whaling feast), Thanksgiving, Christmas, and potlucks held throughout the year.⁵⁶ No information was reported by management agencies regarding subsistence harvest of beluga whale, sea otter, Steller sea lion, harbor seal, or spotted seal between 2000 and 2010 (Table 15).

⁵⁵ Bearing Sea Elders Advisory Group. (2011). *The Northern Bering Sea: Our Way of Life*. P.14.

⁵⁶ Alaska Eskimo Whaling Commission (n.d.) *Overview of the Alaska Eskimo Whaling Commission*. Retrieved at <http://www.bluediamondwebs.biz/Alaska-aewc-com/aboutus.asp> (Accessed June 27, 2012).

Table 12. Subsistence Participation by Household and Species, Gambell: 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 (pounds)
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	n/a	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, Gambell: 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	n/a	n/a	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	n/a	n/a
2002	1	n/a	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	n/a	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	4	4	n/a	1	1	22	n/a	n/a	n/a
2006	1	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2007	1	1	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	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). 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, Gambell: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	7	7	105
2004	7	n/a	n/a
2005	7	n/a	n/a
2006	6	n/a	n/a
2007	6	n/a	n/a
2008	1	n/a	n/a
2009	1	n/a	n/a
2010	1	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, Gambell: 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	705	4	n/a	n/a	n/a
2001	n/a	n/a	448	8	n/a	n/a	n/a
2002	n/a	n/a	662	21	n/a	n/a	n/a
2003	n/a	n/a	817	0	n/a	n/a	n/a
2004	n/a	n/a	383	0	n/a	n/a	n/a
2005	n/a	n/a	519	6	n/a	n/a	n/a
2006	n/a	n/a	469	12	n/a	n/a	n/a
2007	n/a	n/a	705	8	n/a	n/a	n/a
2008	n/a	n/a	625	0	n/a	n/a	n/a
2009	n/a	n/a	787	0	n/a	n/a	n/a
2010	n/a	n/a	509	1	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.