

Nightmute (NITE-myoot)

People and Place

*Location*¹

Nightmute is located on Nelson Island, in the Yukon-Kuskokwim Delta. It is located 18 miles upriver from Toksook Bay, and 100 miles west of Bethel, in the Bethel Census Area and Bethel Recording District. The City encompasses 97 square miles of land and 4.6 square miles of water.

*Demographic Profile*²

In 2010, there were 280 inhabitants in Nightmute, making it the 168th largest of 352 total Alaskan communities with recorded populations that year. The town first appeared in U.S. Census records in the 1940s with 78 inhabitants. Overall between 1990 and 2010, the population of Nightmute increased by 83%. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents increased by 26.9%, with an average annual growth rate of 1.7%. In 2010, a majority of Nightmute residents identified themselves as American Indian and Alaska Native (94.6%), along with 5% that identified as White and 0.4% identifying with two or more races. Also in 2010, 2.5% of Nightmute residents identified themselves as Hispanic. Individuals indentifying as White made up 0.3% less of the population in 2010 compared to 2000, and those identifying as American Indian and Alaska Natives made up 2.8% more of the population, while the percentage of individuals identifying with two or more races decreased between 2000 and 2010 by 2.5%. 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 Nightmute was 4.75, a slight increase from 4.43 persons per household in 2000, but an overall decrease from 5.2 persons per household in 1990. The total number of households in Nightmute increased over time, from 29 in 1990 to 47 in 2000, and 59 occupied housing units in 2010. Of the 61 housing units surveyed for the 2010 U.S. Census, 73.8% were owner-occupied, 30% were renter-occupied, and only 3.3% were vacant or used only seasonally. Between 1990 and 2010, no residents of Nightmute lived in group quarters.

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>.

In 2010, the gender makeup in Nightmute was 52.5% male and 47.5% female, only slightly more skewed toward males than the population of Alaska as a whole, which was 52% male and 48% female. The median age in Nightmute was 22.9 years in 2010, much lower than the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, the age groups 0-9 and 40-49 years had notably more males than females. There were slightly more women than men in age groups 10-19 and 20-29 years. Also in 2010, 8.7% of Nightmute residents were age 60 or older. The overall population structure of Nightmute in 2000 and 2010 is shown in Figure 2.

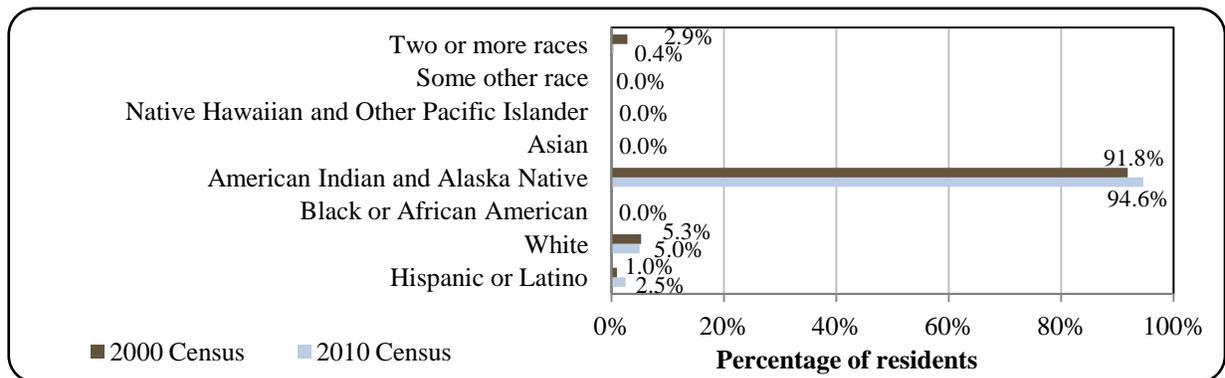
Table 1. Population in Nightmute from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	153	-
2000	208	-
2001	-	213
2002	-	224
2003	-	229
2004	-	233
2005	-	234
2006	-	238
2007	-	243
2008	-	248
2009	-	264
2010	280	-

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>.

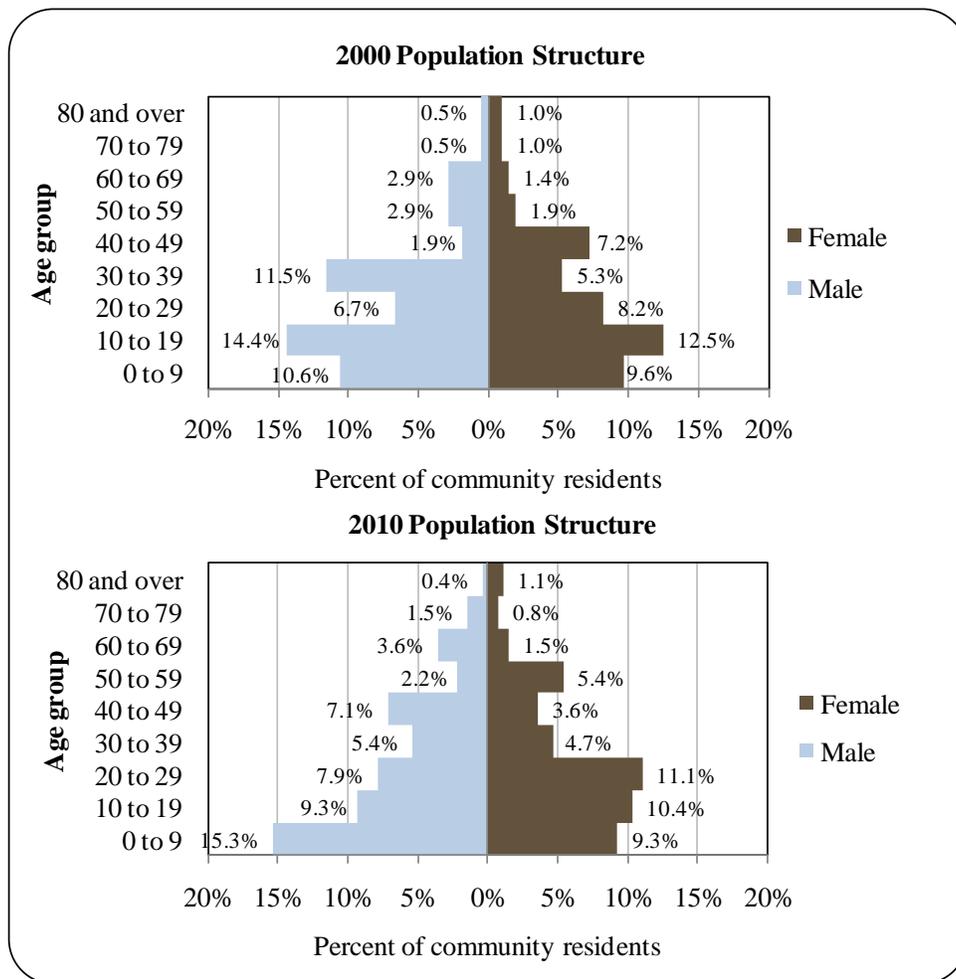
² Alaska Department of Labor. (2011). *Current population estimates for Alaskan Communities*. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

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



In terms of educational attainment, according to the 2006-2010 American Community Survey (ACS),³ 58% of Nightmute residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaska residents overall. Also in 2010, 25.5% of residents aged 25 and older were estimated to have less than a 9th grade education, compared to 3.5% of Alaska residents overall; 16.6% were estimated to have a 9th to 12th grade education but no diploma, compared to 5.8% of Alaska residents overall; 8.9% were estimated to have some college but no degree, compared to 28.3% of Alaska residents overall; 3.2% were estimated to have an Associate’s degree, compared to 8% of Alaska residents overall; 3.2% were estimated to have a Bachelor’s degree, compared to 17.4% of Alaska residents overall; and 0% were estimated to have a graduate or professional degree, compared to 9.6% of Alaska residents overall.

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



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.

History, Traditional Knowledge, and Culture

Nightmute is a Yup'ik Eskimo village. The people of Nelson Island are known as *Qaluyaarmiut*, or “dip net people.” The Qaluyaarmiut have lived on the Bering Sea coast for at least 2,000 years.⁴ In 1841-1842, a Russian naval officer, Lieutenant Lavrenty Zagoskin, was the first to explore the lower Yukon and briefly came into contact with the Qaluyaarmiut.⁵ Russian Orthodox missionaries established a mission on the Yukon River in 1845, and Moravian missionaries arrived in Bethel in 1885.⁶ Contact with outside people and customs became more consistent during the 1950s, when the Territorial Guard began sending volunteers to Bethel for two weeks of training each year. During this period, the indigenous population was exposed to disease, and tuberculosis became a major health problem in the area.⁷

The traditional fish camp for the people of Nightmute is called Umkumiut. In 1964, many residents relocated to the present site of Toksook Bay to more easily access cost-effective goods. Those that remained make up most of the current population of Nightmute.^{8,9} Because of the Village's relative isolation from outside influences, traditions and customs have been retained in Nightmute to a greater degree than in other parts of Alaska. Residents of the Village have an active subsistence lifestyle.¹⁰ The sale, importation, and possession of alcohol are banned in the community.¹¹

Natural Resources and Environment

Nightmute is located in a marine climate zone. Average annual precipitation is 22 inches, and snowfall averages 43 inches per year. Temperatures range between 41 and 57 °F in the summer, and 6 and 24 °F in the winter.¹²

Nightmute is located on Nelson Island, the second largest island within the Yukon Delta National Wildlife Refuge (NWR). The southern portion of the Island, where Nightmute is located, is low-lying and covered with small lakes and streams. The northern portion of the Island hosts more rugged terrain, with several peaks over 1,300 feet in elevation. The Bering Sea coast along the Yukon-Kuskokwim delta is characterized by sandy beaches that merge into active sand dunes greater than 100 feet in height. The dunes are particularly susceptible to erosion.¹³

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 Newtok Planning Group (n.d.). *A Brief History of the Settlement of Newtok and Village Relocation Efforts*. Retrieved January 19, 2012 from http://commerce.alaska.gov/dca/planning/pub/Newtok_History1.pdf.

⁶ Fienup-Riordan, Ann (1994). *Boundaries and Passages: Rule and Ritual in Yup'ik Eskimo Oral Tradition*. Norman: University of Oklahoma Press.

⁷ See footnote 5.

⁸ See footnote 4.

⁹ Nightmute Traditional Council (2004). *Action Plan*. Retrieved January 20, 2012 from <http://www.commerce.state.ak.us/dca/plans/Nightmute-GCP-2004.pdf>.

¹⁰ See footnote 4.

¹¹ Alaska Dept. of Public Safety (2011). *Local Option Restrictions*. Retrieved May 31, 2012 from <http://dps.alaska.gov/abc/restrictions.aspx>.

¹² See footnote 4.

¹³ U.S. Fish and Wildlife Service (2011). *Yukon Delta National Wildlife Refuge website*. Retrieved December 8, 2011 from <http://yukondelta.fws.gov/>.

The Yukon Delta NWR was established “to conserve fish and wildlife populations and habitats in their natural diversity, including, but not limited to shorebirds, seabirds, tundra swans, emperor, white-fronted and Cackling Geese, black brant and other migratory birds, salmon, muskoxen, and marine mammals; to fulfill treaty obligations; to provide the opportunity for continued subsistence uses; and to ensure water quality and necessary water quantity.” NWR lands are open to sport and subsistence hunting and fishing. The most productive wildlife habitat is the coastal region between Nelson Island and the Askinuk Mountains to the north.¹⁴

Natural hazards that have been identified to be present in the Bethel Census Area include flooding, earthquakes, and severe weather.¹⁵ Communities in the region are also suffering from severe erosion of both riverbanks and coastal shorelines, and are susceptible to tundra fires.^{16,17}

According to the Alaska Department of Environmental Conservation, there are no notable active environmental cleanup sites located in Nightmute as of May 2012.¹⁸

Current Economy¹⁹

Employment in Nightmute is provided by local government offices, local and regional Native corporations and non-profit organizations, the school, social services, commercial fishing, and construction.^{20,21} Between 2000 and 2010, Nightmute residents were most active in fisheries for halibut and herring, as well as some activity in salmon fisheries. The number of Nightmute residents holding state Commercial Fisheries Entry Commission (CFEC) permits was equal to 16% of the total local population in 2000, declining to 9% of the local population by 2010. Over the same period, the percentage of the local population holding crew licenses decreased from 10.5% in 2000 to 1% in 2010, and the number of local residents who were primary owners of fishing vessels decreased from 15% of the local population to 5% (see *Commercial Fisheries* section). Almost all families engage in subsistence fishing activities to supplement cash employment.²²

Based on household surveys for the 2006-2010 ACS,²³ in 2010, the per capita income in Nightmute was estimated to be \$12,198 and the median household income was estimated to be \$54,063. This represents an increase in per capita income, from \$9,396 reported in 2000, and an

¹⁴ Ibid.

¹⁵ 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>.

¹⁶ Climate Adaptation Knowledge Exchange (CAKE) (2011). *Relocating the Village of Newtok, Alaska due to Coastal Erosion*. Retrieved January 19, 2012 from <http://www.cakex.org>.

¹⁷ Village of Newtok (2008). *Local Hazards Mitigation Plan*. Retrieved January 19, 2012 from http://www.dced.state.ak.us/dca/planning/pub/Newtok_HMP.pdf.

¹⁸ Alaska Dept. of Environmental Conservation (n.d.). *List of Contaminated Sites*. Retrieved April 17, 2012 from <http://dec.alaska.gov/spar/csp/list.htm>.

¹⁹ Unless otherwise noted, all monetary data are reported in nominal values.

²⁰ See footnote 4.

²¹ 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/>.

²² See footnote 4.

²³ 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>.

increase in median household income, from \$35,938 reported in 2000. However, if inflation is taken into account by converting 2000 values to 2010 dollars,²⁴ real per capita income in 2000 (\$12,356) is shown to be similar to the 2010 income estimate, while the 2010 median household income estimate still shows an increase from real median household income in 2000 (\$47,258). In 2010, Nightmute ranked 239th of 305 Alaskan communities with per capita income data that year, and 105th in median household income, out of 299 Alaskan communities with household income data.

Nightmute's small population size may have prevented the ACS from accurately portraying economic conditions.²⁵ 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 Nightmute in 2010 is \$6,784.²⁶ This estimate is lower than the 2000 per capita income reported in by the U.S. Census, providing additional evidence that per capita income in Nightmute did not increase between 2000 and 2010. The fact that per capita income did not increase over the 2000-2010 period is reflected in the fact that the community was recognized as "distressed" by the Denali Commission in 2011,²⁷ 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, 65.6% of Nightmute residents aged 16 or older were estimated in the civilian labor force, compared to 68.8% of Alaskans estimated to be in the civilian labor force statewide. In the same year, 23.8% of local residents were estimated to be living below the poverty line in 2010, compared to 9.5% of Alaska residents overall, and the unemployment rate was estimated to be 8%, compared to a statewide unemployment rate of 5.9%. An alternative estimate of unemployment is based on the ALARI database, which indicates that the 2010 unemployment rate in Nightmute was 18.5%, compared to a statewide unemployment rate estimate of 11.5%.²⁸

Also based on the 2006-2010 ACS, 52.1% of the Nightmute workforce was estimated to be employed in the public sector, along with 40.3% in the private sector, 5.6% self-employed, and 2.1% unpaid family workers. Of the 144 people aged 16 and over that were estimated to be employed in the civilian labor force, the greatest number were estimated to be working in public administration (30.6%), retail trade (25.7%), and educational services, health care, and social assistance (21.5%). None of the civilian labor force was estimated to be working in agriculture, forestry, fishing, hunting, and mining in 2010. However, the number of individuals employed in farming, fishing, and forestry industries is probably underestimated in census statistics; fishermen may hold another job and characterize their employment accordingly. This

²⁴ 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>).

²⁵ 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.

²⁶ See footnotes 21 and 23.

²⁷ Denali Commission (2011). *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.

²⁸ See footnote 21.

information about employment by industry is presented in Figure 3, and employment is broken down by occupation in Figure 4.

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

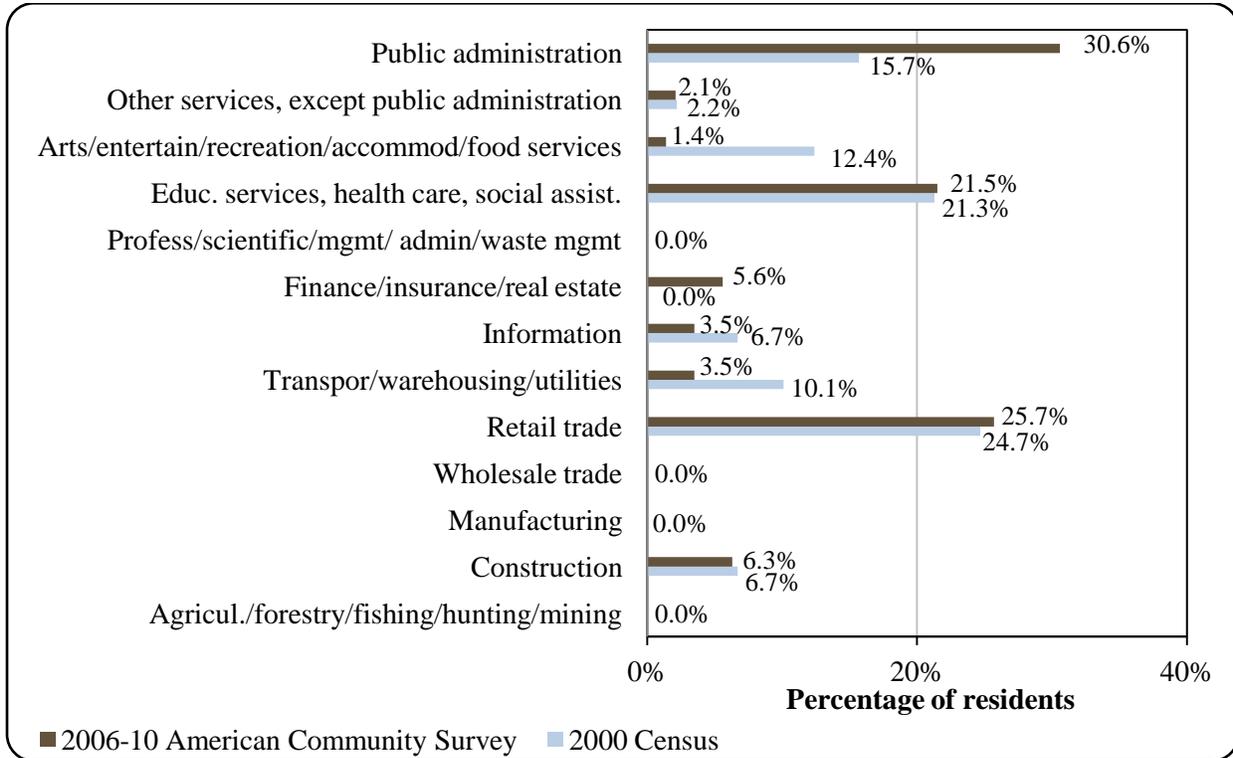
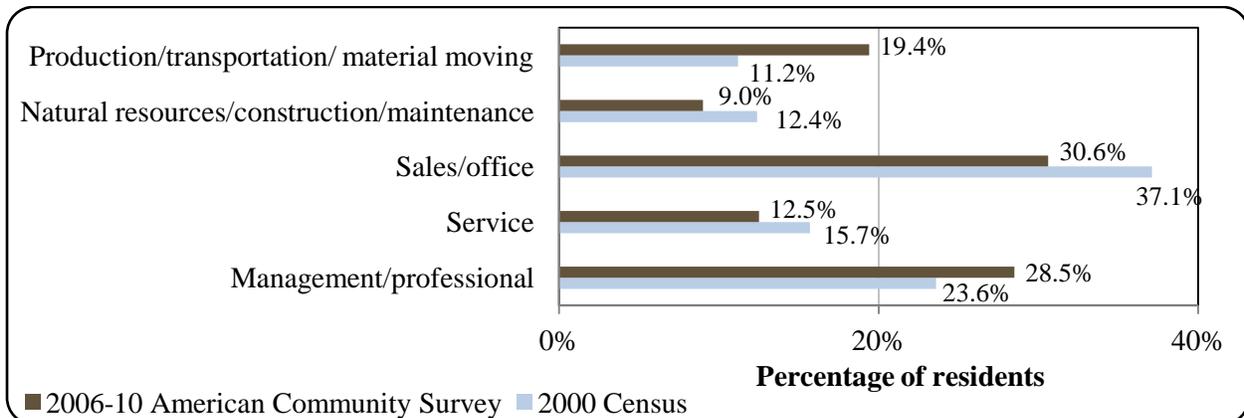


Figure 4. Local Employment by Occupation in 2000-2010, Nightmute (U.S. Census).



An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 124 employed residents in Nightmute in 2010, of which 61.3% were employed in local government, 12.9% in trade, transportation, and utilities, 8.9% in financial activities, 5.6% in education and health services, 4.8% in professional and business services, 0.8% in manufacturing, 0.8% in natural resources and mining, 0.8% in leisure

and hospitality, 0.8% in state government, and 3.2% in other industries.²⁹ As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents' activity in the subsistence economy.

Governance

Nightmute was incorporated in 1974 as a 2nd Class City and is not located in an organized borough. The City has a Strong Mayor form of government, with a seven-person city council, including the mayor, a nine-person advisory school board, and several municipal employees. The City administers a 2% sales tax.³⁰ In addition to sales tax revenues, other locally-generated income sources in Nightmute include building leases, building and equipment rentals, water and sewer service fees, airport maintenance contracts from the State, bingo/pull tabs receipts, and fuel sales in the last few years of the decade. Outside revenue sources during the 2000-2010 period included various shared revenues from state and federal sources, as well as small grants in some years. The community received approximately \$25,000 per year from the State Revenue Sharing program between 2000 and 2003, and just over \$100,000 per year from the Community Revenue Sharing program in 2009 and 2010. Some shared state funds were received from fisheries-related tax refunds (see the *Fisheries-Related Revenue* section). No information was reported about fisheries-related grants received by the City during the 2000-2010 period. The increase in total municipal revenues in the later years in the decade can be explained in part by the large Community Revenue Sharing contributions as well as a large increase in local fuel sales. Information about selected aspects of Nightmute's revenue sources is presented in Table 2.

Nightmute 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 Bureau of Indian Affairs (BIA), is the Native Village of Nightmute. The Native village corporation is Chinuruk, Incorporated, which manages 69,120 acres of land. The regional Native corporation to which Nightmute belongs is the Calista Corporation.³¹

Nightmute is also a member of the Association of Village Council Presidents (AVCP), a tribal non-profit organization headquartered in Bethel that serves communities in the Yukon-Kuskokwim Delta. At the request of villages, AVCP provides social services, human development and culturally relevant programming to "promote tribal self-determination and self-governance and to work to protect tribal culture and traditions."³² The AVCP 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.³³ AVCP is made up of 56 villages and 45 village corporations.³⁴

²⁹ 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/>.

³⁰ 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.

³¹ Ibid.

³² Association of Village Council Presidents (n.d.). *AVCP homepage*. Retrieved December 6, 2011 from www.avcp.org.

³³ 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>.

³⁴ Calista Corporation (2011). *Our Communities: The Villages of the Calista Region*. Retrieved February 6, 2012 from <http://www.calistacorp.com/shareholders/communities>.

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

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Nightmute 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	\$232,429	\$11,157	\$26,566	n/a
2001	\$207,886	\$5,644	\$25,543	n/a
2002	\$254,524	\$4,929	\$25,546	n/a
2003	\$235,124	n/a	\$25,745	n/a
2004	\$360,011	\$1,628	n/a	n/a
2005	\$284,746	\$6,464	n/a	n/a
2006	\$147,514	\$2,772	n/a	n/a
2007	\$212,406	\$6,319	n/a	n/a
2008	\$419,821	\$4,866	\$108,703	n/a
2009	\$736,932	\$8,500	\$109,240	n/a
2010	\$528,577	\$4,484	n/a	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.

Infrastructure

Connectivity and Transportation

Nightmute is not connected to the rest of Alaska by road, and is primarily accessible by air or water. A state-owned, 1,600 feet long by 35 feet wide gravel airstrip provides air access.³⁵ Era Aviation provides scheduled commercial service to Nightmute. The price of a roundtrip ticket from Nightmute to Anchorage in early June of 2012 was \$578.³⁶ A seaplane base is also available. Fishing boats, skiffs, snowmobiles, and ATVs are used for local transportation and subsistence activities. Winter trails are marked to nearby villages of Toksook Bay, Cak'caa, and

³⁵ See footnote 30.

³⁶ These prices were calculated on November 21, 2011 using kayak.com.

Baird Inlet. Nightmute does not have docking facilities. Cargo and supplies are lightered up the Tuqsuk River during summer months.³⁷

Facilities

A diesel power plant, operated by the Alaska Village Electric Cooperative (AVEC), provides electricity in Nightmute. Water is derived from a community well source and chlorinated. The City of Nightmute provides a small water facility which serves as a central watering point for the City. Honeybuckets are used in Nightmute. The City provides water and sewer haul services. A sewage pumper and sewage lagoon are used for sewage treatment. The school has its own sewage lagoon.³⁸

Community facilities include a city jail and city/community hall. The school offers public use of its library. Safety services are provided by City Village Police Officers (VPO) in Nightmute and state troopers stationed in Bethel. Fire and rescue services are provided by a volunteer fire department and a city ambulance. Phone and internet service are provided in Nightmute, but cable service is not available.³⁹

In 2004, the Nightmute Traditional Council reported that a variety of projects were underway to make improvements to facilities and services in Nightmute, including airport and road improvements, development of housing, addition of utility poles, consolidation of the AVEC tank farm, improved internet service, and feasibility studies related to solid waste and water and sewer improvements. They also noted that they were pursuing establishment of a fishery support center in partnership with the Coastal Villages Region Fund (CVRF), the Community Development Quota (CDQ) entity to which Nightmute belongs (see *History and Evolution of Fisheries* section below).⁴⁰

Medical Services

Medical services are provided by the Nightmute Health Clinic, operated by the Yukon-Kuskokwim Health Corporation. The Clinic is a Community Health Aide Program site. Emergency Services have coastal and air access. Emergency services are provided by the Community Health Aide.⁴¹ The nearest hospital is located in Bethel.

Educational Opportunities

Nightmute has one school. The Nightmute School offers a pre-school through 12th grade education. As of 2011, there were 9 teachers and 102 students attending the school.⁴²

³⁷ 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.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Nightmute Traditional Council (2004). *Action Plan*. Retrieved January 20, 2012 from <http://www.commerce.state.ak.us/dca/plans/Nightmute-GCP-2004.pdf>.

⁴¹ See footnote 37.

⁴² Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Harvest of marine resources has been important to residents of the Nightmute area since prehistory. Yup'ik Eskimo people were historically very mobile, following the migration and seasonal availability of subsistence resources.⁴³ Subsistence fishing and hunting continue to be an important supplement to commercial fishing and other cash employment for Nightmute residents.⁴⁴ Between 2000 and 2010, residents of Nightmute were involved in commercial fisheries for herring, halibut and salmon (Table 4).

Nightmute is located near the Kuskokwim River. Commercial harvest of salmon first took place in the Kuskokwim area in 1913, although in the early years it was a quasi-commercial fishery with limited distribution. Harvest levels continued to increase until the mid-1990s, after which time fishing effort, harvest levels and salmon prices decreased. Current management is focused on sustainability of salmon runs, ensuring subsistence needs are met, and with a precautionary approach, providing opportunity for commercial harvest of available surpluses.⁴⁵ However, the salmon resource is not as easily accessible for communities along the Bering Sea coast as in other regions of Alaska.⁴⁶

Commercial catch of herring for human consumption began in 1878 in Alaska, while harvest of herring for bait began around 1900, and herring sac roe fisheries developed in the late 1970s. There are six commercial gillnet sac roe districts along the Yukon/Kuskokwim coast, including Nelson Island and Nunivak Island. However, harvests of herring have been declining in this region in recent years, in part due to lack of processing capacity in the area. A significant subsistence herring harvest also occurs at Nelson Island.⁴⁷

Commercial exploitation of halibut first extended into the Bering Sea region in 1928 after development of diesel engines, which allowed fishing vessels to undertake longer trips.⁴⁸ Today, Pacific halibut fisheries are managed under the International Pacific Halibut Commission.

The coastal area around Nelson Island is encompassed by Federal Statistical and Reporting Area 514, Pacific Halibut Fishery Regulatory Area 4E, and the Bering Sea Sablefish Regulatory Area. Nightmute is a member of the Coastal Villages Region Fund (CVRF), a Community Development Quota (CDQ) group that promotes employment opportunities for residents as well as participation in the Bering Sea crab and groundfish fisheries.⁴⁹ The community is not eligible to participate in the Community Quota Entity program.

⁴³ Alaska Native Heritage Center (n.d.). *Yup'ik & Cup'ik - Who We Are website*. Retrieved December 8, 2011 from http://www.alaskanative.net/en/main_nav/education/culture_alaska/yupik/.

⁴⁴ See footnote 37.

⁴⁵ Clark, McGregor, Mecum, Krasnowski and Carroll (2006). Kuskokwim Commercial Salmon Fishery. In *The Commercial Salmon Fishery in Alaska*. Alaska Dept. of Fish and Game, Pgs. 105-146. Retrieved December 28, 2011 from http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1_p4.pdf.

⁴⁶ Woodby, Doug, Dave Carlile, Shareef Siddeek, Fritz Funk, John H. Clark, and Lee Hulbert (2005). *Commercial Fisheries of Alaska*. Alaska Dept. of Fish and Game, Special Publication No. 05-09. Retrieved December 29, 2011 from <http://www.adfg.alaska.gov/FedAidPDFs/sp05-09.pdf>.

⁴⁷ Ibid.

⁴⁸ Thompson, William F. and Norman L. Freeman (1930). *History of the Pacific Halibut Fishery*. Report of the International Fisheries Commission. Number 5. Retrieved June 1, 2012 from <http://www.iphc.int/publications/scirep/Report0005.pdf>.

⁴⁹ Coastal Villages Region Fund (n.d.). *Homepage*. Retrieved December 12, 2011 from <http://www.coastalvillages.org/>.

Processing Plants

ADF&G's 2010 Intent to Operate list does not list a registered processing plant in Nightmute. However, processing facilities operated by Coastal Villages Seafood, LLC, a subsidiary of CVRF, were listed in several nearby villages, including Mekoryuk, Hooper Bay, Kipnuk, and Quinhagak.

Fisheries-Related Revenue

On average between 2000 and 2010, the City of Nightmute received \$360 per year from fisheries-related taxes and fees. These revenue sources include a raw fish tax and the Shared Fisheries Business Tax. Table 3 shows the annual revenue for these categories.⁵⁰

Commercial Fishing

Between 2000 and 2010, Nightmute residents were most engaged in fisheries for halibut and herring, and also participated to a lesser degree in salmon fisheries. During this period, local residents participated in state and federal fisheries as permit and quota share holders, crew license holders, and vessel owners. The number of Nightmute residents holding state Commercial Fisheries Entry Commission (CFEC) permits was equivalent to 16% of the total local population in 2000, declining to 9% of the local population by 2010.

In 2010, 25 Nightmute residents held a total of 32 commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC). These included 10 halibut permits (6 statewide hand-troll permits and 5 statewide longline permits for vessels under 60 feet in length), 20 herring permits (Nelson Island herring roe and foot/bait gillnet fishery, and Nunivak Island herring roe and foot/bait gillnet fishery), and 2 salmon permits (Bristol Bay drift gillnet and Bristol Bay set gillnet). Of these, in 2010, 50% of halibut permits were actively fished (5 out of 10), 50% of salmon permits were actively fished (the drift gillnet permit was active), and 0% of herring and permits were actively fished.

The number of halibut permits and halibut permit holders decreased by half between 2000 and 2010, and the number of active permits decreased by two-thirds, from 15 in 2000 to 5 in 2010. The number of herring permits held remained stable between 2000 and 2010, although the number that were actively fished declined steadily, from 13 in 2000 to zero by 2007. The number of salmon permits held decreased steadily from six in 2000 to two in 2010, and the number of permit holders followed a similar trend. No Federal Fisheries Permits (FFP) or federal License Limitation Program permits (LLP) were issued to Nightmute residents between 2000 and 2010. This information about CFEC, FFP, and LLP permits is presented in Table 4.

In 2000 and 2001, 1,072 halibut quota shares were held by Nightmute residents in the federal halibut catch share fishery, but no information was available about number of quota share holders or the halibut individual fishing quota (IFQ) allotment associated with the quota shares. Between 2000 and 2010, no quota share accounts or quota shares were held by Nightmute residents in federal catch share fisheries for sablefish or crab. Information about federal catch share participation is presented in Tables 6 through 8.

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.

In 2010, 2 Nightmute residents held crew licenses, a significant decrease from 22 licenses held in the year 2000. The number of Nightmute residents that were the primary owner of a fishing vessel decreased between 2000 and 2010, from 31 in 2000 to 13 in 2010. The number of vessels homeported in Nightmute followed the same trend, with 27 in 2000 and only 10 in 2010. These characteristics of the commercial fishing sector are presented in Table 5.

In 2010, Nightmute vessel owners landed 22,371 net pounds of halibut, earning \$69,869 in ex-vessel revenue. In 2006, the last year during the 2000-2010 period in which a herring permit was actively fished by a community member, Nightmute vessel owners landed 129,240 net pounds of herring with a total ex-vessel revenue of \$7,237. Information about salmon landings and revenue are considered confidential throughout the 2000-2010 period due to the small number of participants. Information about landings and ex-vessel revenue generated by Nightmute vessel owners is presented in Table 10. Since no fish buyers or shore-side processing facilities were present in Nightmute between 2000 and 2010 (Table 5), no local landings or ex-vessel revenue were reported (Table 9).

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	\$573	\$500	\$102	n/a	\$91	\$100	n/a	n/a	n/a	n/a	\$277
Shared Fisheries											
Business Tax ¹	\$573	\$451	\$86	\$112	\$91	\$227	\$260	\$138	\$100	\$85	\$90
Fisheries Resource											
Landing Tax ¹	n/a	\$101									
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 revenue⁴</i>	<i>\$1,146</i>	<i>\$951</i>	<i>\$188</i>	<i>\$112</i>	<i>\$182</i>	<i>\$327</i>	<i>\$260</i>	<i>\$138</i>	<i>\$100</i>	<i>\$85</i>	<i>\$468</i>
<i>Total municipal revenue⁵</i>	<i>\$232,429</i>	<i>\$207,886</i>	<i>\$254,524</i>	<i>\$235,124</i>	<i>\$360,011</i>	<i>\$284,746</i>	<i>\$147,514</i>	<i>\$212,406</i>	<i>\$419,821</i>	<i>\$736,932</i>	<i>\$528,577</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.

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Table 4. Permits and Permit Holders by Species, Nightmute: 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	21	18	16	16	10	11	17	17	14	11	10
	Fished permits	15	12	7	7	4	8	10	10	8	7	5
	% of permits fished	71%	67%	44%	44%	40%	73%	59%	59%	57%	64%	50%
	Total permit holders	21	17	16	16	10	11	17	16	14	11	10
Herring (CFEC) ²	Total permits	18	18	18	19	18	18	19	19	19	20	20
	Fished permits	13	8	6	8	7	6	6	0	0	0	0
	% of permits fished	72%	44%	33%	42%	39%	33%	32%	0%	0%	0%	0%
	Total permit holders	19	19	18	19	18	19	19	19	19	20	21

Table 4 cont'd. Permits and Permit Holders by Species, Nightmute: 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	6	6	6	6	3	3	4	2	3	2	2
	Fished permits	3	3	1	2	0	1	2	0	2	2	1
	% of permits fished	50%	50%	17%	33%	0%	33%	50%	0%	67%	100%	50%
	Total permit holders	8	6	6	6	3	3	4	2	4	3	2
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>45</i>	<i>42</i>	<i>40</i>	<i>41</i>	<i>31</i>	<i>32</i>	<i>40</i>	<i>38</i>	<i>36</i>	<i>33</i>	<i>32</i>
	<i>Fished permits</i>	<i>31</i>	<i>23</i>	<i>14</i>	<i>17</i>	<i>11</i>	<i>15</i>	<i>18</i>	<i>10</i>	<i>10</i>	<i>9</i>	<i>6</i>
	<i>% of permits fished</i>	<i>69%</i>	<i>55%</i>	<i>35%</i>	<i>41%</i>	<i>35%</i>	<i>47%</i>	<i>45%</i>	<i>26%</i>	<i>28%</i>	<i>27%</i>	<i>19%</i>
	<i>Permit holders</i>	<i>34</i>	<i>29</i>	<i>29</i>	<i>30</i>	<i>24</i>	<i>26</i>	<i>28</i>	<i>27</i>	<i>27</i>	<i>27</i>	<i>25</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 Nightmute: 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 Nightmute ²	Total Net Pounds Landed In Nightmute ^{2,5}	Total Ex-Vessel Value Of Landings In Nightmute ^{2,5}
2000	22	0	0	31	27	0	0	\$0
2001	20	0	0	21	19	0	0	\$0
2002	18	0	0	21	18	0	0	\$0
2003	18	0	0	22	17	0	0	\$0
2004	7	0	0	15	12	0	0	\$0
2005	15	0	0	18	17	0	0	\$0
2006	12	0	0	24	22	0	0	\$0
2007	5	0	0	19	18	0	0	\$0
2008	6	0	0	15	13	0	0	\$0
2009	4	0	0	12	10	0	0	\$0
2010	2	0	0	13	10	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 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 Nightmute: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	0	1,072	0
2001	0	1,072	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 Nightmute: 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 Nightmute: 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 Nightmute: 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.

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

	<i>Total Net Pounds¹</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	-	-	-	-	-	-	-	-	-	-	-
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	6,514	8,689	6,705	6,073	3,091	19,207	20,902	26,855	20,597	12,353	22,371
Herring	177,456	217,350	275,163	275,972	324,071	232,149	129,240	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	-	-	-	-	-	-	-	-	-
<i>Total²</i>	<i>183,970</i>	<i>226,039</i>	<i>281,868</i>	<i>282,045</i>	<i>327,162</i>	<i>251,356</i>	<i>150,142</i>	<i>26,855</i>	<i>20,597</i>	<i>12,353</i>	<i>22,371</i>
	<i>Ex-vessel Value (nominal U.S. dollars)</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	-	-	-	-	-	-	-	-	-	-	-
Finfish	-	-	-	-	-	-	-	-	-	-	-
Halibut	\$8,143	\$10,411	\$10,162	\$7,595	\$3,824	\$40,970	\$77,918	\$116,062	\$80,538	\$26,669	\$69,869
Herring	\$17,268	\$10,868	\$14,308	\$14,903	\$34,352	\$12,304	\$7,237	-	-	-	-
Other Groundfish	-	-	-	-	-	-	-	-	-	-	-
Other Shellfish	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	-	-	-	-	-	-	-	-	-
Salmon	-	-	-	-	-	-	-	-	-	-	-
<i>Total²</i>	<i>\$25,411</i>	<i>\$21,279</i>	<i>\$24,470</i>	<i>\$22,498</i>	<i>\$38,176</i>	<i>\$53,274</i>	<i>\$85,155</i>	<i>\$116,062</i>	<i>\$80,538</i>	<i>\$26,669</i>	<i>\$69,869</i>

Note: Cells showing – indicate that the data are considered confidential.

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

Between 2000 and 2010, there were no active sport fish guide businesses or licensed sport fish guides in Nightmute. In 2009, five sportfishing licenses were sold in the City, but in general no licenses were sold locally between 2000 and 2010. Between 2000 and 2010, Nightmute residents purchased between 5 and 30 sportfishing licenses (irrespective of point of sale).

The Alaska Statewide Harvest Survey,⁵¹ conducted by ADF&G between 2000 and 2010, did not provide information about species targeted by private anglers in Nightmute. No kept/release log book data were reported for fishing charters out of Nightmute between 2000 and 2010.⁵² Nightmute is located within Alaska Sport Fishing Survey Area V – Kuskokwim River and Bay Drainages. Information is available about both saltwater and freshwater sportfishing activity at this regional scale. Between 2000 and 2010, saltwater sportfishing activity was minimal, with between zero and 28 non-Alaska resident angler days fished per year, and between zero and 108 Alaska resident angler days fished per year. A majority of sportfishing activity occurred in freshwater, with non-Alaska resident anglers fishing consistently more angler days (12,624 – 17,582 angler days per year) than Alaska resident anglers (5,166 – 9,152 angler days per year). This information about the sportfishing sector in and near Nightmute is displayed in Table 11.

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

Year	Active Sport Fish Guide Businesses¹	Sport Fish Guide Licenses¹	Sport Fishing Licenses Sold to Residents²	Sport Fishing Licenses Sold in Nightmute²
2000	0	0	17	0
2001	0	0	5	0
2002	0	0	12	0
2003	0	0	6	0
2004	0	0	11	0
2005	0	0	11	0
2006	0	0	30	0
2007	0	0	19	0
2008	0	0	15	0
2009	0	0	13	5
2010	0	0	19	0

⁵¹ 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/sportfishingsurvey/> (Accessed September 2011).

⁵² Alaska Department of Fish and Game (2011). *Alaska sport fish charter logbook database, 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.]

Table 11 cont'd. Sport Fishing Trends, Nightmute: 2000-2010.

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	27	13	13,388	6,602
2001	0	0	16,437	4,236
2002	0	0	14,583	6,062
2003	28	63	16,923	7,355
2004	0	15	16,239	9,152
2005	19	18	13,725	5,685
2006	0	0	14,773	7,616
2007	0	0	13,390	7,816
2008	0	108	17,582	8,172
2009	0	0	12,625	5,166
2010	0	0	14,033	5,422

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/sportfishingsurvey/> (Accessed September 2011).

Subsistence Fishing

Historically, Yup'ik Eskimos along the Bering Sea coast harvested herring, marine mammals, Pacific halibut, salmon, flounder, and a variety of freshwater fish species.⁵³ Traditional dried herring is an important protein source for residents of Bering Sea communities such as Nightmute, where salmon are not as readily available as in other regions.⁵⁴ Subsistence harvest remains a fundamental aspect of Nightmute's local economy and culture today.⁵⁵

No information was reported by ADF&G between 2000 and 2010 regarding per capita subsistence harvest or the percentage of Nightmute households utilizing various marine resources for subsistence purposes (Table 12). However, a 1990 subsistence survey conducted by ADF&G found that 67% of Nightmute households harvested herring and herring sac roe for subsistence purposes, and 100% of Nightmute households used these resources, indicating sharing of herring and sac roe between households. In 1990, 35,065 pounds of herring were

⁵³ Fienup-Riordan, A. 1994. *Boundaries and Passages: Rule and Ritual in Yup'ik Eskimo Oral Tradition*. Norman: University of Oklahoma Press.

⁵⁴ Woodby, Doug, Dave Carlile, Shareef Siddeek, Fritz Funk, John H. Clark, and Lee Hulbert (2005). *Commercial Fisheries of Alaska*. Alaska Dept. of Fish and Game, Special Publication No. 05-09. Retrieved December 29, 2011 from <http://www.adfg.alaska.gov/FedAidPDFs/sp05-09.pdf>.

⁵⁵ 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.

harvested by Nightmute residents for subsistence purposes, for a per capita harvest of 215 pounds.⁵⁶

Information was reported by ADF&G regarding both subsistence salmon permits and Subsistence Halibut Registration Certificates (SHARC) issued in Nightmute during the 2000-2010 period. Between 2000 and 2008, the number of subsistence salmon permits issued to Nightmute households varied between 46 and 68 per year. Subsistence salmon harvest was relatively low compared to communities along the Kuskokwim and Yukon Rivers, and areas further south in Alaska. In 2000, six salmon permits were returned, and sockeye were the most heavily harvested salmon species. This information is presented in Table 13. Between 2003 and 2010, the number of SHARC cards issued to Nightmute residents declined from 29 to 2. In 2003, 18 SHARC cards were fished with a total of 6,634 pounds harvested. In 2009, 1 permit was fished, and a total of 126 pounds of halibut were reported harvested (Table 14).

No information was reported by management agencies regarding subsistence harvest of marine mammals by Nightmute residents during the 2000-2010 period (Table 15). Likewise, no information was reported about total pounds of marine invertebrates or non-salmon fish harvested for subsistence purposes in Nightmute (Table 13).

Additional Information

Nelson Island was named after Edward W. Nelson, the man who conducted the first detailed exploration of the area in 1878-1879.⁵⁷

Table 12. Subsistence Participation by Household and Species, Nightmute: 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).

⁵⁶ 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).

⁵⁷ Newtok Planning Group (n.d.). *A Brief History of the Settlement of Newtok and Village Relocation Efforts*. Retrieved January 19, 2012 from http://commerce.alaska.gov/dca/planning/pub/Newtok_History1.pdf.

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Nightmute: 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	67	6	8	2	2	n/a	71	n/a	n/a
2001	67	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2002	68	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	68	3	4	15	n/a	n/a	20	n/a	n/a
2004	46	1	n/a	n/a	n/a	n/a	10	n/a	n/a
2005	46	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	46	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2007	46	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2008	50	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, 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, Nightmute: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	29	18	6,634
2004	29	12	882
2005	31	23	4,496
2006	15	11	4,246
2007	15	10	1,642
2008	8	2	168
2009	7	1	126
2010	2	1	60

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, Nightmute: 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.