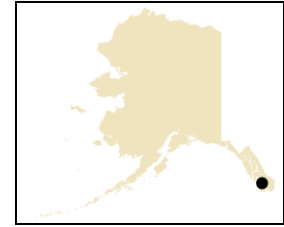


Thorne Bay



People and Place

*Location*¹

Thorne Bay is 47 air miles northwest of Ketchikan on the east coast of Prince of Wales Island. On the island road system, it lies 60 miles from Hollis and 36 miles east of the Klawock Junction. Thorne Bay is located in the Prince of Wales-Hyder Census Area and is not located within an organized Borough. The community encompasses 25.5 square miles of land and 4.8 square miles of water.

*Demographic Profile*²

In 2010, there were 471 inhabitants in Thorne Bay, making it the 125th largest of 352 total Alaskan communities with recorded populations that year. Between 2000 and 2009, the population of Thorne Bay decreased by 23.88%, with an average annual growth rate of -1.85% indicating a moderate rate of decline. The change in population from 1990 to 2010 is provided in Table 1. In a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders estimated that approximately 50 people come to Thorne Bay each year as seasonal workers or transients between April and September, with the population reaching its annual peak in August each year. This could account for the difference seen between the Alaska Department of Labor 2009 estimate and the U.S. 2010 Census count.

A majority of Thorne Bay residents identified themselves as White in 2010 (91.9%). Other ethnic groups present in Thorne Bay in that year included: two or more races (4.2%), some other race (0.4%), Native Hawaiian and Other Pacific Islander (0.4%), Asian (0.6%), American Indian and Alaska Native (2.1%), Black or African American (0.2%), and Hispanic or Latino (1.7%). Between 2000 and 2010, there were slight increases in the percentages of the population identifying themselves as two or more races, Native Hawaiian and Other Pacific Islander, Asian, Black or African American, and Hispanic or Latino. During the same period, there were decreases in the percentages of the population identifying themselves as some other race, American Indian and Alaska Native, and White. Changes in racial and ethnic composition from 2000 to 2010 are shown in Figure 1.

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>.

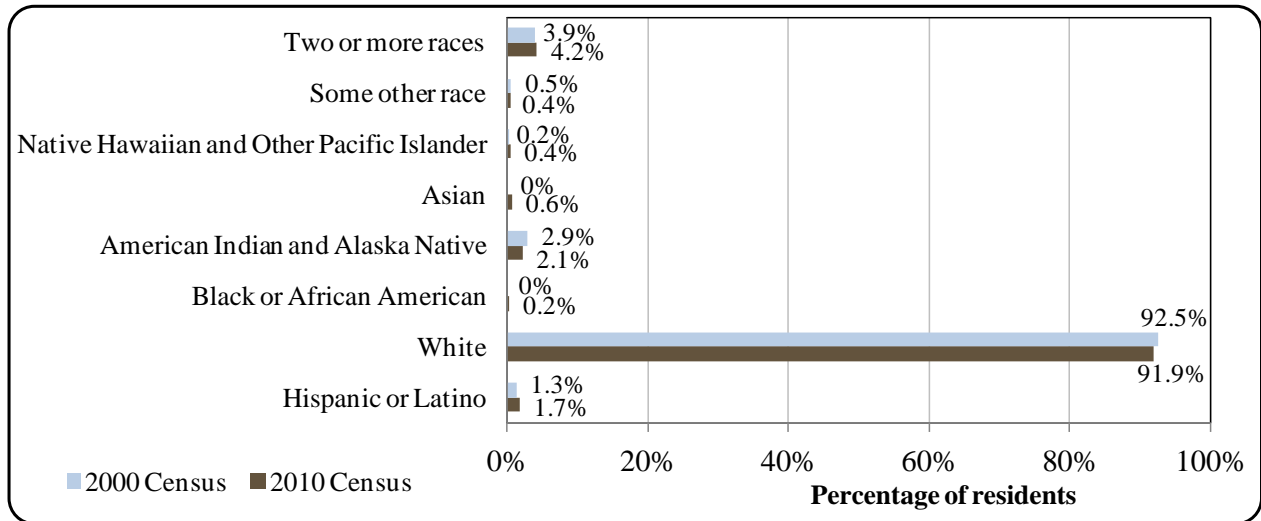
Table 1. Population in Thorne Bay from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Dept. of Labor Estimate of Permanent Residents ²
1990	569	-
2000	557	-
2001	-	521
2002	-	501
2003	-	481
2004	-	499
2005	-	486
2006	-	481
2007	-	465
2008	-	439
2009	-	424
2010	471	-

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>.

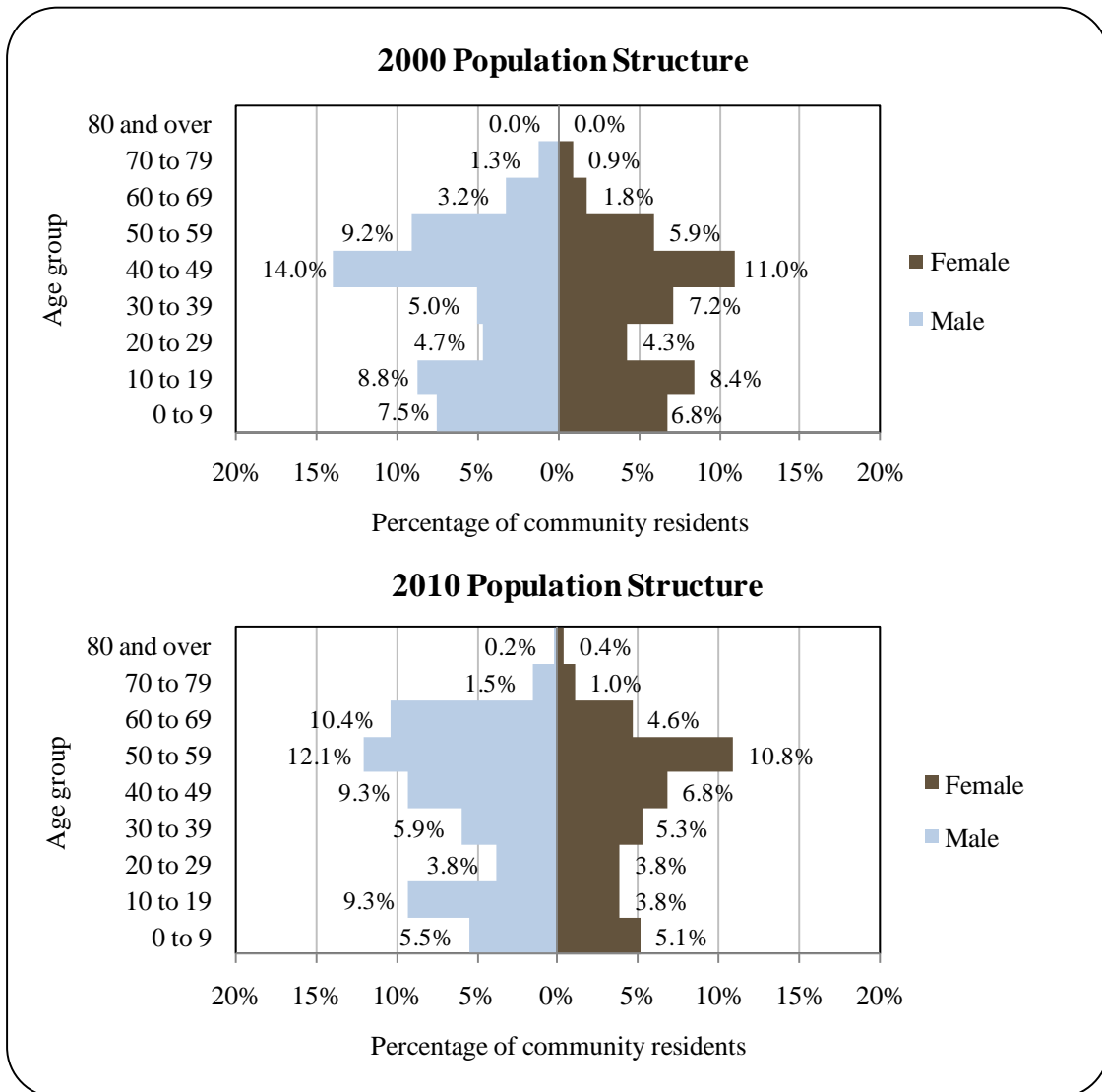
Figure 1. Racial and Ethnic Composition, Thorne Bay: 2000-2010 (U.S. Census).



The average household size in Thorne Bay in 2010 was 2.18, a decrease from 2.9 persons per household in 1990 and 2.54 in 2000. The total number of households in Thorne Bay increased from 203 in 1990 to 219 in 2000, then decreased slightly to 214 households by 2010. Of the 354 housing units surveyed for the 2010 Decennial Census, 156 were owner-occupied, 58 were renter-occupied, and 140 were vacant or used only seasonally. There was one resident of Thorne Bay reported to be living in group quarters in 1990 and four residents living in group quarters in 2010.

In 2010, the gender makeup in Thorne Bay was 58.2% male and 41.8% female, very similar to the state as a whole (52% male, 48% female). The median age was estimated to be 44.4 years, higher than both the U.S. national average of 36.8 years and the median age for Alaska, 33.8 years. In 2010, the largest percentage of residents fell within the age group 50 to 59 years old, with the next largest percentage falling within the age group 40-49 years old. Relatively few individuals were age 70 or older. The overall population structure of Thorne Bay in 2000 and 2010 is shown in Figure 2.

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



According to the 2006-10 American Community Survey (ACS),³ in terms of educational attainment, 93.1% of Thorne Bay residents aged 25 and over were estimated to hold a high school diploma or higher degree in 2010, compared to 90.7% of Alaskan residents overall. Also in 2010, 6.9% of residents aged 25 and older were estimated to have a ninth to 12th grade education but no diploma, compared to 5.8% of Alaskan residents overall; 31% were estimated to have a high school diploma or equivalent, compared to 27.4% of Alaskan residents overall; 22.8% were estimated to have some college but no degree, compared to 28.3% of Alaskan residents overall; 10.4% were estimated to have an Associate's degree, compared to 8% of Alaskan residents overall; 20.1% were estimated to have a Bachelor's degree, compared to 17.4% of Alaskan residents overall, and 8.8% were estimated to have a graduate or professional degree, compared to 9.6% of Alaskan residents overall.

*History, Traditional Knowledge, and Culture*⁴

The bay itself was named after Frank Manley Thorn, superintendent of the U.S. Coast & Geodetic Survey from 1885 through 1889. The name was misspelled when published. The first major settlement in the area was built around the logging operation of Wes Davidson. Thorne Bay developed as a result of a long-term timber sales contract between the U.S. Forest Service and the Ketchikan Pulp Company. In 1960, a floating logging camp was built in Thorne Bay. In 1962 Ketchikan Pulp moved its main logging camp from Hollis to Thorne Bay. A shop, barge terminal, log sort yard, and camp were built to replace facilities at Hollis. Roads were then constructed to connect Thorne Bay with Hollis, Craig, and Klawock. During this time, Thorne Bay was considered the largest logging camp in North America. The community evolved from a company-owned logging camp to an incorporated city in 1982, partly due to the land selection program provided for in the Alaska Statehood Act.

Natural Resources and Environment

Prince of Wales Island, where Thorne Bay is located, is dominated by a cool, moist, maritime climate. Summer temperatures range from 49 to 63 °F (9.4 to 17.2 °C) and winter temperatures from 32 to 42 °F (0 to 5.6 °C). Average annual precipitation is 120 inches, with 40 inches of snow.⁵

Prince of Wales Island is located 600 miles north of Seattle, Washington in Southeast Alaska near Ketchikan Gateway Borough, and can be reached via the Inter-Island Ferry Authority. The Island of Prince of Wales is a unique and special place. It is a great place to showcase some of Southeast Alaska's unique qualities such as a temperate rainforest with all its natural beauty and wonder, bountiful wildlife, Native culture and historical artifacts. The Prince of Wales Island Scenic Byway covers two hundred sixty miles of mostly paved roads that lead to communities on the island that each present a different Alaskan experience. Prince of Wales has

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.

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 Ibid.

the most extensive road system in the entire Tongass National Forest (National Forest), the largest national forest in the U.S. The approximately 1,500 miles of roads offer unparalleled access to recreational opportunities in the National Forest.⁶

Thorne Bay is located within the National Forest. **The** National Forest is the largest unit in the national forest system, at almost 17 million acres. National Forest employees work to balance multiple uses of the forest resources. The National Forest has healthy fish and wildlife populations, clean water, trees to support local industry, and recreation opportunities unique to Alaska. The roads that exist in Southeast Alaska have been developed from forest roads that were originally built to reach timber.

Though home to the world's largest temperate rain forest, almost half of the Tongass is covered by ice, water, wetlands and rock. Few places in the world have the geologic and climatic variations that sculpt this landscape. The snow and ice of the 1,500-square-mile Juneau Ice Field are less than eight miles from the salt water in Gastineau Channel.

The forest is home to numerous plant species, including ferns, dwarf dogwood, false lily of the valley, marsh marigold, skunk cabbage, western hemlocks, Sitka spruce, sub-alpine fir, red cedar, yellow cedar, and hardwoods such as alder. The largest known concentrations of bald eagles gather each year in the National Forest, and thousands of shorebirds use the forest as a resting place during their annual migrations. Marine mammals such as sea otters, whales, porpoises, and seals utilize the waters located inside the National Forest. Terrestrial species that inhabit this area include Sitka black-tailed deer, brown bears, mountain goats, moose, wolves, beaver, fox, and porcupines. All five species of Pacific salmon (chum, coho, king, pink, and sockeye) can be found within the National Forest, along with Dolly Varden, rainbow trout, steelhead trout, and cutthroat trout.

People have lived and worked in this area for centuries. For years, the Tlingit and Haida peoples have fished for salmon and herring and gathered berries and other plants. Each generation shares its knowledge of the land with the next. Today, many rural residents depend on a subsistence lifestyle, just as Alaska Natives have for centuries. Water routes in the National Forest are the way many tourists see coastal Alaska. Local residents and tourists enjoy sailing, motor boating, kayaking and fishing.⁷

In a survey conducted by the AFSC in 2011, community leaders reported that the economy of Thorne Bay is reliant on the following natural resource-based industries: logging, fishing, and sport hunting and fishing.

Thorne Bay is protected against many natural hazards due to its sheltered position. However, earthquakes have been classified as a moderate risk by the U.S. Army Corps of Engineers and it is projected that regional damage caused by an earthquake would be major.⁸ Damage from earthquakes would likely come from shaking, tsunamis, seiches, and landslides.

According to the Alaska Department of Environmental Conservation, there were no significant environmental remediation sites active in Thorne Bay as of 2010.⁹

⁶ Alaska Department of Transportation and Public Facilities (2011). *Alaska Scenic Byways: Prince of Wales Island Road System*. Retrieved from <http://dot.alaska.gov/stdplng/scenic/byways-pow.shtml> on April 6, 2012.

⁷ U.S. Forest Service (n.d.). *Tongass National Forest; Introduction to the Tongass*. Retrieved March 8, 2012 from http://www.fs.fed.us/r10/tongass/forest_facts/faqs/intro.shtml.

⁸ City of Craig. (2000). *City of Craig Comprehensive Plan*. Retrieved February 29, 2012 from: <http://www.commerce.state.ak.us/dca/plans/Craig-CP-2000.pdf>.

⁹ Alaska Department of Environmental Conservation. (n.d.). *Contaminated Sites Program*. Retrieved from: <http://www.dec.state.ak.us/spar/csp/list.htm#Southeast>.

Current Economy¹⁰

Employment is primarily in small sawmills, U.S. Forest Service management of the National Forest, the Southeast Island School District, commercial fishing, tourism and lodging, and both local and state government employment. To supplement incomes, residents fish and trap. Deer, salmon, halibut, shrimp, and crab are popular food sources. Additional economic activities include automobile and heavy equipment maintenance and repair, vehicle and boat fuel sales, transportation, and limited retail.¹¹ Top employers in 2010 included Southeast Island School District, City of Thorne Bay, Williams Inc., Cooke Bay Adventures LLC, Southeast Road Builders Inc., Adventure Alaska Southeast, State of Alaska, Tongass Federal Credit Union, M&M McDonald Inc., and Community Connections Inc.

In 2010, per capita income in Thorne Bay was estimated to be \$33,260 and the median household income was estimated to be \$54,318, compared to \$20,836 and \$45,625 in 2000, respectively. Taking inflation into account by converting the 2000 values to 2010 dollars,¹² the real per capita income in 2000 is shown to have been \$27,399 and the real 2000 median household income was \$59,996. This shows that there was a real increase in per capita income during this period, while household income decreased. In 2010, Thorne Bay ranked 44th of 305 Alaskan communities with per capita income that year, and 104th of 299 Alaskan communities with household income data. However, Thorne Bay's small population size may have prevented the American Community Survey from accurately portraying economic conditions.¹³ A potentially more accurate understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development. According to the ALARI database, the per capita income in Thorne Bay in 2010 was \$10,179, which indicates an overall decrease compared to the real per capita income values reported by the U.S. Census in 2000.¹⁴ This is supported by the fact that the community was recognized as "distressed" by the Denali Commission indicating that over 70% of residents aged 16 and older earned less than \$16,120 in 2010.¹⁵ However, it should be noted that American Community Survey and DOLWD data are based on wage earnings and does not take into account the value of subsistence within the local economy.

Based on the American Community Survey, in the same year, 63.5% of the population was estimated to be in the civilian labor force, compared to the statewide rate of 68.8%. The local unemployment rate was 2.5%, compared to the statewide rate of 5.9%. Approximately 10.5% of local residents were living below the poverty line, compared to 9.6% of Alaskans overall. It should be noted that income and poverty statistics are based on wage income and other money sources; figures reported for Thorne Bay are not reflective of the value of subsistence to the local economy. In addition, these unemployment and poverty statistics are likely inaccurate given the small population of Thorne Bay. A more accurate estimate is based on the ALARI

¹⁰ Unless otherwise noted, all monetary data are reported in nominal values.

¹¹ See footnote 4.

¹² Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved October 18, 2011 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

¹³ See footnote 3.

¹⁴ 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/>.

¹⁵ Denali Commission. (2011). *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from: www.denali.gov.

database, which indicates that the unemployment rate in 2010 was 15.8%.

Based on household surveys conducted for the 2006-2010 American Community Survey, the greatest percentage of workers was employed in the public sector (53.8%), while 28.2% were employed in the private sector and 18.1% were self-employed. Out of 238 people aged 16 and over that were estimated to be employed in the civilian labor force in 2010, the greatest percentage worked in agriculture, forestry, fishing, hunting, and mining (27.2%), educational services, health care, and social assistance (19.5%), and manufacturing (15.7%). Smaller percentages of the workforce were estimated to be employed in public administration (7.3%), other services except public administration (3.1%), finance, insurance, and real estate (1.5%), information (2.3%), transportation, warehousing, and utilities (8.8%), retail trade (8.8%), and construction (5.7%). Given the data reported in the *Commercial Fishing* section below, the number of individuals employed in farming, fishing, and forestry industries may be underestimated in census statistics as fishermen may hold another job and characterize their employment accordingly. 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, Thorne Bay (U.S. Census).

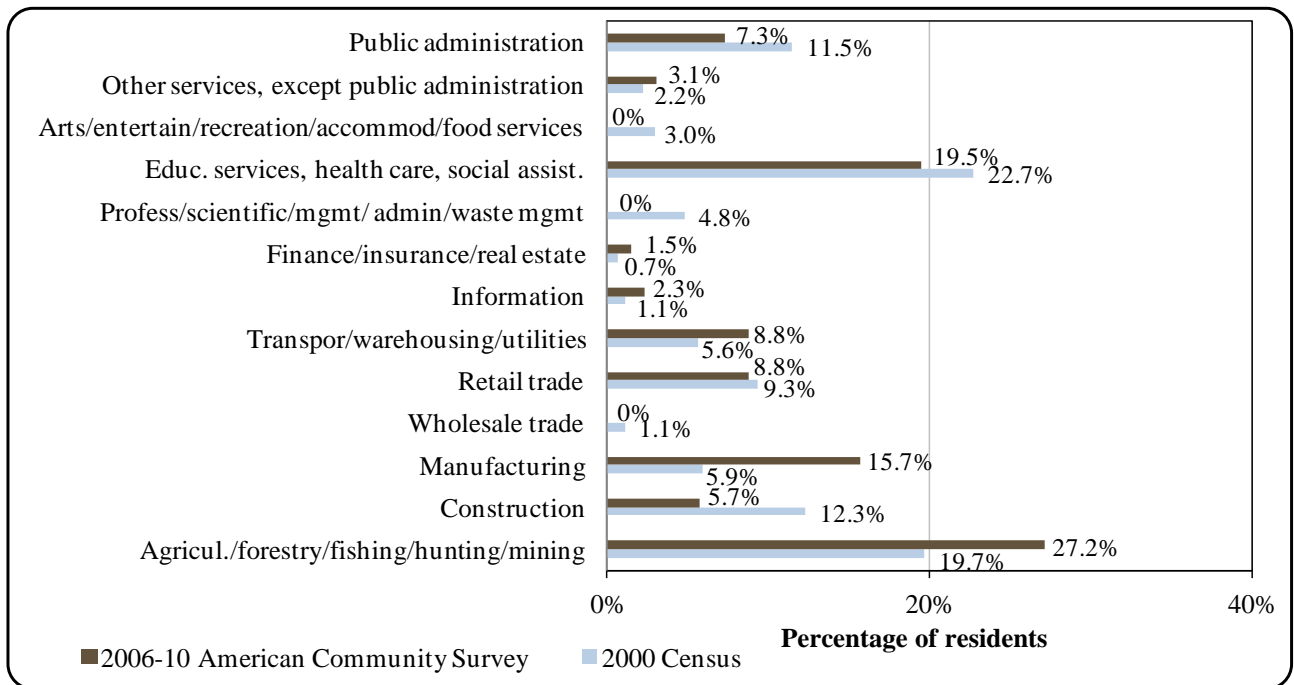
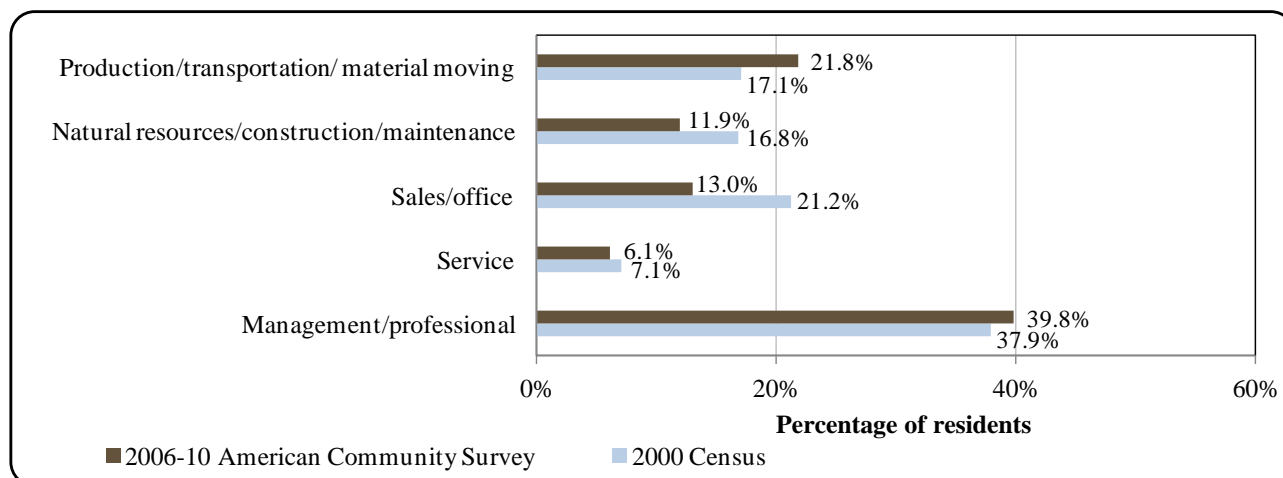


Figure 4. Local Employment by Occupation in 2000-2010, Thorne Bay (U.S Census).



Governance

Thorne Bay is a Second-class city that is not located within an organized borough. Total municipal revenues received by the city were variable between 2000 and 2010. Thorne Bay administers a 6% sales tax, which represents an increase from 3% in 2000. Municipal revenue data was taken from *Community Financial Statements (CFS)* for the years of 2007 through 2010, and from financial audits for the years of 2000 through 2006.¹⁶ When adjusted for inflation,¹⁷ total municipal revenues increased by 25.3% between 2000 and 2010 from \$468,761, to \$759,460. There are several years (2004 and 2007) when municipal revenues were significantly higher than normal. In 2004, \$378,750 in timber sales contributed greatly to general fund revenues, and in 2007 Thorne Bay received \$128,190 in National Forest Receipts as well as locally generated funds that were higher than normal. In 2010, Thorne Bay collected the majority (34.5%) of its municipal revenues from sales taxes, followed by land sales (29.8%), state allocated Community Revenue Sharing (15.6%), and federal payments in lieu of taxes (13.0%). Compare this to 2000 when sales taxes accounted for 20.1% of total municipal revenues, and State Revenue Sharing accounted for 4.9%.

In addition, Thorne Bay received a number of fisheries-related grants between 2000 and 2010 for projects including construction of Davidson Landing Dock, harbor shack construction, harbor rehabilitation and expansion – electrical upgrades, Thorne Bay – Davidson Landing harbor reconstruction, purchase and installation of a dock hoist, a new harbor shack, and construction of mooring floats for Thorne Bay – Davidson Landing. Information about selected aspects of Thorne Bay’s community revenue is presented in Table 2.

Thorne Bay was not included under the Alaska Native Claims Settlement Act (ANCSA) and is not federally recognized as a Native village. However, many Native community members in Thorne Bay are shareholders in the regional Native corporation for Southeast Alaska, the Sealaska Corporation. Sealaska is owned by over 20,000 tribal member shareholders and guided by the traditions of environmental stewardship and positively impacting their communities.

¹⁶ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Financial Documents Delivery System*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

¹⁷ Inflation calculated using Anchorage CPI from Alaska DOL: <http://labor.alaska.gov/research/cpi/cpi.htm>.

Sealaska is made up of legendary traders who are deeply connected to their lands and have successfully adapted to constantly changing environments and global economies. Sealaska brings together the wisdom and foresight of their combined heritage to create an enduring corporation that provides business opportunities, benefits and cultural strength for their people. Today Sealaska is the largest private landowner and the largest for-profit private employer in Southeast Alaska. Sealaska is a diverse company with investments in forest products, construction aggregates, machining and fabrication, environmental remediation, information technology, plastics injection molding and manufacturing, global logistics, wood products and financial markets. Sealaska’s status as a Minority Business Enterprise and Small Disadvantaged Business add to their strength as a government contractor and commercial diversity supplier.¹⁸

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

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Thorne Bay 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	\$468,761	\$94,195	\$23,006	n/a
2001	\$499,735	\$166,056	\$22,282	n/a
2002	\$690,014	\$100,467	\$22,315	n/a
2003	\$814,132	\$110,910	\$22,327	\$25,000
2004	\$1,367,540	\$156,704	-	n/a
2005	\$884,581	\$203,173	-	n/a
2006	\$957,636	\$226,917	-	\$70,000
2007	\$1,001,579	\$239,620	-	\$150,000
2008	\$820,813	\$279,356	-	\$297,229
2009	\$566,483	\$267,888	\$118,446	\$118,000
2010	\$759,460	\$261,652	\$117,264	\$559,496

¹ Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Financial Documents Delivery System*.

Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

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

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

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

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

¹⁸ Sealaska: A Native Corporation (2012). *Who We Are*. Retrieved on May 9, 2012 from http://www.sealaska.com/page/who_we_are.html.

Infrastructure

Connectivity and Transportation

Thorne Bay is accessed by float plane, the airport at Klawock, and the inter-island ferry at Hollis. The Thorne Bay Harbor provides slips for over 100 vessels. A seaplane base is state-owned. The Prince of Wales Island Road System connects the communities on Prince of Wales Island with one another.¹⁹ From nearby Ketchikan, round-trip airfare to Anchorage in June 2012 was \$461.²⁰

*Facilities*²¹

Water Lake, north of Thorne Bay, supplies water that is treated and stored in a tank before piped distribution to local houses. A gravity sewage system includes secondary treatment before discharge into the bay. On the north side of town, 100% of households are connected to the piped systems and are fully plumbed; on the south side, residents use rain catchment, streams, or springs and direct discharge or septic systems. The City provides refuse collection services, a regional baler, a recycling facility, and a landfill; it also participates in annual hazardous waste disposal events. The City also provides emergency medical services (boat and ambulance), fire protection, and an emergency medevac helipad.

Law enforcement services are provided by a Village Public Safety Officer, state troopers in Klawock, and a city public safety facility. Fire and rescue services are provided by the Thorne Bay Volunteer Rescue Squad/Emergency Medical Services and by the Prince of Wales Island Area EMS. Thorne Bay has a community hall, a school gym, and school and public libraries.

In a survey conducted by the AFSC in 2011, community leaders reported that Thorne Bay has 3,045 feet of dock space available for permanent vessels and 471 feet of dock space available for transient vessels, and that vessels up to 100 feet long can use moorage in Thorne Bay. Community leaders noted that the port of Thorne Bay is capable of handling fuel barges. In terms of infrastructure, community leaders indicated that water serving the dock space and broadband internet access projects have been completed within the past 10 years, with construction of new dock space in progress. Projects planned for completion within the next 10 years include a breakwater, haul out facilities, a community center/library, and a police department. For fishing-related businesses that are not located in Thorne Bay, community leaders indicated that residents travel to Craig, Ketchikan, or Wrangell.

*Medical Services*²²

Medical care is provided by the Thorne Bay Health Center, which is owned by the city and operated by the Southeast Alaska Regional Health Consortium. The health center is a Community Health Aid Program site. Alternate health care is provided by the Thorne Bay

¹⁹ 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.

²⁰ Airfare was obtained on the travel website <http://www.travelocity.com> for a round-trip ticket for travel from June 1 to June 8, 2012. Retrieved on December 1, 2011.

²¹ [See](#) footnote 19.

²² *Ibid.*

Volunteer Rescue Squad/Emergency Medical Services and the Prince of Wales Island Area EMS. Emergency services have limited highway, coastal floatplane, and helicopter access and are provided by volunteers. The nearest hospitals are located in Sitka and Juneau.

*Educational Opportunities*²³

The Thorne Bay School provides instruction to students from pre-school through 12th grade. In 2011, the school had 77 students and 12 teachers.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Commercial harvest of salmon began in Southeast Alaska in the late 1870s.²⁴ In the 1880s, a commercial fishery began for halibut in the inside waters of Southeast Alaska, with sablefish targeted as a secondary fishery.²⁵ Today, Southeast Alaska salmon fisheries utilize purse seine, drift gillnet, troll and set gillnet gear. The highest volume of salmon landings in the region are harvested by purse seine gear, although the species harvested are typically pink and chum, the salmon species with lowest ex-vessel value. Other salmon fisheries target the higher value species (i.e., sockeye, coho and Chinook). Because of Southeast Alaska's proximity to British Columbia, as well as many trans-boundary rivers that cross from Canada into Alaskan waters, salmon management in the region is governed to a large degree by the Pacific Salmon Treaty which was originally negotiated in 1985, and renegotiated in 1999 with increased emphasis on implementation of abundance-based management strategies.²⁶

Shrimp trawl fisheries in Southeast Alaska primarily target northern shrimp (*Pandalus borealis*) and sidestripe shrimp (*Pandalopsis dispar*), although the market for northern shrimp has declined in recent years with the closure of the primary processing facility in Petersburg in 2006.²⁷ A pot fishery for spot shrimp (*Pandalus platyceros*) has also grown in Southeast Alaska since the 1990s. Commercial dive fisheries for red sea cucumber (*Parastichopus californicus*) and sea urchin (*Strongylocentrotus spp.*) began near Ketchikan in the early 1980s. A dive fishery for geoduck clams began around the same time, and all three fisheries are now managed according to Fishery Management Plans. Sea cucumbers and sea urchin are handpicked by divers, while geoduck divers use handheld water jets to remove substrate from around the clams.²⁸

A state-managed sablefish fishery currently takes place in the inside waters of Chatham

²³ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

²⁴ Clark, McGregor, Mecum, Krasnowski and Carroll (2006). "The Commercial Salmon Fishery in Alaska." *Alaska Fisheries Research Bulletin* 12(1):1-146. Alaska Dept. of Fish and Game. Retrieved January 4, 2012 from <http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1.pdf>.

²⁵ 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>.

²⁶ Ibid.

²⁷ Alaska Dept. of Fish and Game (2012). *Northern Shrimp Species Description*. Retrieved April 2, 2012 from <http://www.adfg.alaska.gov/index.cfm?ADFG=northernshrimp.printerfriendly>.

²⁸ See footnote 25.

and Clarence Straits and Dixon Entrance. Pacific halibut fisheries in Southeast Alaska are managed by the International Pacific Halibut Commission (IPHC). Pacific cod and lingcod are also harvested in Southeast Alaska under state regulations, independent of federal fisheries for these species. Halibut and Pacific cod fisheries utilize longline gear, while the Southeast Alaska lingcod fishery uses dinglebar troll gear, a salmon power troll gear modified with a heavy metal bar to fish for groundfish. Management of the Southeast Alaska lingcod fishery includes a winter closure for all users (except longliners) to protect nest-guarding males. Demersal rockfish are caught as bycatch in the halibut longline and trawl fisheries. A small directed fishery for flatfish (other than halibut) has also taken place in Southeast inside waters in recent decades, but effort has declined since 1999.

Anadromous fish in the Thorne Bay area include all five species of Pacific salmon, and steelhead trout. These fish are important for commercial fishing, sportfishing, subsistence use, and charter boat operations. No seafood is being processed within Thorne Bay, although there is discussion of increasing mooring capacity and attracting a seafood processor. A local shellfish testing lab has been proposed in order to serve the many shellfish farmers on Prince of Wales Island, and within southeast Alaska as a whole. With its historic dependence on the timber industry, the commercial fishing industry has been slow to develop in Thorne Bay. Commercial fishing permits within the community were limited until the completion of the harbor facility. Gear types primarily consist of power and hand troll. Thorne Bay residents are also involved in the local halibut fishery.²⁹

Thorne Bay is located on the east coast of Prince of Wales Island.³⁰ The area is included in Federal Statistical and Reporting Area 659, Pacific Halibut Fishery Regulatory Area 2C, and the Eastern Gulf of Alaska/Southeast Outside Sablefish Regulatory Area.

Thorne Bay participates in the Community Quota Entity (CQE) program through the Thorne Bay Fisheries Association. The impetus for the CQE program followed the implementation of the halibut and sablefish Individual Fishing Quota (IFQ) program in 1995. The IFQ program restructured fixed gear halibut and sablefish fisheries into a catch share program which issued transferable quota shares that allocated and apportionment of the annual Total Allowable Catch to eligible vessels and processors. Although the IFQ program resulted in many benefits to fishermen, processors, and support businesses, and unintended consequence was that many quota holders in smaller Alaskan communities either transferred quota outside the community or moved out themselves. In addition, as quota became increasingly valuable, entry into halibut or sablefish fisheries became difficult. In many cases, it was more profitable for small-scale operators to sell or lease their quota rather than fish it due to low profit margins and high quota value. These factors lead decreased participation in communities traditionally dependent on the halibut or sablefish fisheries. To address this issue, the North Pacific Fishery Management Council implemented the CQE program in 2005. Under the program, eligible communities could form a non-profit corporation to purchase and manage quota share on their behalf.³¹ As of Fall 2013, the Thorne Bay Fisheries Association had not yet purchased any commercial halibut IFQ or non-trawl groundfish License Limitation Program permits. However,

²⁹ City of Thorne Bay. (1999). *City of Thorne Bay Comprehensive Plan*. Retrieved July 11, 2012 from: <http://www.commerce.state.ak.us/dca/plans/ThorneBay-CP-1999.pdf>.

³⁰ Ibid.

³¹ North Pacific Fishery Management Council (2010). *Review of the Community Quota Entity (CQE) Program under the Halibut/Sablefish IFQ Program*. Retrieved October 23, 2012 from: <http://www.fakr.noaa.gov/npfmc/PDFdocuments/halibut/CQEREport210.pdf>

the non-profit had acquired four halibut charter permits for lease to community members.³²

According to a survey conducted by the AFSC in 2011, community leaders reported that Thorne Bay does not actively participate in the fisheries management process in Alaska.

Processing Plants

According to ADF&G's 2010 Intent to Operate list, Thorne Bay does not have a registered processing plant. The nearest processing plant is located in Ketchikan.

Fisheries-Related Revenue

Between 2000 and 2010, Thorne Bay received fisheries-related revenue from the Shared Fisheries Business Tax and harbor usage fees. The annual amount received from the shared fisheries business tax decreased overall during this period, while the amount received from harbor usage fees increased. Also, between 2002 and 2004, Thorne Bay received revenue from the Fisheries Resource Landing Tax, and the amount remained stable throughout this period.³³ Information on known fisheries-related revenue received by Thorne Bay between 2000 and 2010 is presented in Table 3.

Commercial Fishing

In 2010, a total of 29 permit holders held 51 commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC) for crab, other shellfish, halibut, herring, groundfish, and salmon (Table 4). Overall between 2000 and 2010, the number of permit holders remained relatively stable while the total number of CFEC permits held decreased slightly. The total number of permits reported as fished varied throughout this period. The number of crab CFEC permits held decreased from two to one between 2000 and 2010, though none of these permits were reported as fished during the period. The crab CFEC permit issued in 2010 was for the southeastern Tanner crab ring net fishery. The number of other shellfish CFEC permits and permit holders decreased during the period, though the number of permits reported as fished was variable. Other shellfish CFEC permits were issued for the geoduck clam diving gear fishery in the southeast, the shrimp pot fishery in the southeast, and the sea cucumber diving gear fishery in the southeast.

The number of halibut CFEC permits and permit holder varied between two and four between 2000 and 2010, with between 67% and 100% of those permits reported as fished in any given year. All halibut CFEC permits issued in 2010 were for the statewide longline fishery using vessels under 60 feet.

The number of herring CFEC permits and permit holders decreased slightly during this period, though the number of permits reported as fished remained relatively stable. The herring CFEC permits issued in 2010 were for the herring spawn on kelp pound fishery in the southern southeast.

While the number of groundfish CFEC permits declined between 2000 and 2010, the

³² NOAA Fisheries. (2013). Community Quota and License Programs and Community Quota Entities. Retrieved October 30, 2013 from <http://alaskafisheries.noaa.gov/ram/cqp.htm>.

³³ 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.

number of permit holders remained relatively stable and only one permit was reported as fished in 2009 and 2010. Groundfish CFEC permits were issued in 2010 for the statewide lingcod dinglebar troll fishery, the statewide miscellaneous saltwater finfish hand troll fishery, the Gulf of Alaska miscellaneous saltwater finfish longline fishery using vessels under 60 feet, and the southeast demersal shelf rockfish longline fishery using vessels under 60 feet.

The number of salmon CFEC permits varied from 22 in 2008 and 2009 to 27 in 2003, with 24 permits held by 19 permit holders in 2010. The number of permits reported as fished varied between 9 and 13 during this period. Salmon CFEC permits issued in 2010 were for the southeastern drift gillnet fishery, the statewide hand troll fishery, and the statewide power gurdy troll fishery.

There were two Federal Fisheries Permits held by two permit holders in 2010, a slight increase from one permit/permit holder in 2000. These permits were only reported as fished in 2004 and 2006 to 2010. The number of groundfish License Limitation Program (LLP) permits held by Thorne Bay residents remained relatively stable between 2000 and 2010, as did the number of permit holders and the number of permits reported as fished (Table 4).

An average of 15 crew license holders were present in Thorne Bay in each year between 2000 and 2010. There were no fish buyers or shore-side processing facilities located in the community during this period, and no vessels recorded landings during this period. The number of vessels owned primarily by Thorne Bay residents decreased between 2000 and 2010, as did the number of vessels homeported in Thorne Bay. Information on characteristics of the commercial fishing sector in Thorne Bay between 2000 and 2010 is presented in Table 5.

The number of halibut quota share account holders decreased between 2000 and 2010, while the number of quota shares held decreased before increasing slightly again during this period, along with the annual halibut IFQ allotment. Information about halibut IFQ between 2000 and 2010 is presented in Table 6. Between 2000 and 2003, there was one sablefish quota share account holder that held 279 quota shares and received approximately 30 pounds of IFQ allotment each year. Information about sablefish IFQ between 2000 and 2010 is presented in Table 7. There were no crab quota share account holders in Thorne Bay between 2005 and 2010 (Table 8). There were no landings or associated ex-vessel revenue recorded in Thorne Bay between 2000 and 2010 (Table 9).

Landings by Thorne Bay residents are only reportable for shellfish, excluding crab, between 2000 and 2009 and for salmon between 2000 and 2010. For all other species in all years, the data are considered confidential due to a small number of participants. Landings and ex-vessel revenue for other shellfish and salmon were variable during this period. Information regarding landed pounds and ex-vessel revenue by community residents is presented in Table 10.

In a survey conducted by the AFSC in 2011, community leaders reported that commercial fishing boats under 60 feet in length use Thorne Bay as their base of operations during the fishing season. Community leaders also noted that fishing boats that use Thorne Bay as their base of operations during the fishing season use the following gear types: longline, gillnet, troll, and diving. Community leaders also stated that, “The commercial IFQ program greatly reduced the number of commercial halibut fishermen and made it nearly impossible for new fishermen to enter the industry.”

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Shared Fisheries											
Business Tax ¹	\$6,855	\$6,005	\$2,890	\$5,166	\$3,729	\$5,278	\$5,493	\$5,336	\$2,979	\$5,160	\$2,910
Fisheries Resource											
Landing Tax ¹	n/a	n/a	\$2,900	\$2,900	\$2,900	n/a	n/a	n/a	n/a	n/a	n/a
Fuel transfer tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage ²	\$44,885	\$46,950	\$29,250	\$27,350	\$40,826	\$56,500	\$28,880	\$44,650	\$54,300	\$54,650	\$60,200
Port/dock usage ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
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	n/a
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	n/a
<i>Total fisheries-related revenue⁴</i>	<i>\$51,740</i>	<i>\$52,955</i>	<i>\$35,040</i>	<i>\$35,416</i>	<i>\$47,455</i>	<i>\$61,778</i>	<i>\$34,373</i>	<i>\$49,986</i>	<i>\$57,279</i>	<i>\$59,810</i>	<i>\$63,110</i>
<i>Total municipal revenue⁵</i>	<i>\$468,761</i>	<i>\$499,735</i>	<i>\$690,014</i>	<i>\$814,132</i>	<i>\$1.37 M</i>	<i>\$844,581</i>	<i>\$957,636</i>	<i>\$1.0 M</i>	<i>\$820,813</i>	<i>\$566,483</i>	<i>\$759,460</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.

NOAA-TM-AFSC-259 – Volume 11
Community Profiles for North Pacific Fisheries – Alaska: Thorne Bay

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	4	5	5	5	5	5	5	5	5	5	5
	Active permits	1	1	2	2	2	2	2	2	3	3	2
	% of permits fished	25%	20%	40%	40%	40%	40%	40%	40%	60%	60%	40%
	Total permit holders	4	5	5	5	5	5	5	5	5	5	5
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	1	1	1	1	1	1	1	2	2	2	2
	Fished permits	0	0	0	0	1	0	1	1	1	2	2
	% of permits fished	0%	0%	0%	0%	100%	0%	100%	50%	50%	100%	100%
	Total permit holders	1	1	1	1	1	1	1	2	2	2	2
Crab (CFEC) ²	Total permits	2	2	2	2	1	1	1	1	1	1	1
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	2	2	2	2	1	1	1	1	1	1	1
Other shellfish (CFEC) ²	Total permits	19	19	15	15	14	15	15	16	15	15	15
	Fished permits	8	6	7	8	8	7	6	8	6	6	5
	% of permits fished	42%	31%	46%	53%	57%	46%	40%	50%	40%	40%	33%
	Total permit holders	11	11	11	11	10	9	10	12	11	11	12
Halibut (CFEC) ²	Total permits	4	3	3	3	3	2	3	4	4	4	4
	Fished permits	4	3	3	3	2	2	3	4	3	3	4
	% of permits fished	100%	100%	100%	100%	67%	100%	100%	100%	75%	75%	100%
	Total permit holders	4	3	3	3	3	2	3	4	4	4	4
Herring (CFEC) ²	Total permits	4	4	3	2	2	2	2	2	2	2	2
	Fished permits	0	2	3	2	2	2	0	2	2	2	2
	% of permits fished	0%	50%	100%	100%	100%	100%	0%	100%	100%	100%	100%
	Total permit holders	3	3	3	2	2	2	2	2	2	2	2

Table 4 cont'd. Permits and Permit Holders by Species, Thorne Bay: 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	8	7	7	6	6	6	3	4	5	5	5
	Fished permits	0	0	0	0	0	0	0	0	0	1	1
	% of permits fished	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%
	Total permit holders	4	3	3	3	3	3	3	3	4	5	4
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	26	24	25	27	26	23	24	25	22	22	24
	Fished permits	12	10	9	12	11	10	10	13	9	10	10
	% of permits fished	46%	42%	36%	44%	42%	43%	42%	52%	41%	45%	42%
	Total permit holders	19	19	19	21	21	20	18	20	18	18	19
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>63</i>	<i>59</i>	<i>55</i>	<i>55</i>	<i>52</i>	<i>49</i>	<i>48</i>	<i>52</i>	<i>49</i>	<i>49</i>	<i>51</i>
	<i>Fished permits</i>	<i>24</i>	<i>21</i>	<i>22</i>	<i>25</i>	<i>23</i>	<i>21</i>	<i>19</i>	<i>27</i>	<i>20</i>	<i>22</i>	<i>22</i>
	<i>% of permits fished</i>	<i>38%</i>	<i>36%</i>	<i>40%</i>	<i>45%</i>	<i>44%</i>	<i>43%</i>	<i>40%</i>	<i>52%</i>	<i>41%</i>	<i>45%</i>	<i>43%</i>
	<i>Permit holders</i>	<i>28</i>	<i>27</i>	<i>27</i>	<i>29</i>	<i>27</i>	<i>25</i>	<i>25</i>	<i>29</i>	<i>27</i>	<i>28</i>	<i>29</i>

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

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

Table 5. Characteristics of the Commercial Fishing Sector in Thorne Bay: 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 Thorne Bay ²	Total Net Pounds Landed In Thorne Bay ^{2,5}	Total Ex-Vessel Value Of Landings In Thorne Bay ^{2,5}
2000	12	0	0	38	34	0	0	\$0
2001	14	0	0	33	34	0	0	\$0
2002	13	0	0	34	31	0	0	\$0
2003	11	0	0	34	29	0	0	\$0
2004	19	0	0	36	32	0	0	\$0
2005	15	0	0	22	19	0	0	\$0
2006	14	0	0	22	20	0	0	\$0
2007	19	0	0	21	17	0	0	\$0
2008	16	0	0	16	15	0	0	\$0
2009	16	0	0	14	15	0	0	\$0
2010	19	0	0	15	16	0	0	\$0

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

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

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

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

⁵ Totals only represent non-confidential data.

Table 6. Halibut Catch Share Program Participation in Thorne Bay: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Pounds)
2000	7	203,690	28,729
2001	7	203,690	29,989
2002	7	203,690	29,033
2003	7	203,690	29,032
2004	5	96,197	16,959
2005	6	99,804	18,316
2006	5	99,450	17,751
2007	6	144,219	20,608
2008	5	143,735	14,988
2009	5	143,735	12,116
2010	5	143,735	10,619

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 Thorne Bay: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Pounds)
2000	1	279	33
2001	1	279	31
2002	1	279	29
2003	1	279	33
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 Thorne Bay: 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 Thorne Bay: 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.

NOAA-TM-AFSC-259 – Volume 11
Community Profiles for North Pacific Fisheries – Alaska: Thorne Bay

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

	<i>Total Net Pounds¹</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	--	--	--	--	--	--	--	--	--	--	--
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	--	--	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	37,339	35,427	60,879	49,510	32,416	32,389	40,016	33,759	28,861	35,691	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	212,207	290,684	183,556	315,878	311,464	276,791	215,042	250,821	218,007	246,975	245,401
<i>Total²</i>	<i>249,546</i>	<i>326,111</i>	<i>244,435</i>	<i>365,388</i>	<i>343,880</i>	<i>309,180</i>	<i>255,058</i>	<i>284,580</i>	<i>246,868</i>	<i>282,666</i>	<i>245,401</i>
	<i>Ex-vessel Value (nominal U.S. dollars)</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	--	--	--	--	--	--	--	--	--	--	--
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	--	--	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	\$97,181	\$66,179	\$83,985	\$75,583	\$70,150	\$77,360	\$82,280	\$93,345	\$66,165	\$83,564	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	\$120,042	\$160,531	\$89,346	\$196,618	\$257,842	\$228,006	\$281,896	\$289,014	\$364,511	\$259,147	\$228,163
<i>Total²</i>	<i>\$217,223</i>	<i>\$226,710</i>	<i>\$173,331</i>	<i>\$272,201</i>	<i>\$327,992</i>	<i>\$305,366</i>	<i>\$364,176</i>	<i>\$382,359</i>	<i>\$430,676</i>	<i>\$342,712</i>	<i>\$228,163</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

In 2010, there were eight active sport fish guide businesses registered in Thorne Bay, compared to four in 2000. Active sport fish guide businesses increased significantly in 2005, and remained relatively high in years following. Also in 2010, 16 sport fish guide licenses were held by residents, compared to 13 in 2000. The number of sport fish guide licenses peaked in 2002 through 2004 at between 21 and 25. The number of sportfishing licenses sold to Thorne Bay residents (irrespective of the location of the point of sale) decreased between 2000 and 2010, while the number of sportfishing licenses sold within the community increased during this period (Table 11). This may indicate a steady increase in the number of visits by recreational anglers from outside the community.

Thorne Bay is located within the Prince of Wales ADF&G Harvest Survey Area which includes all waters and drainages from Cape Chacon to Sumner Strait and from Clarence Island westward. In 2010 there were a total of 51,312 saltwater angler days fished, compared to 49,074 in 2000. In that year, non-Alaska residents accounted for 74.4% of angler days fished, compared to 67.3% in 2000. In terms of freshwater angler days fished, there were a total of 15,138 angler days fished in 2010, compared to 19,654 in 2000. In that year, non-Alaska residents accounted for 70.4% of angler days fished, compared to 45.9% in 2000. Information regarding recreational fishing trends in and near Thorne Bay can be found in Table 11.

The Alaska Statewide Harvest Survey,³⁴ conducted by ADF&G between 2000 and 2010, noted the following species targeted by private anglers in Thorne Bay: all five species of salmon, rainbow trout, Dolly Varden, cutthroat trout, Pacific halibut, rockfish, lingcod, Pacific cod, steelhead trout, Dungeness crab, Tanner crab, razor clam, hardshell clam, shrimp, and other shellfish. Information from charter log books on species that were kept and released on fishing charters out of Thorne Bay noted the following species: Chinook salmon, chum salmon, coho salmon, halibut, lingcod, other rockfish, other salmon, pink salmon, pelagic rockfish, sablefish, shark, sockeye salmon, and yelloweye rockfish.³⁵

In a survey conducted by the AFSC in 2011, community leaders reported that the following species are targeted by recreational fishermen that use boats based in Thorne Bay: all five species of salmon, halibut, rockfish, crab, black cod/sablefish, shrimp, and clam. In the same survey, community leaders indicated that recreational fishing in Thorne Bay takes place from charter boats or party boats, private boats owned by local residents, and private boats owned by non-residents. Community leaders also stated that, “New restrictions on charter halibut fishing have had an adverse impact on the charter boat fleet.”

³⁴ 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).

³⁵ 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. Sport Fishing Trends, Thorne Bay: 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 Thorne Bay ²
2000	4	13	399	262
2001	2	12	340	273
2002	3	21	331	426
2003	2	25	308	513
2004	4	22	335	614
2005	6	12	300	497
2006	7	12	330	708
2007	7	12	294	1,117
2008	6	16	286	1,380
2009	4	12	294	1,063
2010	8	16	292	1,267

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	33,043	16,031	9,024	10,630
2001	38,248	14,090	7,299	5,922
2002	36,736	12,590	9,957	8,981
2003	37,341	16,346	10,627	11,506
2004	40,803	16,770	11,518	3,969
2005	52,135	16,333	10,100	3,527
2006	46,207	11,828	11,073	5,161
2007	49,280	13,327	11,132	6,463
2008	46,717	17,930	11,302	7,185
2009	38,164	10,829	9,918	4,124
2010	37,416	13,896	10,660	4,478

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

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

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

Subsistence Fishing

To supplement incomes, residents fish and trap. Deer, salmon, halibut, shrimp, and crab are popular food sources.³⁶ In a survey conducted by the AFSC in 2011, community leaders reported that the three most important subsistence marine or aquatic resources to the residents of

³⁶ 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.

Thorne Bay are halibut, sockeye salmon, and crab. Between 2000 and 2010, data were not reported on subsistence participation by household and species (Table 12), or subsistence harvest of marine invertebrates, non-salmon fish (Table 13), or marine mammals (Table 15). However, data were reported for subsistence harvests of salmon and halibut.

In years for which data were reported between 2000 and 2010, an average of 105 subsistence salmon permits were issued to Thorne Bay households, though both the number of permits issued and the number of permits returned declined substantially during this period. Sockeye salmon were the primary species harvested for subsistence permits (an average of 761 sockeye per year); however, Chinook salmon, chum salmon, coho salmon, and pink salmon were also harvested (Table 13).

Between 2000 and 2010, an average of 120 Subsistence Halibut Registration Certificate (SHARC) were issued to Thorne Bay residents, with an average of 63 permits returned. In 2010, 114 SHARC were issued and 60 were returned, with 13,283 pounds of subsistence halibut reported harvested. Reported halibut harvests peaked in 2004 at 16,714 pound harvested on 67 SHARC. Information about subsistence halibut harvest is presented in Table 14.

The ADF&G Division of Subsistence reported that the following species of marine invertebrates were used for subsistence in Thorne Bay during this period: abalone, basket cockles, black (small) chitons, blue king crab, box crab, brown king crab, butter clams, Dungeness crab, geoduck, green sea urchin, heart cockles, horse clams (gaper), limpets, octopus, oyster, Pacific littleneck clams (steamers), purple sea urchins, razor clams, red (large) chitons, red king crab, red sea urchin, rock scallops, shrimp, squid, Tanner crab bairdi, unknown chitons, unknown clams, unknown cockles, unknown crab, unknown king crab, unknown mussels, unknown scallops, unknown sea cucumber, unknown sea urchin, weathervane scallops, and yein sea cucumber. Marine mammals reported as harvested for subsistence use included fur seal (other), harbor seal (saltwater), and Steller sea lion. Non-salmon fish reported as harvested for subsistence use included: black rockfish, brook trout, buffalo sculpin, cutthroat trout, dogfish, Dolly Varden, eulachon (hooligan candlefish), grayling, herring, herring roe on hair seaweed, herring roe on hemlock branches, herring roe unspecified, herring spawn on kelp, lingcod, Pacific cod (gray), Pacific tom cod, rainbow trout, red Irish lord, red rockfish, rock greenling, sablefish (black cod), sea perch, silver smelt, skates, steelhead, unknown cod, unknown flounder, unknown perch, unknown rockfish, unknown sculpin, unknown shark, unknown smelt, unknown sole, unknown trout, and walleye pollock.³⁷

³⁷ Alaska Department of Fish and Game. (2011). Community Subsistence Information System (CSIS). ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sb/CSIS/> (Accessed February 2011).

Table 12. Subsistence Participation by Household and Species, Thorne Bay: 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, Thorne Bay: 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	182	162	n/a	2	32	36	1,338	n/a	n/a
2001	142	134	n/a	n/a	16	14	1,304	n/a	n/a
2002	184	164	n/a	n/a	46	60	1,526	n/a	n/a
2003	154	146	n/a	6	148	70	1,138	n/a	n/a
2004	79	77	3	n/a	26	9	589	n/a	n/a
2005	76	75	n/a	n/a	7	5	627	n/a	n/a
2006	54	54	n/a	n/a	76	n/a	162	n/a	n/a
2007	36	20	n/a	n/a	7	n/a	67	n/a	n/a
2008	35	33	n/a	n/a	161	53	99	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, Thorne Bay: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	99	61	13,268
2004	121	67	16,714
2005	134	67	10,422
2006	135	60	10,051
2007	129	55	8,990
2008	112	63	10,837
2009	115	67	11,663
2010	114	60	13,283

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, Thorne Bay: 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.