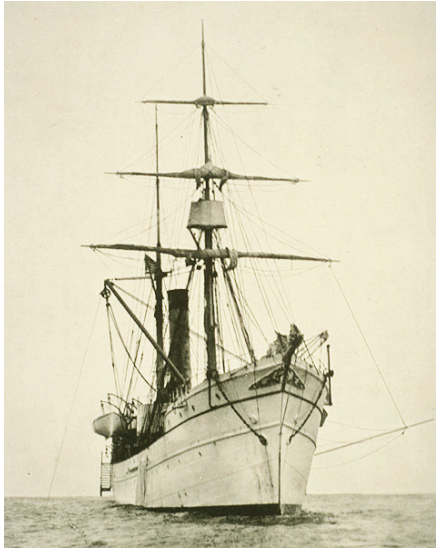
Alaska Fisheries Science Center History

Seward's Folly and Early Research in Alaska

The history of the Alaska Fisheries Science Center (AFSC) can be traced back to 1867 when Alaska was purchased from Russia for $7.2 million. Spencer Fullerton Baird, Assistant Secretary of the Smithsonian Institution and in 1871, the first Commissioner of the U.S. Commission of Fish and Fisheries played a key role in influencing Congress to approve the purchase. One year later. Congress, concerned about the exploitation of northern fur seals, outlawed the killing of seals within the Territory of Alaska and the Treasury Department assumed responsibility for fur seals on the Pribilof Islands. Later the U.S. Fish Commission would move to protect the northern fur seal from high-seas harvest.

U.S. Fish Commission and the *Albatross*



Albatross. 1907. Smithsonian.

The U.S. Commission of Fish and Fisheries, was formed on 9 February 1871 becoming the first Federal agency concerned with natural resource conservation. Spencer F. Baird was named first U.S. Fish Commissioner. The Commission was directed by Congress to "….determine whether a diminution of the number of food-fishes of the coast and lakes of the U.S. has taken place; and, if so, to what causes the same is due; and whether any and what protective prohibitory or precautionary measures should be adopted in the premises....". Baird immediately initiated a broad spectrum of research on living marine resources. In 1872, Henry Wood Elliot of the Treasury Department conducted the first surveys of northern fur seals on the Pribilof Islands in the Bering Sea, and before the turn of the century scientists aboard the U.S. Fish Commission vessel *Albatross* conducted the first fisheries investigations off the coasts of California, Oregon, Washington, and Alaska. Over the next 20 years, the *Albatross* would undertake many pioneering research cruises to Alaska. The Alaska Fisheries Science Center (AFSC) is an outgrowth of these early *Albatross* investigations and other field studies in Alaska.

U.S. Bureau of Fisheries

Kitovi Rookery, St. Paul Island. 1895.

In 1903, The Fish Commission was renamed the U.S. Bureau of Fisheries. The new Bureau retained the scientific responsibilities of the Fish Commission and incorporated other fishery-related functions (i.e., jurisdiction, supervision, and official control over the fur seal research in Alaska are assumed from the Department of the Treasury). Many of the early *Albatross* cruises were led by Dr. Charles Gilbert, a professor of biology at Stanford University. In 1909, Gilbert was appointed by the U.S. Bureau of Fisheries as Scientist in Charge of all fishery investigations along the

Pacific Coast and in 1914 a small office opened in Seattle's historic Smith Tower Building as a temporary administrative center for the Bureau's Pacific coast operations. The biology department at Stanford would serve as the temporary West Coast and Alaska field station for the Bureau until 22 May 1931 when the Montlake Laboratory, a predecessor of the AFSC, opened in Seattle.

Comprehensive Alaska Salmon Studies 1930s

Montlake Laboratory. 1931

An expansion of the Bureau's ongoing Alaska fishery research program began with a comprehensive two-part program of study on the salmon runs in the Bristol Bay area of the Bering Sea. A field station and experimental area were established on Brooks River. One part studied the freshwater life history of the Bristol Bay sockeye salmon and the environmental factors affecting their survival. The other part studied the ocean life history of salmon and worked in close cooperation with the U.S. Coast Guard using the cutter *Redwing*. The studies end in 1941 with the outbreak of WWII and Japan's invasion of the Aleutian Islands.

In 1939, temporary field facilities for pink salmon survival studies were built on Sashin Creek near the Center's Little Port Walter Field Station in southeastern Alaska. They included the weir cabin, built in Seattle, barged to Alaska, and are still in use today. The facility is the longest continuously operating fisheries research facility in Alaska. The Bureau's Alaska Technological Laboratory also opened in Ketchikan; it moved to Kodiak in 1971.

U.S. Department of the Interior, Fish and Wildlife Service, 1940-1956

On 3pril 1939, the Commerce Department's Bureau of Fisheries and the Agriculture Department's Bureau of Biological Survey ere transferred to the U.S. Department of the Interior as part of the 1939 Presidential Reorganization. This reorganization led to the creation of the Fish and Wildlife Service in 1940. Sixteen years later, the two agencies, still in the Interior Department, would be separated again.

Little Port Walter field station. 1939

In 1940, Congress appropriated $100,000 for a 1-year study of the potential of an Alaska king crab fishery. The research identified potential harvest areas, fishing gear, preservation and canning techniques, and the fishery potential. While other fisheries research was curtailed during World War II, the Ketchikan Laboratory investigated potential emergency sources of marine foods (e.g., various sharks and the Steller sea lion, groundfish, and shellfish) in case military activities in Alaska caused food shortages.

Bureau of Commercial Fisheries, 1956-1970

Salmon research in Bristol Bay, Alaska. 1969

In 1956, the new Fish and Wildlife Act created the U.S. Fish and Wildlife Service, including two Bureaus: the Bureau of Commercial Fisheries, the descendant of the original U.S. Fish Commission, of which the Alaska Center is part, and the Bureau of Sport Fisheries and Wildlife. The Bureau's northern fur seal and whale research studies were combined in Seattle and designated as the Marine Mammal Biological Laboratory. In 1959, Congress passed the Alaska Statehood Act and Alaska became the 49th state in 1960. A fisheries exploration and gear research program was formed in 1960 and was based in Juneau, Alaska. The same year, the Center's Auke Bay Laboratory near Juneau opened to support the Alaska fisheries research programs. By 1962, scientific studies included the long-established biological programs at Little Port Walter and at Karluk and Brooks Lakes, and at newer projects at Kasitsna Bay, Olsen Bay, Traitors Cove, Naknek River, Hollis, Old Tom Creek, Wood River, and Kvichak. Research expanded to focus on the environmental impacts on the growth and of young salmon.

National Oceanic and Atmospheric Administration (NOAA) 1970 to Present

In 1970, under Executive Order 11564, President Richard M. Nixon established the National Oceanic and Atmospheric Administration (NOAA) as part of the Department of Commerce. The Bureau of Commercial Fisheries (BCF) was transferred to NOAA on October 3rd and was renamed the National Marine Fisheries Service. As part of this reorganization, four independent research groups in Seattle — the Biological Laboratory at Montlake, the Marine Mammal Biological Laboratory, the Exploratory Fishing and Gear Research Base, and the Food Science Pioneer Research Laboratory — were combined with the exploratory fishing and gear research, the marine fisheries, and the shellfish groups in Kodiak, Alaska, to form the North Pacific Fisheries Research Center. A fifth independent research group, the Technological Laboratory, was renamed the Pacific Utilization Research Center. As part of the 1971 reorganization, the exploratory fishing and gear research groups were renamed the Marine Fish and Shellfish Division. The fish passage group at the Biological Laboratory became the Coastal Zone and Estuarine Studies Division (CZES), and the Environmental Conservation (EC) Division was formed from the Food Science Pioneer Research Laboratory. On 28 November 1971— North Pacific

Miller Freeman docked at subport in Juneau, Alaska. 1968

Fisheries Research Center was renamed the Northwest Fisheries Center. 1 July 1974 —The Auke Bay Laboratory (ABL) in Alaska became a part of the Northwest Fisheries Center and 1 October 1974 — The Northwest Fisheries Center was officially renamed the Northwest and Alaska Fisheries Center. The Center would later be split to meet the demands of the two regions. Passage of the Marine Mammal Protection Act of 1972 and the Fishery Conservation and Management Act of 1976 (later renamed in 1980 after Washington Senator Warren G. Magnuson) and the establishment of the U.S. 200-mile exclusive economic zone gave further impetus to the Center to conduct research for the conservation and management of the nation's living marine resources. The Center, as a result of its data gathering in the late 1980s and early to mid-1900s plays a pivotal role in providing data needed for managing the resources of Alaska.

Auke Bay Laboratory. 1971

Alaska Fisheries Science Center

In 1990, The Northwest and Alaska Fisheries Center was separated into two science centers. The Alaska Fisheries Science Center now manages the nation's largest fishery observer program, continues examination of the impacts of the *Exxon Valdez* oil spill on Prince William Sound, and conducts long-term surveys on northern fur seals on the Pribilof Islands which began in 1872. The Center has played a key role in developing the knowledge needed for the management of the walleye pollock and other groundfish stocks in the North Pacific. Center scientist have and continue to make important contributions toward understanding the biology and population dynamics of other major species necessary for effective fishery management in Bering Sea, Gulf of Alaska, and Aleutian Islands region. Protection and restoration of Alaska's marine mammal populations is an especially important objective. Several studies are focused on identifying and evaluating the ecosystem structure and variability, essential fish habitat, and the genetic structure of fish and marine mammal populations. More recently, considerable effort has been expended to impacts of climate change on the myriad of species found in Alaska waters. While the research of the Center has expanded in many directions and continues to grow, its roots can be traced back to the late 1800s when Alaska was a vast unknown territory with untapped marine mammal and fishery resources.

Alaska Fisheries Science Center at Sand Point, WA 1984.