

Lake Clark *Qizhjah Vena*

National Park Service
U.S. Department of the Interior

Lake Clark National Park & Preserve
www.nps.gov/lac



Sockeye Salmon Escapement Monitoring

Maintaining healthy runs of sockeye salmon, which are also known as red salmon, is critical to the ecological, economic, and cultural integrity of Lake Clark and the entire Bristol Bay region. The Alaska National Interest Lands Conservation Act of 1980 established Lake Clark National Park and Preserve “to protect the watershed necessary for perpetuation of the red salmon fishery in Bristol Bay.” In order to understand salmon population trends, the park operates counting towers on the Newhalen River to monitor sockeye returning to spawn in Lake Clark. The information gained allows the park to craft management strategies that ensure conservation of the fish while providing for subsistence and recreational needs.



The park's fisheries program uses counting towers located along the Newhalen River south of the park boundary to estimate the number of adult sockeye that return to spawn in Lake Clark. NPS Photo: D. Young



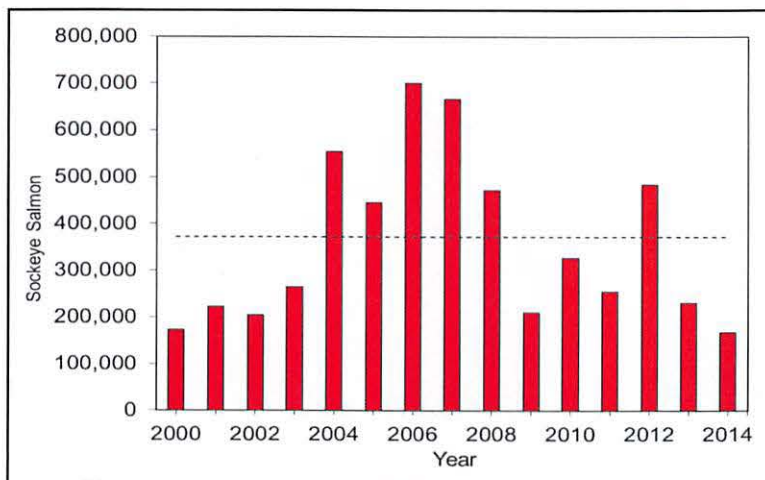
Sockeye are also known as red salmon. Photo: FW5/K. Mueller

Sockeye are the Life-Blood of the Bristol Bay Region

Each year millions of sockeye salmon return to Bristol Bay, infusing life into the culture, economy, and ecosystem. In the Lake Clark country salmon have sustained people and provided for the majority of their subsistence diet from prehistoric times through modern day. In addition to the sockeye caught by local residents, the Bristol Bay commercial fleet harvests around 20 million sockeye salmon valued at more than \$100 million annually, making it the world's largest and most valuable commercial sockeye fishery. Ecologically, salmon returning from the sea provide nutrients vital to resident fish and wildlife populations. In the fall, rivers and lakes are hubs of activity with bears, bald eagles, and wolves feasting on the abundant spawning sockeye.

Current Status of Lake Clark Sockeye Salmon

In 2014, park biologists estimated the Lake Clark escapement (the number of adult salmon that ‘escape’ the fishery to spawn) at nearly 168,000 sockeye salmon. This was the lowest return documented since 2000 and was 55% below the average escapement of 372,000 fish from 2000 to 2013. The fish returned approximately one week earlier than average with peak counts on July 6th and July 13th. While numbers returning to the Newhalen River in 2014 were low, returns to the Kvichak River watershed, which includes Lake Clark, were relatively strong in 2014. This disparity highlights the variation of run strength that can occur between different river drainages and spawning habitats. These differences tend to shift over time with changes in the climate, providing stability to the overall population of Bristol Bay sockeye salmon despite changes among individual populations.



Annual sockeye salmon escapement estimates. The dashed line represents the average escapement of 372,000 for the years 2000 - 2013.