

Glacier Bay: What Can Be Learned Here?

Researchers from around the country will meet in Glacier Bay National Park and Preserve Sept. 19-22, 1988, for the Second Glacier Bay Science Symposium. It is rare in today's specialized society to find an interdisciplinary conference planned where papers covering lake ontogeny, bryophyte succession, plate tectonics, and marine mammal biology can all be presented and discussed. That is exactly what marked the success of the last symposium. This year's gallery of scientists again will seek to provide a better understanding of the total interrelationships of the natural systems that shape the park environment.

The five years since the last symposium seems only an "eye wink." But five years in Glacier Bay could equal a century of change elsewhere. For example in five years an open stand of 3-5 foot alder in Wachusett Inlet is now an impenetrable tangle of alder trunks and branches 12 feet high. The site is no longer devoid of large mammals. Alaska willows on the fringe of the alder thicket now support a healthy moose population. And although nearby Carroll Glacier has retreated 2 miles onto the land, glacier sediments are rapidly building an outwash delta, filling in Wachusett Inlet at an incredible rate of 8 meters per year. Recent glacier photographs indicate that the glacier is beginning to surge forward, so another 5 years of advancing ice may erase all these changes.

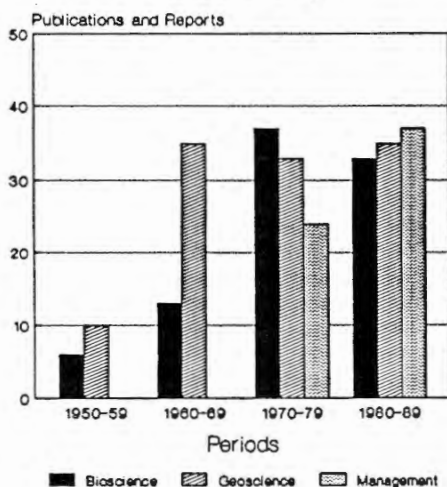
For the past 5 years, Glacier Bay NP has served as a field laboratory for more than 80 separate scientific investigations. In the *Proceedings* for the past Science Symposium, Garry McKenzie wrote a paper on "Research Trends in Glacier Bay Since 1890." He used the titles from the park's bibliography as an indicator of research emphasis in bioscience, geoscience, and resource management.

Early theories relating to plant succession were derived in Glacier Bay and it was this type of research that led the Ecological Society of America to lobby for the park's creation. But geoscience research predominated until the decade of the 70s, probably because of spectacular geomorphic changes that could be studied here. Bioscience research began to increase in the 1960s along with the emergence of ecology as a science. What direction will research take in the next decade? Will the recent increase in resource management directed research mean that we may truly begin to use science as the basis upon which most decisions affecting the park are made?

Stay tuned to this and other NPS stations for the next exciting episodes.

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Research Trends Glacier Bay



Some of the continuing research from the past includes this Institute of Polar Studies weather station at Casement Glacier's 3,500 foot level, operating in August 1965, when Glacier Bay was still a National Monument.

Second Glacier Bay Science Symposium – 1988

The principal objectives are:

- 1) Provide bridges for communication among disciplines.
- 2) Present results of research conducted in GLBA during the past five years.
- 3) Examine the relationship between science and management in GLBA.
- 4) Discuss the future direction and role of science in GLBA.

The proposed sessions are:

- 1) Ecosystem development – (Colonization, succession and community development of plants and animals in terrestrial and aquatic ecosystems, etc.)
- 2) Physico-chemical processes (glaciology, geology, oceanography, hydrology, etc.)
- 3) Research related to resource management and human influence (humpback whales, seals, spruce bark beetle, other mammal studies, commercial fisheries, salmon spawners surveys, carrying capacity, anthropology and historical surveys, etc.)
- 4) Science and management: history of science in the park, funding, management utilization and needs of science, implications of biosphere status, direction and role of science in Glacier Bay.

The idea is to move away somewhat from the discipline to the interdisciplinary approach and thus make the sessions more widely ranging in topics.