

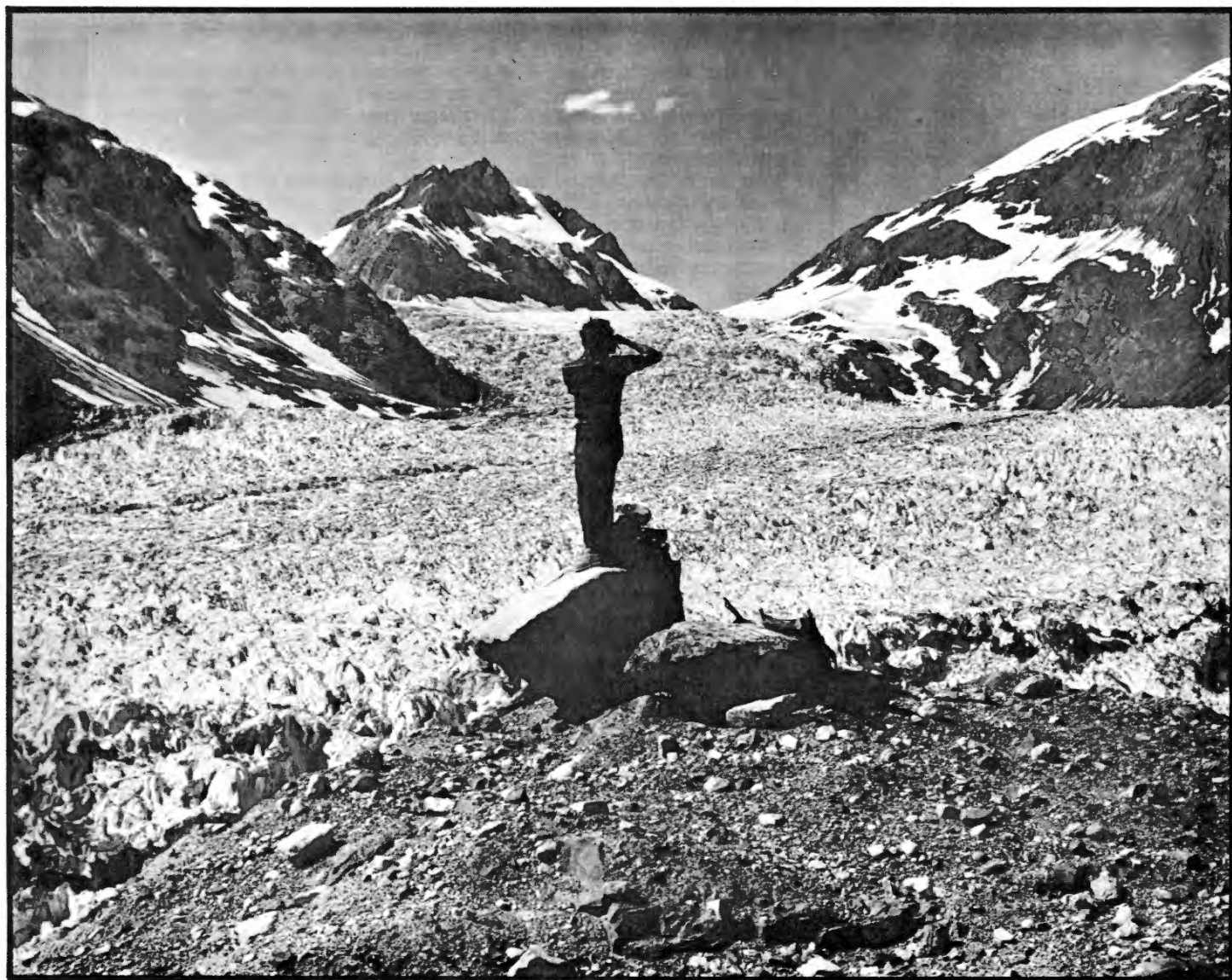


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Cover Photo: Muir Glacier, one of the sites visited during a nine-day scientific study trip through Glacier Bay NP and sites along the Park's Gulf of Alaska coastline.

**Glacier Bay Staff Honors Two
For Venerable Research Record**

By Gary Vequist

Two scientists with a combined total of 97 years spent in research were honored at a June 19 dinner arranged by the Glacier Bay National Park and Preserve staff. Staff members and other scientists spent a rewarding evening discussing their long-term research efforts and the history of scientific discoveries made at Glacier Bay with Dr. Donald Lawrence, a plant ecologist from the University of Minnesota, and Dr. William Field, glacial geologist with the American Geographical Society.

Dr. Lawrence and Dr. Field returned to Glacier Bay to re-examine their research sites and to familiarize accompanying scientists with their studies.

The research team boarded the NPS vessel "Nunatak" on June 17th for a 4-day trip to study sites throughout Glacier Bay followed by a 5-day trip to sites along the Park's Gulf of Alaska shore, primarily in Lituya Bay.

William Field made his first visit to Glacier Bay in 1926 and initiated a long-term project to record glacier variations by means of precise ground measurement and photography of glacier termini, done at several year intervals. On this trip, Field was able to make observations of most major tidewater glaciers. Monitoring efforts will be undertaken by park rangers in 1982 to maintain the data base on movement of glacier fronts. Dr. Field is attempting to locate other scientists to resume and expand glacier monitoring from specific observation stations.

Nowhere in Alaska has there occurred within recent years so rapid a disappearance of glacial ice. Glacier Bay is an ideal location for more sophisticated scientific techniques to develop a better understanding of the relationship between glacier regime and the climatic environment. The measurement of ice mechanics, mass balance and meteorological variations, when evaluated with long term data records, could provide valuable knowledge of the relationships behind the creation of this spectacular landscape.

Dr. Lawrence evaluated changes at eight permanent research plots in Glacier Bay. His plant studies, begun in 1941, continue the research begun in 1916 by Professor William S. Cooper. These permanent plots are the longest record of vegetative development on terrain of known age following glacier recession.

The rapidity of vegetation change following glacier recession has made it possible to map and photograph the course of plant succession. These studies have provided important contributions to

the development of plant succession theory.

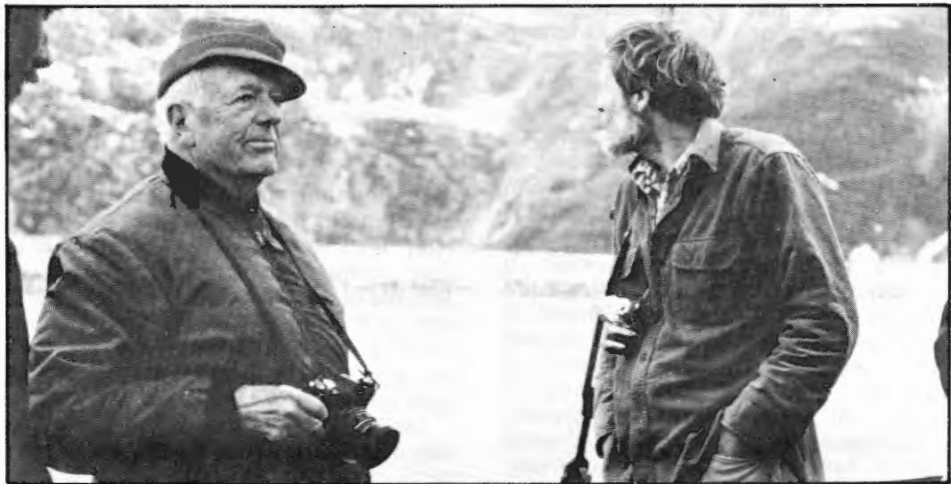
Other researchers participated on this trip to investigate various aspects of the glacier recession on patterns and processes of physiographic ecology. Dr. Peter Wardle, an authority of arctic and alpine timberlines, from the New Zealand Department of Scientific and Industrial Research, examined the remnant forests above 2,400 feet that were left uncovered by glacier ice 200 years ago. Dr. Mark Noble of the Arctic Alpine Research Institute of Colorado, and Dr. Ian Worley of the University of Vermont participated to obtain experience needed to continue monitoring of the plant succession study.

The accurately documented glacial recession creates a unique opportunity for the study of glacier geology and plant ecology.

Gary Vequist is a resource management specialist at Glacier Bay NP. The photos of Dr. Field and Dr. Lawrence were taken by Dr. Mark Noble, research associate at the Institute of Arctic and Alpine Research, University of Colorado.



Dr. Donald B. Lawrence surveys one of the permanent plots that were remapped during the recent research trip in Glacier Bay NP. This was Dr. Lawrence's 11th trip to the Park.



Dr. William O. Field is shown here on June 18, 1982, aboard the NPS vessel M/V Nunatak in Johns Hopkins Inlet, Glacier Bay NP. Gary Vequist's profile can be seen to the left of Dr. Lawrence. Looking out over Glacier Bay is Dr. Ian A. Worley, professor of botany at the University of Vermont.