

CONCEPTS

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Uncovering the Juneau Botanical Club's Herbarium

by Wendy Parker Swedell

In the late 1930s the Juneau Botanical Club began gathering specimens for its herbarium, a collection of dried plant specimens. Throughout the next forty years the herbarium grew to be the most complete collection housed in southeast Alaska, with approximately 5,000 specimens. It includes a comprehensive collection of plants from all over Alaska and neighboring Canada. Samplings come from the Aleutian Islands and Interior Alaska, with several specimens from as far west as Little Diomedede Island.

In 1977 the Juneau Botanical Club donated its library and herbarium to the Alaska State Museum with the stipulation that the specimens remain in Juneau.

The Club's Early Days

The botanical club consisted of six active members in Juneau. However, at least 65 collectors were recruited throughout Alaska and Canada. An excerpt from the short history of the aggressive little group, written by leader Maxcine Williams, explains:

"The collection did not grow much until after the war. Lucille (Stonehouse) and I went to Haines in 1946 and collected there and up the highway a ways. About this time Christine Heller, nutritionist with the old Health Department,

became interested and started to collect after work. Her job took her all over Alaska so our range was greatly enlarged. In 1949 Christine, Amy Rude, Lucille and I took Dr. Rude's car, (he was getting a new one), shipped it to Haines on an Alaska Steamship boat and drove the Haines, Alaska and Steese Highways to the Yukon River. We stayed at Miller House for many days and collected in a wide area around there. We only got down the Richardson Highway a little ways south of Black Rapids Roadhouse because of several washouts and a



Difficult roads often proved to be the greatest obstacle on collection trips.

bridge out. As it would take quite a long time to repair, we went back to the Alaska Highway and so on home. Incidentally there were no paved roads in those days. We collected 1,100 specimens and were gone five weeks.

I started a newsletter and got names of teachers and FAA personnel and sent out the first issue. From this effort we got several good collectors and much new material from new places. The most prolific was Mrs. Arthur (Helen) Schmuck whose husband was with the FAA. She collected at Lake Clark on the Alaska Peninsula, Yakutat and Nenana. Henry Kyllingstad, a teacher from Mountain Village on the lower Yukon, sent plants from there. Gertrude Frohne collected in several places."

Maxcine Williams moved to Oregon in the 1960s, where she remained an avid botany student and spent summers in Alaska until her death in 1983.

Williams often worked on this collection at the museum in exchange for her room and board in Juneau. At her bequest the Alaska State Museum gained hundreds of her very professional slides and photos, illustrating her life in Juneau, visits around the state and plant collecting trips, most notably the 1949 trip. Her closeup studies of flowers have illuminated several friends' books. One storage case contains a slide lecture program which she gave to groups. The text of this presentation provides a broad overview of the entire collection,

using many species from the Interior.

The Growth of the Herbarium Contributions of noted Botanist

Maxcine and the club felt they owed much of their start in the late 1930s to her employer, Dr. J. P. Anderson, owner of Juneau Florists. An eminent botanist and enthusiastic teacher, he gave the



Club members credit Dr. J. P. Anderson as a major influence on the Juneau Botanical Club.

members botany lessons using specimens from his private herbarium, which he was building after his first one was consumed by fire. He was an avid plant hunter who encouraged collecting expeditions via hikes and boat trips. Dr. Anderson had an M.S. degree from Iowa State University. Although the club's collection has a good number of specimens which he contributed, he sent many of his specimens to the university herbarium in Iowa. He was also awarded an honorary doctor of science degree from the University of Alaska in 1940.

One of the reasons this herbarium is so valuable is that several outstanding botanists shared in the identification of plants collected. Dr. Anderson was the major identifier. He was assisted by Dr. Stanley Larson Welsh of Brigham Young University's herbarium, who rewrote Anderson's *Flora of Alaska and Adjacent Parts of Canada*. In 1946, *Polemonium pilcherrimum* was identified by Edgar Theodore Wherry, a botany professor from Pennsylvania, who specialized in Polemoniaceae (*Philox Family*). *Salix* studies were done in 1976 by George W. Argus, a salicologist with the University of Wisconsin; in 1965 by Dr. William Mitchell; and in 1948 by Carleton R. Ball, author of the *Revision of the North American Willows*.

Hundreds of specimens, perhaps more than one thousand, were personally identified by Dr. Eric Hulten. Before he died in 1981, Hulten was Director Emeritus of the botany department of the

State Museum of Natural History in Stockholm, Sweden. He wrote many scientific works dealing with Arctic regions from Siberia, across Alaska to the Mackenzie River district of Canada. His book on Alaskan flora is the standard reference guide to vascular plants of our area, and it is an honor to have his handwritten notes among the club's collection.

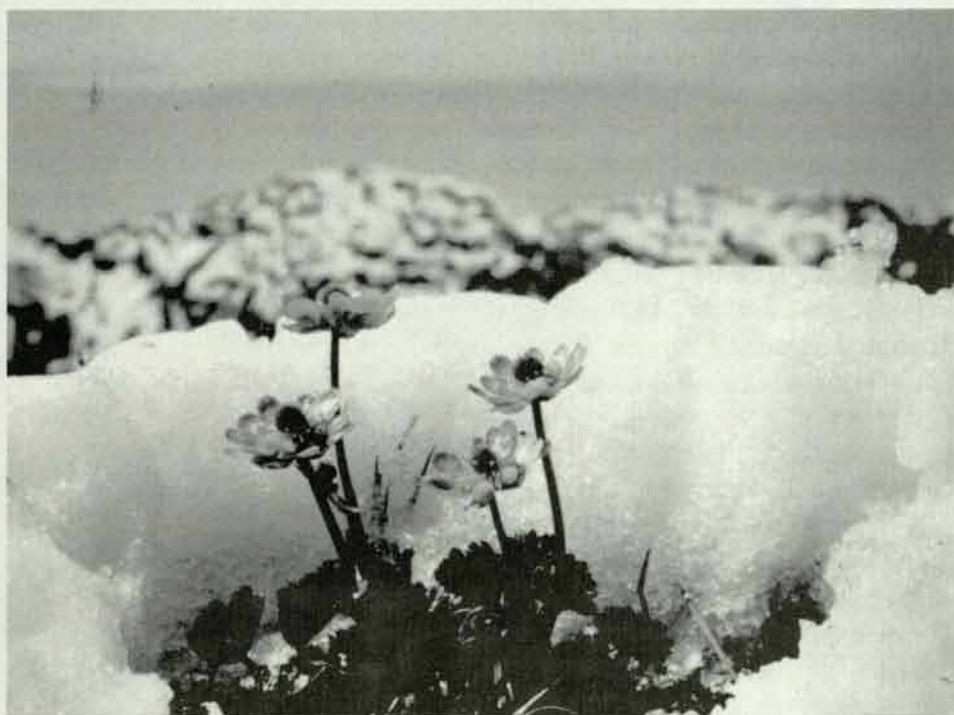
In the 1950s and 1960s, many species were identified by Ira L. Wiggins, Professor of Botany and Director of the Natural History Museum at Stanford University from 1940 to 1961. At Point Barrow, he was Scientific Director of the Arctic

Research Laboratory for several years, specifically studying vascular plant taxonomy. With John Hunter Thomas, he co-authored *A Flora of the Alaskan Arctic Slope* in 1962.

One of Maxcine Williams' special photographs depicts Cooley's Buttercup (*Ranunculus cooleyae*). One of the very first alpine flowers to display its colors, it can poke right through melting snow banks, often in the middle of a stream. This buttercup's identity was first investigated by a famous botany professor, Dr. Grace Cooley, of Newark, New Jersey, on a visit she made to Juneau's Mount Roberts, near the turn of the century. Consequently the sturdy little yellow-flowered plant was named for her.

Many North American scientists assisted with the Juneau club's herbarium. Another famous student of Canadian flora, who did much identification in this herbarium, was Alf Erling Porsild, a curator of the National Herbarium of Canada. In 1926, he and his brother collected about 6,000 Alaska specimens while studying reindeer. Another was a student of the flora of Oregon and a professor of botany there, Leroy Ellsworth Detling. Some identification work was also done here by a curator of botany from Philadelphia, Francis Whittier Pennell. Another biologist associated with this collection was George W. Gillet, from the herbarium of Michigan State University.

A number of others made large contributions to the herbarium. For instance, Francis Baker covered the Ketchikan area well and made several productive collecting trips into British Columbia. Frank Beals was very prolific during the World War II era, especially in the Aleutian Islands. Some collectors require



Cooley's Buttercup (*Ranunculus cooleyae*) was discovered on Mount Roberts.

more research, especially Dr. Knut Faegri of the University of Bergen, Norway. Dr. Faegri was studying pollen and did a great deal of collecting in the Juneau, Tenakee and Elfin Cove areas in 1963. Calvin J. Heusser was also studying pollen and contributed many specimens from the Juneau Ice Field in the early 1930s. Edith Scamman deserves mention here for collections she made, especially along the Steese Highway in the summer of '49. Hulten refers to her in his book as a botanical author associated with the Gray Herbarium of Harvard. It is interesting to note that two alpine plants, *Oxytropis scammaniana* and *Claytonia*

scammaniana, were named for her by Hulten.

The Juneau Botanical Club also donated its small library to be kept alongside the herbarium. It houses several scientific papers written by botanists associated with the collection, some of which are now out of print. Other books, such as *Edible and Poisonous Plants of Alaska*, by Christine Heller, were written by the collectors themselves and club members. Heller's book is illustrated by Marion R. Sheehan and another member of the club, Claudia Kelsey.

Also included in the library is part of the manuscript for Anderson's *Flora of Alaska* and many other articles which he wrote and published for *Alaska Sportsman* magazine concerning local flora.¹

Founding Members of the Juneau Botanical Club

Ann Coleman
Helen Johnson
Claudia Kelsey
Amy Rude
Lucille Stonehouse
Maxcine Williams

Refurbishing a Valuable Collection

Recently, *ed.note* (1986), the Juneau Botanical Club's Herbarium was refurbished in the collections of the Alaska State Museum. Two full-

¹ In January, 1970 the former *Alaska Sportsman* magazine began publishing under the title of *Alaska* magazine.

sized cabinets were added to the three half-cabinets, making the collection site more compact, organized and accessible to serious botanists and museum staff. My job as intern/volunteer was to update and "releaf" the collection, making it less vulnerable to deterioration. My work for the University of Alaska-Juneau was directed by Dr. Rita O'Clair, an Adjunct Associate Professor of Biology, and overseen by the Museum's Curator of Collections, Dr. Lynn Wallen.

The physical work took approximately five months to complete. The specimens are fragile but in good condition, mostly due to their infrequent handling. Old newsprint species covers and worn genus covers were replaced with new acid-free folders made of 100% rag paper. These covers are now labeled with bold, stenciled lettering in permanent ink for better legibility.

Each specimen is mounted on a plate, a heavy piece of paper approximately 12" by 16". An identification

label in the lower right-hand corner of the plate lists the scientific species name, location of collection, and habitat. The names of the collector and of the person who did the scientific identification are also recorded on the label. Many location sites were altered for clarity. For example, "NW of Juneau" was added to "Eagle River" to avoid confusion with the town of Eagle River in the Matanuska-Susitna valley.

The identification of some species is still questionable. As a student, I accepted the final dated identification as the most accurate. With regard to taxonomic listing, I have followed Dr. Eric Hulten's *Flora of Alaska and Neighboring Territories*.² Many specimens had to be renamed, cross-referenced, and relocated. As a result, the herbarium should be much more scientifically accurate and useful. Inside each cabinet is a list of genera and family name tags to aid in the location of specimens within that cabinet.

The refurbishing and associated research on this important herbarium should provide a reference for comparison with other collections of plant specimens. Of particular interest to researchers is a master list of genera not found in this herbarium. A list of contributors to the herbarium, indicating the areas and years in which they collected, summarizes the scope of this herbarium. The Juneau Botanical Club's herbarium significance lies not only in the actual specimens, but also in the expertise and perseverance of the collectors, scientists, and club members.

The Author

Wendy Parker Swedell completed an internship at the Alaska State Museum during the winter of 1985-86, in cooperation with the University of Alaska, Juneau. Swedell refurbished the herbarium and researched the history of the Juneau Botanical Club, volunteering her time to complete the extensive project after fulfilling her internship requirement.

² The herbarium collection was dedicated to Dr. J. P. Anderson, author of *Flora of Alaska and Adjacent Parts of Canada*. This book is no longer in print and is nearly impossible to obtain.

Bibliography

Anderson, J.P.

1959 *Flora of Alaska and Adjacent Parts of Canada*. Ames, Iowa: Iowa State University Press.

Heller, Christine

1953 *Wild Edible and Poisonous Plants of Alaska*. University of Alaska Fairbanks, U.S. Department of Agriculture Extension Service.

Heuser, Calvin J.

1954 "Nunatak Flora of the Juneau Ice Field, Alaska." *Bulletin of the Torrey Botanical Club*, Vol. 81, No. 3, May, pp. 236-250.

Hulten, Eric

1968 *Flora of Alaska and Neighboring Territories*. Stanford, Stanford University Press, California.

Wiggins, Ira L. and J.H. Thomas

1962 *A Flora of the Alaskan Arctic Slope*. Arctic institute of North America, Special Publication No. 4.

The Concepts series publishes information on the preservation of Alaska's material heritage and recent research on the collections of the Alaska State Museum, Juneau, and Sheldon Jackson Museum, Sitka.

Alaska State Museums
Division of Libraries, Archives
and Museums
395 Whittier Street
Juneau, Ak 99801