

# In Search of a Cure

By Robert L. DeVelice, Forest Ecologist, Chugach National Forest

In the summer of 2003, botanists Rich Spjut and Rick Marin collected 166 samples from 69 plant species on the Chugach National Forest for cancer research. Spjut and Marin, of World Botanical Associates in Temecula, Calif., conducted their work for the U.S. government's National Cancer Institute. Their Chugach collections took place in the Kenai Mountains and primarily included species having no or limited sampling elsewhere in the United States for cancer research. To facilitate efficient sampling of a wide diversity of vegetation types, the Ecology Program on the Chugach provided suggestions on sites to visit.

The pair based their work out of Broadview Station, a Forest Service facility managed by State and Private Forestry on the shores of Kenai Lake. They used attic, plant driers, and bunkhouse facilities to dry the plant materials collected prior to shipment to the National Cancer Institute in Bethesda, Md. Once at

the Institute, extracts from the sampled material will be applied to 60 different cell lines of cancer. Based on previous research, Spjut anticipates that 1-2% of the samples collected will show enough response in the anti-cancer experiments to justify further research.

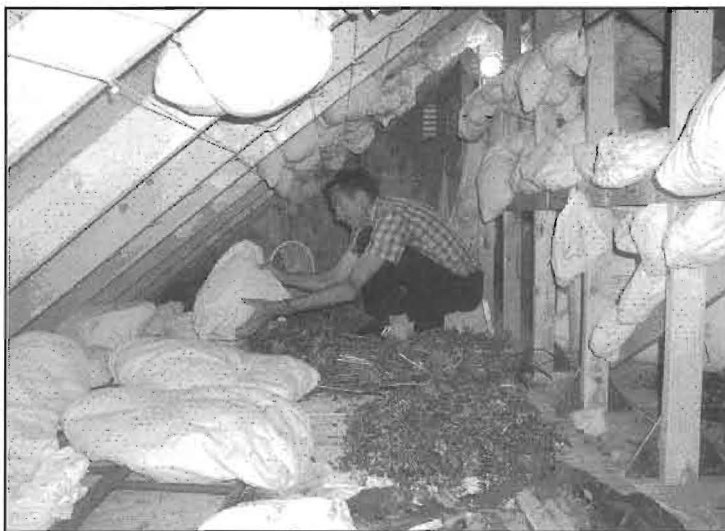
In addition to potentially resulting in cures for cancer, the information collected benefits the Ecology Program on the Chugach National Forest by expanding the program's database on the distribution and abundance of plant species across the Kenai Mountains

*Editor's Note: Dr. Rob DeVelice served as the primary contact at the Chugach National Forest for this valuable project. He reports that there have been documented successes in finding anti-cancer properties in Pacific yew trees and false hellebore. Both species occur in the Alaska Region. The website for World Botanical Associates: <http://www.worldbotanical.com/>.*



Rich Spjut prepares to collect specimens of northern bastard toadflax from the Palmer Creek area of the Chugach National Forest. The sample will be tested against 60 different cell lines of cancer. Photo courtesy of World Botanical Associates.

Rick Marin at work drying plant specimens in an attic at S&PF's Broadview Station. After drying, the specimens are shipped to the National Cancer Institute in Bethesda, Maryland. Photo courtesy of World Botanical Associates.



## A partial list of collections includes:

- Sitka alder .....(*Alnus crispa* ssp. *sinuata*)
- Mertens' sedge .....(*Carex mertensii*)
- Stellers' cassiope .....(*Cassiope stellariana*)
- White mountain avens .....(*Dryas octopetala*)
- Crowberry .....(*Empetrum nigrum*)
- Woodland horsetail .....(*Equisetum silvaticum*)
- Northern bastard toadflax .....(*Geocaulon lividum*)
- Partridge foot .....(*Luetkea pectinata*)
- Rusty menziesia .....(*Menziesia ferruginea*)
- Arctic sweet coltsfoot .....(*Petasites hyperboreus*)
- Aleutian mountain heath.....(*Phyllodoce aleutica*)
- Trailing black current .....(*Ribes laxiflorum*)
- Cloudberry .....(*Rubus chamaemorus*)
- Least willow .....(*Salix rotundifolia*)
- Sitka mountain ash .....(*Sorbus sitchensis*)
- False hellebore .....(*Veratrum viride*)