

## Devil's Club good for man and bear alike

by Ed Berg

If you've ever tried to recover your balance by grabbing a handy stem of Devil's Club, you can see how the plant got its name. Grabbing such a stem is a mistake you only make once. The numerous short spines provide a handful of pain and can fester if not removed right away. But properly schooled, there is much to be enjoyed with *Echinopanax* (*Oplopanax*) *horridum* (horrible spiny panax) in spite of its unfriendly names.

Devil's Club is a plant of mature forests. It is very sensitive to fire and takes a long time to reestablish after a fire. A healthy stand of Devil's Club is generally an indicator that the forest hasn't burned for many decades, perhaps several hundred years. The plants are clonal: if you follow the roots (underground stems) in a patch, you will often see that they are all connected and are genetically one individual. I assume that many seasons of growth are needed to establish a single patch, which is probably why we don't see large patches in younger forests.

At the Bufflehead Road site, north of the Swanson River oilfield, we counted Devil's Club 3,548 stems along a 760 meter transect, with an average density of about 2 stems per square meter or 7,650 stems/acre. This is a very mature white spruce and birch forest that hasn't burned for at least 300 years, according to the oldest (non-rotten) trees that we cored. The understory is thick grass and Devil's Club, and not much else. This is pretty typical of our very mature stands of the northern Kenai.

The black and brown bears love forests like this in the summer and fall, because they can eat a phenomenal number of clusters of the bright red berries. Kenai Refuge grad student Todd Eskelin collected and dried clumps of Devil's Club berries at the Bufflehead Road site and estimated berry production at 54 pounds per acre (dry weight). Berry production was low that year (1996), due to dry conditions, so much higher production could be expected in a good year. Former ADF&G biologist Chuck Schwartz located 4 to 8 radio-collared black bears per square mile in this area, which was an underestimate of bear density because he also observed many uncollared bears. Bear densities were much lower in the nearby 1947 and 1969 burns (0.5

bear per square mile) which have not yet produced much Devil's Club.

In the old growth forests of Sitka spruce on the south side of Kachemak Bay, Devil's Club often forms a more or less continuous canopy above the forest floor, broken occasionally with Rusty Menziesia and Blueberry. A rich medicinal smell (one of my favorites) fills the nostrils when you walk through such a canopy and bruise the Devil's Club stems.

This medicinal smell can be captured in Devil's Club tea, which is made from the bark of the "roots." It is easy to collect the bark of the roots, because the spines don't form on the underground part of the stem. Fall is the best time of the year to collect the bark, because like many herbs, the plant has spent all summer sequestering its special compounds in the roots.

I view Devil's Club tea as sort of a "poor man's ginseng," free for the taking in our local forests. Devil's Club is a close relative of ginseng (*Panax* species in the Araliaceae family) and they are both said to contain similar compounds of medicinal value, although I have not searched the literature to confirm this fact. In Chinese folklore ginseng is "good for what ails you," and it is an important herb in traditional Chinese medicine, especially as a male toner. I have visited shops in Chinatown in San Francisco devoted exclusively to the sale of different varieties of ginseng - Korean, Chinese, Wisconsin, etc.

When I collect Devil's Club bark, I peel off the bark of the root with a knife and dry it in a paper bag for a week or two. I then store the bark in a jar with a tight lid to preserve the aroma. As with ginseng, tea can be made by putting a few pieces in a cup and adding boiling water. The tea is a definite stimulant, although less "nervy" than the caffeine in a cup of ordinary black tea.

I like to eat the young leaf buds early in the spring. When the buds are an inch long, they can easily be twisted off and eaten raw, and are quite tasty. Once the buds become longer, they get bitter and the spines stiffen. The red berries are considered inedible for human beings, but I have never read that they are actually toxic.

I did an Internet search on "Devil's Club" and turned up more than 600 hits, many of which were

herbal pharmacies extolling the medicinal virtues of Devil's Club and selling it for as much as \$12.50 for two ounces, under such names as "Wild Alaskan Armored Ginseng." Traditional Native uses of Devil's Club are for rheumatism, stomach troubles, colds, coughs, and fevers. My wife was interested to see that Devil's Club is used to treat late-onset diabetes (Type II) associated with menopause. Jan Schofield in her book "Discovering Wild Plants: Alaska, Western Canada, the Northwest" (Alaska Northwest Books, 1989) advises diabetics to monitor blood sugar levels because Devil's Club use may lower insulin requirements.

You won't find Devil's Club north of the Alaska Range; it is a creature of the Pacific Northwest coastal forests and favors moist but well drained forests. It is especially abundant in British Columbia, where it is an important food source for grizzly bears and has important medicinal and ceremonial roles in the coastal Indian cultures.

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