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UI Horticulturist Looks to Tame the Huckleberry

University of Idaho horticulturist Dan Barney wants to tame the Northwest's wild mountain huckleberries for a life of tidy cultivation while preserving that intense mountain flavor people hike miles for.

But huckleberries, it turns out, are stubbornly wild, especially the flavorful black huckleberries growing in Idaho mountains. They thrive most abundantly at 4,000 to 6,000 feet, where short growing seasons give way to long winters and the deep snows that insulate tender huckleberry buds and shoots. Removed to lower elevations, these huckleberries are apt to freeze to the ground in open winters.

Barney aims to correct these shortcomings through hybridization. Some Northwest huckleberries do prosper at low elevations, for example, but they tend to flunk the flavor test. Others have neat root systems that lend themselves to cultivation. Some plants ripen early, or produce exceptional yields. And Barney, who is superintendent of the UI Sandpoint Research & Extension Center, also knows a few patches of tasty berries that grow wild at just 2,000 feet.

Over the past 12 years, Barney has collected huckleberry "germplasm" (the seeds, stems, and buds that can produce new plants) from throughout the Northwest, as well as from Alaska, Poland, and Finland, accumulating plants whose strengths he can combine into a superior berry. "We have all the germplasm we need to begin a good breeding program," Barney said.

Barney has also developed methods for growing western huckleberries in tissue culture, a critical technique for quickly multiplying promising plants.

At the same time, he has developed methods for growing huckleberries under cultivation, having spent 12 years working out the techniques at Sandpoint. This year, the College of Agriculture published his *Growing Western Huckleberries*, a manual on growing huckleberries commercially or at home (available as BUL 821 from county extension offices).



Huckleberry breeder Dan Barney collects huckleberry germplasm in Washington's Olympic National Forest.

UI Staff Photo

"It's still very experimental and quite risky," said Barney of the prospect of cultivating huckleberries. Future work will refine the techniques, and clarify the importance of cooperative soil fungi, for example.

Access to wild berries has been declining as forest roads are closed. On top of that, a string of bad weather years has hurt supplies and sent prices up to \$30 a gallon last season, up from \$12 to \$18 a gallon in previous years, according to Harry Menser, co-owner of Gem Berry Products in Sandpoint.

If huckleberries were domesticated, commercial growers could provide reliable supplies of high-quality berries. Nurseries could propagate them, and gardeners could pick wild mountain flavor from their own backyards. "There's not a month that goes by that someone doesn't call about growing huckleberries commercially," said Barney.

Barney expects to begin crossing his huckleberry plants this coming summer, and to have preliminary varieties ready for testing in 10 years. "We've got the germplasm now," said Barney, "All we need is some time to develop it."

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