# Plant Data Sheet

## Species (common name, Latin name)

Dwarf bilberry, Dwarf huckleberry, dwarf blueberry, dwarf whortleberry
*Vaccinium caespitosum* Michx

## Range

The range of *Vaccinium caespitosum* extends across the subarctic zone from Alaska to Labrador, with southward extensions into the Sierra Nevada Range of California, the Rocky Mountains to New Mexico, and locally into northern Minnesota, northern Wisconsin, Michigan, northern New York, and northern New England.[2]

## Climate, elevation

Generally cool and dry. 2,420 to 3,340 meters.[2]

## Local occurrence (where, how common)

Common throughout the Olympic and Cascade mountain ranges. [2]

## Habitat preferences

Dwarf huckleberry occurs as an understory dominant or codominant in high elevation spruce (Picea spp.)-fir (Abies spp.) forests throughout much of western North America. It also grows, often in great abundance, in some relatively moist Douglas-fir Pseudotsuga menziesia), quaking aspen (Populus tremuloides), and lodgepole pine (Pinus contorta) communities. Common understory codominants in these western forests include bog Labrador tea (Ledum groenlandicum), grouse whortleberry (Vaccinium scoparium), queencup beadlily (Clintonia uniflora), and bluejoint reedgrass (Calamagrostis canadensis). Dwarf huckleberry also occurs in alpine heath communities and is codominant with species such as grouse whortleberry, and pine dropseed (Blepharoneuron tricholepis) or other forbs. In the lower alpine zone of the West, this shrub, along with grouse whortleberry, commonly dominates shrubfields which develop in areas of prolonged snow cover. In the East and North, it occurs in black spruce (Picea mariana), balsam fir (A. balsamea)-white spruce (P. glauca), paper birch (Betula papyrifera)-balsam fir, oak-maple (Quercus-Acer spp.), and eastern hemlock (Tsuga canadensis) forests.[1,2]

## Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)

Dwarf huckleberry occurs in climax Douglas-fir or spruce-fir forests throughout much of the West. However, it is also considered an important seral shrub in many areas of western North America. An extensive network of shallow rhizomes enables this shrub to rapidly reestablish after most light to moderate disturbances.[1,2]

## Associated species

In the West, dwarf huckleberry commonly grows in association with twinflower, queencup beadlily, Labrador tea,

swordfern (Polystichum spp.), huckleberries (V. membranaceum, V. globulare), bluejoint reedgrass, elk sedge (Carex geyeri), and kinnikinnick (Arctostaphylos uva-ursi). Common eastern understory associates include maples (Acer spp.), blueberries (Vaccinium spp.), ichens (Cladonia spp.), bog Labrador tea, wintergreen (Gaultheria spp.), maianthemum (Maianthemum spp.), black crowberry (Empetrum nigrum), mountain-laurel (Kalmia polifolia), and viburnum (Viburnum spp.).[2]

## May be collected as: (seed, layered, divisions, etc.)

Dwarf huckleberry reproduces both sexually and vegetatively, although vegetative regeneration appears to be of primary importance. [2]

## Collection restrictions or guidelines

Dwarf huckleberry seedlings are rarely observed under natural conditions in the West. Germination may be limited to exceptional sites in favorable, moist years. Seed stored on-site appears to contribute little to regeneration of this species. Buried seeds have been recovered from the top 1.2 inches (3 cm) of soil in balsam fir (Abies balsamea)-white spruce (Picea glauca) forests of Quebec, but viability was very low (0-16 percent). [2]

## Seed germination (needs dormancy breaking?)

Vaccinium seeds are not dormant and require no pretreatment for germination. [2]

## Seed life (can be stored, short shelf-life, long shelf-life)

Not available

## Recommended seed storage conditions

Refrigerated in sealed containers. [1]

## Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)

Dwarf huckleberry is rhizomatous and plants are often capable of resprouting after the crown is removed or damaged. However, these regenerative structures are fairly shallow and can be damaged or eliminated by deep, duff-consuming fires or mechanical treatments which include severe soil scarification. Twigs are capable of regenerating at the nodes and vegetative expansion can occur even in the absence of disturbance. [2]

## Soil or medium requirements (inoculum necessary?)

Dwarf huckleberry grows well on medium-coarse, well-drained, granitic soils. Most huckleberries (Vaccinium spp.) require acidic soils and can grow on infertile sites which have relatively small amounts of many essential elements. Dwarf huckleberry commonly occurs on soils with a pH of 5.5 to 7.0. [2]

## Installation form (form, potential for successful outcomes, cost)

A dwarf-to-low, spreading, rhizomatous shrub. This often mat-forming shrub grows 2 to 20 inches (5-50 cm) in height. It has a relatively short lifespan. [2]

## Recommended planting density

Spreading the plant apart seems to be most successful. Dwarf huckleberry easily spreads out, creating a low, thick shrub cover. [2]

## Care requirements after installed (water weekly, water once etc.)

Regular watering, no special care requirements.

## Normal rate of growth or spread; lifespan

Dwarf Huckleberry grows fast in recently disturbed sites. It has a relatively short lifespan.

## Sources cited

[1]Hansen, W. Native Plants of the Northwest. http://www.nwplants.com. May 2, 2006

[2] USDA Forest Service. *Fire Effects Information System*. http://www.fs.fed.us. May 1, 2006

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