

SALMONBERRY

Rubus spectabilis Pursh

Plant Symbol = RUSP

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Uses

Ethnobotanical: Salmonberry fruits are edible, but are considered too soft to dry. Both the large, raspberry-like fruit and the young shoots were widely eaten by coastal peoples of British Columbia and western Washington. Fruits were an important food source for Native Americans and are still collected today. The berries are among the first to ripen, and are a beautiful salmon color that stand out in the generally rainy weather of spring. Large quantities of fresh berries were picked and were often served at feasts, usually with oil or ooligan grease, said to prevent constipation. Today salmonberries are frozen, canned, or made into jams and jellies.

The young growing sprouts are harvested from April to early June. They are snapped off with the fingers before they become woody, then peeled, and eaten raw or, more commonly cooked by steaming or boiling. Sprouts are also tied in bundles and pit-cooked. They were usually eaten with seal oil or ooligan grease, and, more recently, with sugar, often as an accompaniment to dried salmon or meat. Some *Nuu-chah-nulth* people boiled the leaves with fish as a flavoring. The Kaigani Haida used the leaves to line baskets, wipe fish, and cover food in steaming pits.

The Makah dry and peel a branch of salmonberry, remove the pith, and use it for a pipe stem. The Quileute plug the hair seal float used in whaling with the hollow stem of elderberry wood, then insert a piece of salmonberry wood as a stopper. This salmonberry plug can be removed for further inflation of the float.

Salmonberry has an astringent quality in the bark and leaves. The Quileute chew the leaves and spit them on burns, and in winter when the leaves are not obtainable they use the bark instead. The Makah pound the bark and lay it on an aching tooth or a festering wound to kill the pain. The Quinault boil the bark in seawater, and the brew is drunk to lessen labor pains and to clean infected wounds, especially burns.

Wildlife: Salmonberry fruits, ripe from June to August, rank at the very top of foods for wildlife. The early blooming flowers, blossoming from March to June, are an important nectar source for bees, butterflies, various other insects, and hummingbirds. The berries are relished by songbirds, bears, and small mammals as much as they are enjoyed by humans. Leaves, twigs, and stems are grazed by browsers, such as deer, elk, and rabbits. The dense thickets provide excellent escape habitats for birds and small mammals, and nesting sites for songbirds.

Restoration: Salmonberry is a useful shrub in created wetlands because it transplants easily, with good soil-binding qualities once it is established, and is well adapted to eroded or disturbed sites.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status and wetland indicator values.

Description

General: Rose Family (Rosaceae). Salmonberry is a deciduous rhizomatous shrub, usually 1-4 m tall, with erect or arching stems. The stems are often densely prickly on the upper portions of new growth. The twigs in winter tend to have a distinctive golden-brown to rust-red color. The flowers are large (about 1.5 inches across) and borne singly. Salmonberry blooms in early spring with beautiful deep pink rose-like flowers. The leaves are pinnately compound.

The fruits are raspberry-like, round, and yellow to orange to deep red.

Distribution

For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site. Salmonberry grows in moist places and wetlands, and is especially abundant along streamsides and riparian areas at elevations below 1400 m. It can form dense thickets or grow individually. The range is from Alaska south to northwestern California, from the coast to the Cascades.

Establishment

Salmonberry grows well in full or partial shade. Cultivars are available in the horticultural trade. These shrubs are good for stabilizing or restoring degraded sites, and for slope stabilization and erosion control. Salmonberry shrubs may become invasive one they are established.

Live Plant Collections: Salmonberry is easily grown from layering, basal sprouting, rhizomes, root cuttings, and hardwood cuttings. Small offshoots growing from the parent plant under four feet tall are easily transplanted. Branches that touch the ground tend to root, and they can be separated from the parent plant. Pull the rooted tips of larger plants and plant into one-gallon pots.

Hardwood cuttings should be 1-2.5 cm in diameter and 45 cm or more in length with at least three nodes. Rooting invariably occurs at the base of a cutting and at nodes with leaf buds. Store hardwood cuttings over winter in damp sawdust or peat moss; this promotes callusing and prevents desiccation. As with hardwood cuttings of other species, vigorous rooting can be enhanced in *Rubus* species by using a liquid rooting hormone and burying the cuttings in damp wood shavings.

Seed Collections: Salmonberry can be grown from fresh seed. Collect the fruits when ripe (they are orange or red). Generally salmonberry fruits ripen from June through August, and can be collected by hand. Extract seeds by macerating in water and floating off the pulp and empty seeds. Seed should be planted in the fall. If seeds are to be stored, they should be dried. Seeds will keep for several years at 5°C. A warm stratification of 20-30°C is necessary for spring-sown seeds, although fall sowing provides best germination. Germination is improved if seeds are scarified with sulfuric acid for 20-60 minutes or with a 1% solution of sodium hyperchlorite for seven days prior to cold stratification. Seeds need 90 days

of cold stratification at 36° - 41°F to break seed dormancy. Sow in ground in drills, cover lightly with soil, and mulch over winter. Seeds per kilogram: 315,255

Management

Traditional Resource Management: This includes the following: 1) Occasional burning to stimulate new growth; 2) pruning the branches after picking the berries to stimulate new growth and fruit production the next growing season; and 3) ownership of salmonberry shrubs provides the basis for careful tending and sustainable yield of valued resources. This plant grows very rapidly in moist, shady conditions. If summer drought occurs, the plants should be watered so roots are kept fairly moist.

Cultivars, Improved and Selected Materials (and area of origin)

Available from some native plant nurseries within its range. Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government." The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

References

Albright, M. 1996. *Greenhouse manager*. USDI, National Park Service, Olympic National Park, Port Angeles, Washington. Personal communication.

Angier, B. 1974. *Field guide to edible wild plants*. Stackpole Books. 256 pp.

Brinkman, K.A. 1974. *Rubus L. blackberry, raspberry*. IN: Schopmeyer, C.S. (tech. coord.) 1974. *Seeds of the Woody Plants in the United States*. USDA, FS, Agric. Handbook 450, Washington, D.C. 883 pp.

Cooke, S.S. 1997. *A field guide to the common wetland plants of Western Washington and Northwestern Oregon*. Seattle Audubon Society and Washington Native Plant Society. 414 pp.

Galloway, B. 1982. *Upper Stollo ethnobotany*. Coqualeetza Education Training Center, Sardis, British Columbia, Canada.

Gunther, E. 1945 rev. 1973. *Ethnobotany of western Washington*. University of Washington Publications in Anthropology, 10(1). University of Washington Press, Seattle, Washington.

- Haeussler, S., D. Coates, & J. Mather 1990. *Autecology of common plants in British Columbia: A literature review*. British Columbia Ministry of Forests. FRDA Report 158. 272 pp.
- Heller, C.A. 1976. *Wild edible and poisonous plant of Alaska*. Cooperative Extension Service Bulletin F-40, University of Alaska, College, Alaska.
- Hickman, J.C. (ed.) 1993. *The Jepson manual. Higher plants of California*. University of California Press. 1399 pp.
- Isaacson, R.T. 1993. *Anderson horticultural library's source list of plants and seeds*. Anderson Horticultural Library. University of Minnesota Libraries. Minnesota Landscape Arboretum. 261 pp.
- Jacobs, M. & M. Jacobs 1982. *Southeast Alaska native foods*. IN : Hope. A., ed. Raven's Bones, Sitka, Alaska.
- Jensen, E.C., D.J. Anderson, J.C. Zasada, & J.C. Tappeiner II 1995. *The reproductive ecology of broad-leaved trees and shrubs: salmonberry, Rubus spectabilis Pursh*. Forest Research Laboratory, Oregon State University, Research Publication 9e. 7 pp.
- Kari, P.R. 1987. *Tanaina plantlore. Dena'ina K'et'una. An ethnobotany of the Dena'ina Indians of south-central Alaska*. USDI, National Park Service, Alaska Region, Anchorage, Alaska.
- King County Department of Public Works, Surface Water Management Division 1994. *Northwest native plants, identification and propagation for revegetation and restoration Projects*. King County, Washington.
- Ksan, People of 1980. *Gathering what the great nature provided. Food traditions of the Gitksan*. Douglas & McIntyre, Vancouver and University of Washington Press, Seattle, Washington.
- Kunlein, H.V. & N.J. Turner 1991. *Traditional plant foods of Canadian indigenous peoples. Nutrition, botany, and use*. Food and Nutrition in History and Anthropology Volume 8. Gordon and Breach Science Publishers. 632 pp.
- Leigh, M. August 1997. *Grow your own native landscape: A guide to identifying, propagating, and landscaping with western Washington native plants*. Environmental Protection Agency, The Washington State Department of Ecology, and Washington State University Cooperative Extension.
- Martin, A.C., H.S. Zim, & A.L. Nelson 1951. *American wildlife and plants: A guide to wildlife food habits*. Dover Publications, Inc., New York, New York. 500 pp.
- Moore, M. 1979. *Medicinal plants of the mountain west*. Museum of New Mexico Press. 200 pp.
- Moser, C.L. 1993. *Native American basketry of southern California*. Riverside Museum Press. 155 pp.
- Norton, H.H. 1981. *Plant use in Kaigani Haida culture: correction of an ethnohistorical oversight*. Econ. Botany 35:434-449.
- Port Simpson Curriculum Committee 1983. *Port Simpson foods*. The People of Port Simpson and School District No. 52, Prince Rupert, British Columbia, Canada.
- Randall, W.R., R.F. Keniston, D.N. Bever, & E.C. Jensen 1994. *Manual of Oregon trees and shrubs*. Oregon State University Bookstore, Corvallis, Oregon. 305 pp..
- Rose, R., C.E.C. Chachulski, & D. Haase 1998. *Propagation of Pacific Northwest native plants*. Oregon State University Press, Corvallis, Oregon.
- Schopmeyer, C.S. (Tech. Coord.) 1974. *Seeds of woody plants in the United States*. Agriculture Handbook No. 450. USDA, Forest Service, Washington, D.C.
- Stevens, M. & R. Vanbianchi 1993. *Restoring wetlands in Washington. A guidebook for wetland restoration, planning and implementation*. Washington State Department of Ecology. Publication #93-17.
- Turner, N.J., L.C. Thompson, M.T. Thompson & A.Z. York 1990. *Thompson ethnobotany: Knowledge and usage of plants by the Thompson Indians of British Columbia*. Royal British Columbia Museum Memoirs No. 3, Victoria, British Columbia, Canada.
- Turner, N.J., J. Thomas, B.F. Carlson & R.T. Ogilvie 1983. *Ethnobotany of the Nitinaht Indians of Vancouver Island*. B.C. Provincial Museum Occasional Paper No. 24. 165 pp.

Turner, N.J. & B.S. Efrat 1982. *Ethnobotany of the Hesquiat Indians of Vancouver Island*. B.C. Provincial Museum Cultural Recovery Paper No. 2. 99 pp.

Turner, N.J. 1975. *Food plants of British Columbia Indians*. Part I. Coastal Peoples. British Columbia Provincial Museum Handbook No. 34, Victoria, British Columbia, Canada.

Vanbianchi, R., M. Stevens, T. Sullivan & S. Hashisaki 1994. *A citizen's guide to wetland restoration*. U.S. Environmental Protection Agency, Region 10. 71 pp.

Young, J.A. & C.G. Young 1974. *Collecting, processing, and germinating seeds of wildland plants*. Timber Press, Portland, Oregon.

Prepared By

Michelle Stevens

Formerly USDA, NRCS, National Plant Data Center

Dale C. Darris

USDA, NRCS, Plant Materials Center, Corvallis, Oregon

Species Coordinator

M. Kat Anderson

USDA, NRCS, National Plant Data Center
c/o Plant Sciences Department, University of California, Davis, California

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