

## SPRINGBANK CLOVER

*Trifolium wormskoldii* Lehm.

Plant Symbol = TRWO

Contributed by: USDA NRCS National Plant Data  
Center, Baton Rouge, Louisiana



William & Wilma Follette  
USDA NRCS Western Wetland Flora (1992)

### Alternate Names

Cows clover, marsh clover, perennial clover

### Uses

*Ethnobotany.* The long, fleshy, white rhizomes of springbank clover were an important food to coastal peoples of British Columbia, including the Haida, the Kwakwaka'wakw, the Nuuchah-nulth (including Ditidaht), Nuxalk (Bella Coola), the Comox, the Sechelt, and the Straits Salish, as well as the Makah of Washington. Springbank clover rhizomes were commonly harvested and prepared together with the long, brown roots of Pacific silverweed (*Potentilla anserinas* ssp. *pacifica*). Both plants were usually dug in the fall, after the leaves had started to die back for the winter. The rhizomes were pried out with long, pointed wooden digging sticks. They were cleaned and tied in fist-sized bundles using one of the rhizomes as a tie. Occasionally, they were eaten raw, but typically, they were cooked in an underground pit. The rhizomes were often dried for winter use. Springbank clover rhizomes are seldom eaten today.

*Other Uses.* The stoloniferous growth form aids in substrate stabilization and erosion control. Ducks

and geese are known to be fond of the rhizomes, which were sometimes used as bait for hunting these birds. Wild animals, like domestic livestock, relish the foliage of clovers. The small, hard seeds of western clovers are important to quail, but other upland game birds limit their use of clovers almost entirely to the foliage. Small quantities of clover seeds are eaten by many species of songbirds.

### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

### Description

*General:* Legume Family (Fabaceae). Clovers are perennial herbs that have palmately compound, bright green leaves with three leaflets (trifoliate). All species have the distinctive, round flower heads composed of many, small, pea-like flowers. Springbank clover is a native coastal herbaceous perennial often growing in dense patches from long, slender white rhizomes, with fibrous roots arising from their nodes. The stems, up to 80 cm, are erect to creeping. The reddish purple or magenta flowers are usually white-tipped, 12-16 mm long, with 2-5 flowers per stalk. The flower heads are 2-3 cm in diameter, and are held in a saucer-shaped involucre with 8-12 bracts. The fruits are tiny pea-like pods containing 2-6 seeds.

*Distribution:* For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site. It is found from British Columbia, north as far as the Queen Charlotte Islands (possibly to the southern Alaska panhandle), south to California and Mexico, and east to the Rocky Mountains.

*Habitat:* Springbank clover is found in wet and periodically inundated places, such as high salt and brackish marshes, coastal dunes, wet meadows, and stream banks. It is commonly associated with Pacific silverweed. It occurs from beaches to mountain meadows, ridges, generally open, moist, or marshy places at elevations below 3200 m.

### Establishment

Springbank clover spreads vigorously from rhizomes. Plants can easily be divided and replanted.

Plant Materials <<http://plant-materials.nrcs.usda.gov/>>

Plant Fact Sheet/Guide Coordination Page <<http://plant-materials.nrcs.usda.gov/intranet/pfs.html>>

National Plant Data Center <<http://npdc.usda.gov>>

- In greenhouse conditions, it is best to dig up and separate plants in the late fall or winter. This is the “quiescent” period that follows seed maturation and leaves are senescent.
- Split the plant clump into pieces by hand, then cut the rhizomes into sections, each with one or more buds.
- For dividing the whole plant, gently loosen the soil around the plant, taking care to not damage the roots, then lift the plant gently with a pitchfork. Shake off as much soil from the roots, as possible.
- Divide the plant into smaller pieces by hand, retaining only healthy, vigorous sections, each with new shoots and rhizome buds.
- Replant the divisions as soon as possible. It is important that the plants don’t dry out, so if replanting is delayed a couple of hours, dip the plants briefly in water and keep them in a sealed plastic bag in a cool, shady place until you are ready to plant them.
- Cut back the old top-growth and replant the divided plant sections to the same depth as before.
- When replanting, ensure that the roots are well spread out in the planting hole and the individual is firmly planted. Water newly planted divisions thoroughly, taking care not to expose the roots by washing away soil.
- Springbank clover plants should be planted in the full sun in a light, loose soil. Plants should be planted on 12-18” centers. They will fill in and make solid stands of clover in one year.
- Plants need to be kept moist and need frequent watering. Lightly fertilize the plants during the growing season.
- Springbank clover tolerates brackish conditions, so it can be used to restore salt marshes and wetlands.
- Plants may need to be protected from herbivores, such as rabbits or gophers.
- Wild harvesting should be restricted to salvage sites with appropriate approvals or permits. Due to the loss of wetland and salt marsh habitat throughout the U.S., it is rarely appropriate to harvest wild plants.
- There is no available information about propagation of this species from seed.

### Management

It is necessary to divide the springbank clover patch every 3 to 4 years, starting a new patch and increasing plant vigor. Younger plants are more vigorous and produce more flowers and seeds.

Turner and Deur (1999) include the following for traditional resource management:

- Ownership of individual patches and their output by Chief’s, ensuring long-term care and enhancement of plant production;
- Root feasts as a means of redistributing plant wealth and meeting ceremonial obligations;
- Specialized digging sticks as a harvesting tool to cultivate and turn over the soil;
- Assumed large concentrations/patches of clover;
- Groups of woman harvesting simultaneously;
- Harvesting at a set time of year (late summer and fall);
- Regular use of same sites over time/generations;
- Care and assiduity in harvest;
- Turning of the soil or sod;
- Extending periods of harvest time;
- Replanting and leaving behind portions of clover roots to re-grow the following year;
- Weeding root patches; and
- Individual patches and landscapes were burned regularly.

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

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

- Brickell, C. & E. McDonald (eds.), 1993. *The American Horticultural Society encyclopedia of gardening. The definitive practical guide to gardening techniques, planning, and maintenance.* Darling Kindersten.
- 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. 414p.
- Edwards, G.T. 1979. *Indian spaghetti.* The Beaver (Autumn):4-11.
- Gunther, E. 1973. *Ethnobotany of Western Washington.* University of Washington Publ. in Anthropology 10(1). University of Washington Press, Seattle.
- Hartmann, H.T., D.E. Kester, F.T. Davies, Jr. 1990. *Plant propagation principles and practices.* Prentice Hall, Englewood Cliffs, New Jersey. 647p.

Hickman, J.C. 1993. *The Jepson manual: Higher plants of California*. University of California Press, Berkeley. 1399p.

Hitchcock, C.L. & A. Cronquist (eds.). 1973. *Flora of the Pacific Northwest. An illustrated manual*. University of Washington Press, Seattle. 730p.

Hutchens, A.R. 1991. *Indian herbarology of North America*. Shambhala, Boston & London.

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. 632p.

Martin, A.C., H.S. Zim, and A.L. Nelson. 1951. *American wildlife and plants: A guide to wildlife food habits*. Dover Publication, Inc., New York. 500p.

Moore, M. 1979. *Medicinal plants of the mountain west*. Museum of New Mexico Press, Albuquerque. 200p.

Strike, S.S. 1994. *Ethnobotany of the California Indians. Volume 2. Aboriginal uses of California's indigenous plants*. Koeltz Scientific Books, USA/Germany. 156p.

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

Turner, N.J. 1978. *Food plants of British Columbia Indians. Part II. Interior peoples*. B.C. Provincial Museum Handbook No. 36, Victoria.

Turner, N.J. & M.A.M. Bell. 1983. *The ethnobotany of the Southern Kwakiutl Indians of British Columbia*. Econ. Bot. 27:257-310.

Turner, N.J. & D.E. Deur. 1999. *Cultivating the clover: Managing plant resources on the Northwest Coast*. Presentation at Society of Ethnobiology annual meeting, Oaxaca, Mexico.

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

Turner, & H.V. Kuhnlein. 1983. *Camas (Camassia ssp.) and riceroot (Fritillaria ssp.): Two Liliaceous "root" foods of the Northwest Coast Indians*. Ecology of Food and Nutrition 13:199-219.

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. 165p.

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. 2, Victoria, B.C.

Vanbianchi, R., M. Stevens, T. Sullivan, & S. Hashisaki. 1994. *A citizen's guide to wetland restoration*. USEPA Region 10. 71p.

### Prepared By

Michelle Stevens, formerly USDA NRCS National Plant Data Center, Davis, California

### Species Coordinator

M. Kat Anderson, USDA NRCS National Plant Data Center, Davis, California

Edited: 070122 jsp

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

*The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).*

*To file a complaint of discrimination write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.*

*Read about [Civil Rights at the Natural Resources Conservation Service](#).*