

Plant Guide

WATER BIRCH

Betula occidentalis Hook.

Plant Symbol = BEOC2

Contributed By: USDA NRCS National Plant Data Center



R. Mohlenbrock USDA, NRCS, Wetland Science Institute @ PLANTS

Alternative Names

Rocky Mountain birch, mountain birch, red birch, black birch, spring birch

Uses

Economic: The wood is hard and heavy and is used for firewood and fence posts (Hosie 1969).

Wildlife: Goats, sheep, mule deer, and elk browse Water birch. Beavers harvest the stems of water birch to aid in their construction of dams and lodges. The broad-tailed hummingbird and red-napped sapsucker feed on sap oozing from holes in the bark made by sapsuckers (Gullion 1964).

Agroforestry: Water birch is used in forested riparian buffers to help reduce stream bank erosion, protect aquatic environments, enhance wildlife, and increase biodiversity.

Description

General: Birch family (Betulaceae). Water birch (Betula occidentalis) is a small native tree or shrub that grows in clusters along the banks of streams and lakes. The leaves are thin, ovate, rather coarsely toothed and are usually 1-2 inches long. The fruit is tiny hairy nutlets with wings broader than the seed.

The bark is thin, dark reddish-brown to black, with mark horizontal slits, and does not peel like other birches.

Distribution: White birch is distributed from southern Manitoba to southern Alaska and North Dakota and south to California and New Mexico. For current distribution, please consult the Plant profile page for this species on the PLANTS Web site.

Adaptation

Betula occidentalis is very shade tolerant. It is mostly found in wet to moist nutrient-rich soils, along streams, in mountain canyons, usually in coniferous forest (Little 1980). Water birch occurs on a wide variety of soil textures generally at low to middle elevations.

Establishment

Propagation from Seed: Seeds may be collected from local trees for establishing nursery stock. Sow the seeds as soon as they are ripe in containers or seed trays containing a slow-release fertilized. Firm the medium and sow the seeds thinly and evenly on top, and lightly cover with medium. Once the seedlings are large enough to handle they should be placed into individual pots. Once seedlings are 18-30 inches tall remove from individual pots and outplant to premature location.

Management

Nursery grown seedlings should be planted onto moist sites. The seedlings should be transplanted when they are one to two years old. The best time for transplanting is in the spring as the buds begin to turn green.

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

Arno, S.F. 1977. *Northwest trees*. The Mountaineers, Seattle, Washington.

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://ppdc.usda.gov/

Brinkman, K.A. 1974. *Seeds of wood plants in the United States*. USDA Agriculture Handbook 450. Washington, D.C.

Dirr, M.A. 1990. Manual of woody landscape plants: their identification, ornamental characteristics, culture, propagation, and uses. Stibes Publishing Company, Champaign, Illinois.

Gullion, G.W. 1964. *Wildlife uses of Nevada plants*. Contributions toward a Flora of Nevada No. 49. Beltsville, Maryland.

Heuser, C.W. 1997. *The complete book of plant propagation*. The Taunton Press, Newtown, Connecticut.

Hosie, R.C. 1969. *Native trees of Canada*. 7th ed. Ottawa, Ontario, Canada.

Lanner, R.M. 1983. *Shrubs of the Great Basin: A Natural History*. University of Nevada Press, Reno, Nevada.

Little, E.L. 1980. *National Audubon Society field guide to North American trees: western region*. Alfred A. Knopf Inc., New York, New York.

Munz, P.A. 1965. *A California flora*. University of California Press, Berkely and Los Angeles, California.

Nelson, R.A. 1992. *Handbook of Rocky Mountain plants*. Roberts Rinehart Publishers, Niwot, Colorado.

Sargent, C.S. 1922. *Manual of the trees of North America*. Vol. 1. Dover Publications, Inc., New York, New York.

Van Dersal, W.R. 1938. *Native woody plants of the United States, their erosion-control and wildlife values.* Washington, D.C.

Prepared By

Lincoln M. Moore
USDA NRCS National Plant Data Center, Baton
Rouge, Louisiana

Species Coordinator

Lincoln M. Moore
USDA NRCS National Plant Data Center, Baton
Rouge, Louisiana

Edited: 09jan02 jsp; 25feb03 ahv; 31may06 jsp

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web sitehttp://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 <u>Civil Rights at the Natural Resources Convervation</u> Service.