

-State Species Abstract-  
-Wyoming Natural Diversity Database-

*SALIX CANDIDA*  
HOARY WILLOW  
Family: Salicaceae

Status:

US Fish & Wildlife Service: None.

Agency Status: USFS R2 sensitive

Heritage Rank:

Global: G5 State: S2

WYNDD Plant List: Sparse

(Low conservation priority)

Description: Hoary willow is a low shrub 50-120 cm tall. The branches are light brown and mostly glabrous. Twigs of the current year are densely white pubescent. This pubescence may persist into the second year. The leaves are narrowly elliptic to narrowly ovate, 3-8 cm long, and have entire, inrolled margins. The upper leaf surface is dark green with scattered tufts of woolly hair, while the lower surface is densely white-tomentose. Catkins appear with the leaves and are borne on short leafy branchlets or are nearly sessile. Flower bracts are brownish and wavy-pubescent. Staminate catkins are 1.5-2.5 cm long with 2 stamens and reddish-purple anthers. Pistillate catkins are 2-5 cm long with tomentose, tawny capsules, styles 0.8-1.6 mm long, and stipes 0.5-1.2 mm long (Hitchcock and Cronquist 1964; Moss 1983).

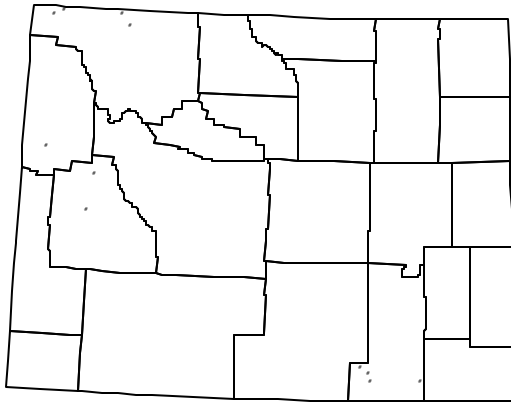
Similar Species: *Salix drummondiana* is a taller shrub and has thin, silvery, appressed hairs on the leaves and inrolled leaf margins. (Dorn 1992). *S. brachycarpa* has relatively small elliptic leaves that are densely gray-hairy on both sides (Harrington 1954).

Flowering/Fruiting Period: Early June-late July.



Above: *Salix candida* by Walter Fertig.

Distribution: Ranges from Labrador to Alaska and south to the Great Lakes states, South Dakota, Colorado, and Idaho (Hitchcock and Croquist 1964). In Wyoming, known from the Absaroka, Beartooth, Laramie, and Medicine Bow ranges, Yellowstone Plateau, and upper Green River Basin.



Above: Wyoming distribution of *Salix candida*.

**Habitat:** Floating mats, bogs, fens, and willow thickets around ponds on wet to saturated, histic soils, sometimes influenced by limestone. Elevation 6600-9200 feet.

**Occurrences in Wyoming:** Known from 10 extant occurrences and 1 historical record in Wyoming. Eight of these populations have been discovered or relocated since 1994 (most recently in 1999).

**Abundance:** Known populations are mostly very small and restricted to specialized wetland habitats that are themselves very uncommon.

**Trends:** Not known. Some habitat may have been lost in the Laramie Valley since European settlement.

**Protection status:** At least 5 occurrences are found in national parks, national wildlife refuges, or designated special interest areas (Yellowstone NP, National Elk Refuge, Swamp Lake SBA, Sheep Mountain Wildlife Refuge). Three other occurrences are within potential Research Natural Areas or Special Interest Areas on National Forest lands (Lake Creek Bogs, Sheep Mountain, Kendall Warms Springs).



Above: *Salix candida* by Jill Walford.

**Threats:** Populations may be threatened by grazing pressure on the National Elk Refuge.

**Managed Areas:** Occurs on lands managed by Bridger-Teton, Medicine Bow, and Shoshone National Forests, Yellowstone National Park, the National Elk Refuge, and possibly the BLM Pinedale Field Office.

**References:**

Brunsfeld, S.J. and F.D. Johnson. 1985. Field Guide to the Willows of East-Central Idaho. Forest, Wildlife and Range Experiment Station, University of Idaho, Moscow, ID.

Colorado Native Plant Society. 1997. Rare Plants of Colorado, second edition. Falcon Press Publ., Helena, MT.

Dorn, R.D. 1997. Rocky Mountain Region Willow Identification Field Guide. United States Forest Service Region 2, Denver, Colorado.

Fertig, W. 1995. Biological report on the potential Kendall Warm Springs Special Management Area. Unpublished report prepared for Bridger-Teton National Forest by the Wyoming Natural Diversity Database, Laramie, Wyoming.

Fertig, W. 1998. Plant species of special concern and vascular plant flora of the National Elk Refuge. Unpublished report prepared for the US Fish and Wildlife Service by the Wyoming Natural Diversity Database, Laramie, WY.

Fertig, W. 1998. The status of rare plants on Shoshone National Forest: 1995-97 survey results. Report prepared by the Wyoming Natural Diversity Database, Laramie, WY.

Fertig, W. and G. Jones. 1992. Plant communities and rare plants of the Swamp Lake Botanical Area, Clarks Fork Ranger District, Shoshone National Forest. Unpublished report prepared for the Shoshone National Forest by the Wyoming Natural Diversity Database.

Fertig, W. and S. Markow. 1998. Guide to the Willows of Shoshone National Forest. Unpublished report prepared for the Shoshone National Forest by the Wyoming Natural Diversity Database, Laramie, WY.

Jankovsky-Jones, M., G. P. Jones, and W. Fertig. 1996. Ecological evaluation of the potential Sheep Mountain Research Natural Area within the Medicine Bow National Forest, Albany County, Wyoming. Unpublished report prepared for the Medicine Bow National Forest by the Wyoming Natural Diversity Database, Laramie WY.

Larson, G.E. and J.R. Johnson. 1999. Plants of the Black Hills and Bear Lodge Mountains. South Dakota State University College of Agriculture and Biological Sciences & South Dakota Agricultural Experiment Station, Brookings, SD.

Markow, S. and W. Fertig. 1993. Report on a general floristic survey of vascular plants of Targhee National Forest and vicinity. Unpublished report prepared for Targhee National Forest by the Rocky Mountain Herbarium and the Wyoming Natural Diversity Database, Laramie, WY.

Mills, S. and W. Fertig. 1996. Survey of plant species of special concern on the Shoshone National Forest, 1995. Unpublished report prepared for Shoshone National Forest by the Wyoming Natural Diversity Database, Laramie, WY.

Mills, S. and M. Neighbours. 1995. Intensive data gathering project (fine-filter analysis) for occurrences of rare, threatened, endangered and sensitive species in sections M331H and M331I, north central highlands and northern parks and ranges, in Wyoming. Unpublished report prepared for Medicine Bow National Forest by the Wyoming Natural Diversity Database, Laramie, WY.

Moseley, R.K., R. Bursik, and M. Mancuso. 1991. Floristic inventory of wetlands in Fremont and Teton Counties, Idaho. Unpublished report prepared for Targhee National Forest by the Conservation Data Center, Idaho Department of Fish and Game, Boise, ID. November 1991.

Porter, C.L. 1967. A Flora of Wyoming, Part V. Agricultural Experiment Station, University of Wyoming Research Journal 14:1-37.

Rosenthal, D.M. 1998. Report on a general floristic survey of vascular plants in selected areas of Shoshone National Forest. Report prepared by the Rocky Mountain Herbarium, University of Wyoming, Laramie, WY.

Rosenthal, D.M. 1999. A floristic survey of selected areas in Shoshone National Forest, Wyoming. Master's Thesis, Department of Botany, University of Wyoming, Laramie, WY.

Sanderson, J. and M. March. 1996. Extreme rich fens of South Park, Colorado: their distribution, identification, and natural heritage significance. Unpublished report prepared for Park County, the Colorado Department of Natural Resources, and the US Environmental Protection Agency by the Colorado Natural Heritage Program, Ft. Collins, CO.

Spackman, S., B. Jennings, J. Coles, C. Dawson, M. Minton, A. Kratz, and C. Spurrier. 1997. Colorado Rare Plant Field Guide. Prepared for the Bureau of Land Management, US Forest Service, and US Fish and Wildlife Service by the Colorado Natural Heritage Program, Ft. Collins, CO.

Walford, Gillian, George Jones, Walt Fertig, and Kent Houston. 1997. Riparian and wetland community types of the Shoshone National Forest. Unpublished report, Shoshone National Forest, Cody WY.

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