

-State Species Abstract-
-Wyoming Natural Diversity Database-

ARCEUTHOBIUM DOUGLASII
DOUGLAS-FIR DWARF-MISTLETOE
Family: Viscaceae

Status:

US Fish & Wildlife Service: None

Agency Status: None

Heritage Rank

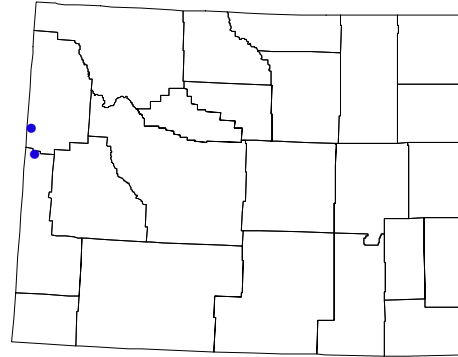
Global: G5 State: S1

WYNDD Plant List: Peripheral (Low conservation priority)

Description: Douglas-fir dwarf-mistletoe is an obligate parasite with stems mostly 0.5-3 cm long and less than 2 mm thick. It is characteristically found on Douglas-fir, producing witches' brooms. Its flattened, olive-green stems are concentrated near the tip of the host-stem branch and are arranged in 1 plane to produce a fan-like appearance. Flowers are terminal on short lateral branches; the branches bearing staminate flowers are often more than 2 per node but branches bearing pistillate flowers are in pairs. Staminate flowers are subglobose in bud, have tepals that are reddish-purple within, and the tepals are not keeled except for the two upper lateral ones. Fruits are olive-green, 3.5-4.5 mm long and 1.5-2.5 mm wide (Cronquist et al. 1997, Hawksworth and Wiens 1972, 1996.)

Similar Species: *Arceuthobium*

cyanocarpum flowers in late summer and parasitizes mainly *Pinus flexilis*. *A. americanum* has whorled rather than fan-like branches that are usually greater than 3 cm long, and parasitizes mainly *Pinus contorta*.



Wyoming distribution of *Arceuthobium douglasii*

Flowering/Fruiting Period: Flowering in spring; fruits mature in fall the following year.

Distribution: Ranging from southern British Columbia to California and New Mexico, extending into Mexico, essentially the range of Douglas-fir. Wyoming populations are known from the Snake River Canyon and Targhee Pass in Lincoln and Teton counties.

Habitat: Occurs in *Pseudotsuga menziesii* forests, in Wyoming at 5,750-7,000 ft.

Occurrences in Wyoming: Known from only 2 occurrences in Wyoming, both dating from 1962.

Abundance: The species was reported as common and abundant on the two 1962 specimen labels.

Trends: No trend data are available. It damages its host (Hawksworth and Wiens 1972). Population numbers may be prone to fluctuation.

Protection status: No occurrences are found within special management areas. Both populations are found on National Forest lands.

Threats: Potential threats include efforts to control mistletoe. One occurrence is from a campground and may be threatened by fuel wood cutting or logging to enlarge facilities.

Managed Areas: Known Wyoming occurrences are found on Targhee National Forest.

References:

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Dorn, R.D. 1992. Vascular Plants of Wyoming, second edition. Mountain West Publishing, Cheyenne, WY.

Hawksworth, F.G. and D. Wiens. 1972. Biology and Classification of Dwarf Mistletoes (*Arceuthobium*). Agriculture Handbook #401. USDA Forest Service, Washington, DC. 234 pp.

Hawksworth, F.G. and D. Wiens. 1996. Dwarf Mistletoes: Biology, Pathology, and Systematics. Agriculture Handbook 709, USDA Forest Service, Washington, DC.

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