

-State Species Abstract-
-Wyoming Natural Diversity Database-

ABIES CONCOLOR
WHITE FIR
Family: Pinaceae

Status:

US Fish & Wildlife Service: None.
Agency Status: None

Heritage Rank:

Global: G5 State: S1
Range Context: Widespread/Edge
Wyoming Contribution Rank: Low

Description: White fir is an evergreen tree up to 40 m high. Leaves are needle-like, 1.5-7 cm long and arranged horizontally on the stem. In cross-section, resin canals are located just below the epidermis at the very tips of the leaf. Ovulate cones are yellow or brown to greenish purple, mostly 7-10 cm long, and erect. Bracts subtending the cone scales have a short, triangular tooth at the tip (Cronquist et al. 1972).

Similar Species: *Abies lasiocarpa* (subalpine fir) has needles that are typically less than 3 cm long and with resin ducts located midway between the midvein and the epidermis (in cross-section). Needles of subalpine fir are also more ascending than spreading. Dorn (2001) suggests that Wyoming material of *A. concolor* is intermediate to *A. lasiocarpa*.

Flowering/Fruiting Period: Cones produced May-August.

Distribution: Native to the western United States from Oregon to New Mexico. Only known extant populations in Wyoming are from Little Mountain in Sweetwater County and the Uinta Mountains in Uinta County.

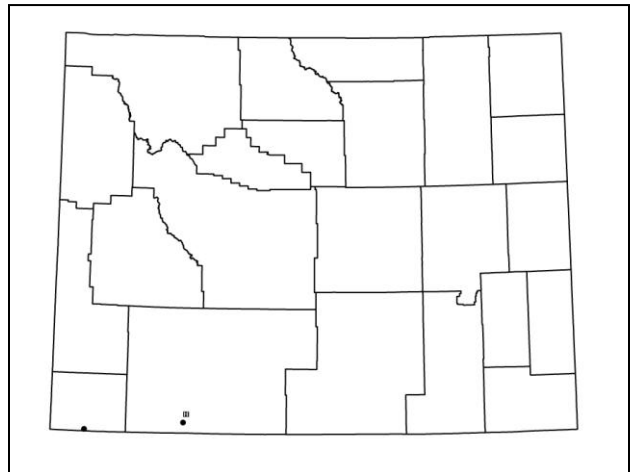
Habitat: Foothills and lower slopes in mountains, often associated with aspen

woods or with *Abies lasiocarpa*. Often on south-facing slopes on dry, shallow soils.

Occurrences in Wyoming: Known from two extant populations and one historical report (Cary 1917). Jerry Morris, an amateur botanist from Denver, has reported *A. concolor*/*A. lasiocarpa* hybrids south of Encampment (Carbon County). Other hybrid swarms between these two taxa have been observed by R. Dorn and W. Fertig in southern Sweetwater County.

Abundance: Dorn reported 100-300 individuals from the Little Mountain population in 1977. W. Fertig resurveyed this area in 1998 and observed a large stand of putative hybrids.

Trends: Population reported as stable by Dorn in 1977.



Wyoming distribution of *Abies concolor*

Protection status: One population is found within the BLM Sage Creek ACEC. Other occurrences are found on public lands managed for multiple use.

Threats: Threats considered low by Dorn. Hybridization with *A. lasiocarpa* may be preventing this species from becoming more widely established in southern Wyoming.

Managed Areas: Occurs on lands managed by the BLM Rock Springs Field Office and Wasatch Cache National Forest.

References:

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