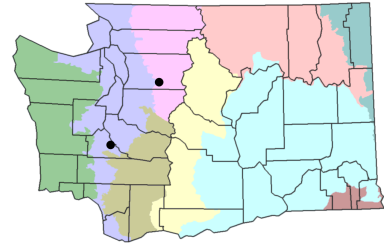


## ***Pityopus californicus*** (Eastw.) H.F. Copel.

synonym: *Monotropella californica* Eastw., *Pityopus californica* (Eastw.) H.F. Copel., *Pityopus oregonus* Small  
pine-foot

Monotropaceae - indian pipe family

status: State Threatened, BLM strategic, USFS strategic  
rank: G4G5 / S1

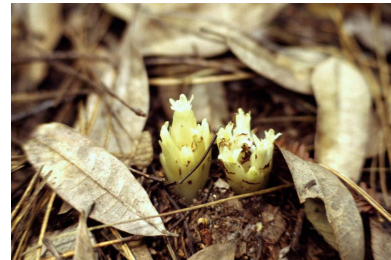


**General Description:** Perennial, saprophytic fleshy herb with brittle roots and unbranched stems; pinkish, cream-colored or yellowish, drying to black; 1-10 cm. Leaves scalelike, nongreen, and sessile.

**Floral Characteristics:** Inflorescence a terminal raceme or solitary flowers, emerging from the soil erect, not persistent after seed dispersal. Flowers axillary, bracted. Sepals 4-5, free, the lateral 2 often folded, clasping the corolla, the others lying flat against the corolla. Petals 4-5, free, cylindric, cream-colored to yellowish; the outside of the corolla is more or less hairless, the inside is densely hairy. Stamens generally 8, with erect, horseshoe-shaped anthers, unawned, dehiscent by 1 unified slit. Styles less than 5 mm long, stigma less than 5 mm wide, funnel-shaped, yellowish, subtended by a ring of hairs. Ovary chamber 1, but may appear greater than 1 due to intrusion of parietal placentation.

**Fruits:** Berries less than 1 cm. Identifiable June to July.

**Identification Tips:** There is only one species of *Pityopus* in the Pacific Northwest. *Pleuricospora fimbriolata* is related, but its flowers are hairless inside and out; its anthers are elongate (3-4 mm) and not horseshoe-shaped; and its stigma is less than 2.5 mm wide, crownlike, and not subtended by hairs. In contrast, the flowers of *Pityopus californicus* are densely hairy inside; its anthers are horseshoe-shaped and not elongate; and its stigma is less than 5 mm wide, more or less funnel-shaped, and subtended by a ring of hairs. *Monotropella hypopitys*\* is similar but emerges from the soil nodding, becoming erect in fruit, and is persistent after seed dispersal; its fruits are capsules, dehiscent tip to base.



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**Range:** Northern CA, southwestern OR, and disjunct in WA.

**Habitat/Ecology:** Low-elevation mixed coniferous forests, including second-growth. In WA it occurs with a significant moss groundcover at 146 m (480 ft). Associated species include Douglas-fir (*Pseudotsuga menziesii*), twinflower (*Linnaea borealis*), prince's pine (*Chimaphila menziesii*), salal (*Gaultheria shallon*), wintergreen (*Pyrola* spp.), and moss (*Eurhynchium oregonum*).

**Comments:** There are 2 known sites in WA. Threats include disturbance from timber harvest, recreational activities, and military training exercises. This species is also rare in CA.

**References:** Hickman 1993.



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