

Pinus monophylla

[Synonyms : *Caryopitys monophylla*, *Pinus californiarum*, *Pinus californiarum* subsp. *fallax*, *Pinus cembroides* var. *monophylla*, *Pinus edulis* var. *fallax*, *Pinus edulis* var. *monophylla*, *Pinus fremontiana*, *Pinus monophylla* var. *californiarum*, *Pinus monophylla* var. *fallax*, *Pinus monophylla* var. *monophylla*]

SINGLELEAF PINYON is an evergreen shrub or tree. Native to south-western United States it has needle-like leaves and small, pale yellowish-brown cones.

It is also known as California pine, Frémont nut pine, Gray nut pine, Nevada nut pine, Nut pine, One-leaf pine, One-leaved nut pine, Oneneedle pinyon pine, Piñon (English, Spanish), Pinon pine, Pinyon, Single-leaf pine, Single-leaf piñon, and Single-leaved piñon.

The flowers are pollinated by wind. One cone can hold from 2 to 60 seeds.

Singleleaf pine is a protected tree in Nevada in the United States.

Monophylla is derived from Greek *mono-* (one) and *phyllo-* (leaf) components.

The tree provided food and a reason for festivity at harvest time for several North American Indian tribes (including the Cocopa), as well as providing a valuable economic crop and trading commodity. Authorities note that it was a staple food for the Paiute tribe and some of the Apache Indians. Cahuilla, Kawaiisu, Washo and Paiute Indians as well as some of the Apache not only used the nutritious nuts to make a kind of porridge but also dried and stored them for Winter food. The latter and the Paiute ground the nuts for flour – and they chewed the pitch like gum. Cahuilla Indians processed the nuts to make a baby food and they also prepared a beverage from them. The Havasupai tribe used sprigs to flavour cooking dishes, and the Paiute made the nuts into a soup and also prepared them in the form of an ice cream-like dish.

Singleleaf pinyon attracted superstition. For the Hopi Indians some gum on the forehead protected the wearer from witchcraft.

While the Havasupai viewed the wood as building material, it was a source of incense for the Cahuilla – and both tribes burnt it as a fuel.

The grey or reddish-brown bark was used for roofing by Cahuilla Indians who also used the roots and the needles for their basketry.

Perhaps it was the pitch or gum however that was of particular value. This provided sealing, sticking and waterproofing material. As an adhesive for instance it was appreciated by the Hopi for their turquoise-mosaic work, and the Cahuilla stuck their arrowheads onto shafts and (like some of the Apache) used it for basketry. Its waterproofing qualities were harnessed by the Kawaiisu for making their water bottles, and by the Hopi and Havasupai Indians for other containers too. It was an ingredient in some Hopi dyes and it was also used by the Havasupai to make a paint.

Records show that both the Havasupai and Cahuilla tribes harvested the nuts as a cash crop. Slightly cracked nut shells seem to have been sought out by Kawaiisu children as authorities note that they edged these onto their ear lobes to wear as jewellery.

The pitch also had some cosmetic use. It was made into a cream that was used by Cahuilla Indians to protect their skin from sunburn, and some of the Apache tribe used it (the pitch) to remove facial hair.

It seems that the gum was applied by some of the Apache for healing cuts on their horses, and the Shoshoni tribe used the root to treat horses with distemper.

For several North American Indian tribes the tree was an important source of medicine. While the Shoshoni prescribed it for coughs, they, the Paiute and the Washo tribes also used it to treat colds. Paiute and Shoshoni Indians turned to it as a remedy for indigestion, fever, bowel problems and pneumonia. Paiute Indians also used it for treating diarrhoea, tuberculosis, some female ailments, sore throats, influenza and rheumatism – and also took it as a tonic. It provided a treatment for venereal disease for the Shoshoni, Washo and Paiute tribes. Shoshoni Indians prescribed it for treating smallpox, measles and kidney disorders. For the Kawaiisu tribe it offered a treatment for some period problems and the pitch was taken by their women as a contraceptive. Gosiute Indians used it for treating worms – and the Paiute, Hopi and Shoshoni Indians all applied it as a remedy for various skin problems. Not least it was applied to cuts by the Hopi, Shoshoni, Paiute, Havasupai and Kawaiisu tribes.

Today the sweet-tasting thick, brown seeds or nuts known as Indian nuts, Pine nuts or Pinyon nuts are of considerable commercial economic importance (not least as an ingredient for the confectionery industry), as well as a crop sold in local markets. There is a problem however. They are being harvested, like nut pine (*Pinus edulis*), in such massive quantities (thousands of tons) that it is not only depriving wildlife of an important source of food but also threatening the trees' existence as their natural regeneration is being curtailed.

These trees are a prized source of food (both direct and indirect), cover and shelter for an incredibly wide range of wildlife. Elk, several kinds of deer, bear, wild sheep and horses, and mountain lions can all be found at one time or another under its branches, while smaller animals such as lynx, prairie wolves, foxes, badgers, weasels and skunks view their cover as ideal for hunting prey. The seeds seem to be universally enjoyed not least by black bears, deer, and wild sheep, as well as by chipmunks, squirrels, mice and rats – and from the bird world certain jays and nutcrackers specifically associated with this species. Flocks of jays (including one species known locally as piñon jay) will descend on the trees when the cones release their seeds in Autumn. Birds are believed to be primarily responsible for dispersing the wingless seed but some animals also cache them for Winter food and this in turn helps the dispersion as some of those that are not eaten will germinate. Rats are an example as they store them in their huge nests (nests which used to be sought out and raided by local Indian tribes). The tree's inner bark is another source of food, especially for porcupines but also for foxes, squirrels and rabbits among many others.

Primarily the tree's soft and lightweight wood has been made into fence posts, burnt as fuel and used to make boarding, and charcoal. In the past it was an important fuel source for railway companies and the charcoal was in demand particularly at the end of the 19th Century by silver smelters.

This tree like many of its close relatives has served as a Christmas tree in some American states.

The state of Nevada in the United States adopted the tree as a state emblem in 1953.

Singleleaf pinyon trees host a particular kind of mistletoe – the piñon mistletoe (*Arceuthobium divaricatum*).