



Endemic Conifers of Tasmania

Tasmania is fortunate to possess a very large number of unique plant species that are endemic, meaning they occur nowhere else in the world. Our rainforest and alpine communities are unique assemblages of plants of great botanical significance.

One such group of plants, the native pines or native conifers, are particularly important, not only for botanical values, but also for the links they have with species in other continents.

There are 11 species of conifers native to Australia. Some of those endemic to Tasmania are outlined briefly below, including the Huon pine, King Billy pine, pencil pine, Laxifolia (the hybrid between King Billy and pencil pine), South Esk pine, celery top pine and the creeping pine.

Huon pine

Lagarostrobos franklinii

The Huon pine is perhaps the most famous of the Tasmanian conifers, due to its incredible longevity and the beauty and durability of its timber. It derives its common name from the stands which once occurred along the Huon River, named after Captain Huon Kermandec, commander of the French ship, L'Esperance. The species is restricted to western and southern Tasmania, where it is largely confined to river edges.

Estimates of the area of living Huon pine vary, but are in the order of 10,500 hectares. The current area of remaining pine has been reduced dramatically by fire, logging and mining. Today, most of the remaining stands are well protected within reserves, the majority being within the World Heritage Area.

Although extremely slow growing, the tree can grow to heights of over 40 m. Growth rates average a mere 1 mm per year, depending on conditions. Huon pine can reproduce both vegetatively (from fallen individuals) and by seed. Seed dispersal is largely limited to the area downstream of the stands.

The Huon pine can often reach ages in excess of 2,000 years, making it among the longest-lived organisms on Earth. Only the bristle-cone pine of North America exceeds its longevity.



Pencil Pines (*Athrotaxis cupressoides*), Cradle Mountain. Photo: Joe Shemesh

Where to see Huon pines

Huon pines can be found at Heritage Landing on the west coast and in the Tahune Forest Reserve on the Huon River. There are other sites of Huon pines which are inaccessible.

King Billy pines

Athrotaxis selaginoides

This pine is thought to derive its common name from the Tasmanian Aborigine William Laney, who was also known as 'King Billy'. These trees can reach a height of 40 m and may age in excess of 1200 years. They typically occur in regions above 600 m where they grow in rainforest and are often associated with *Nothofagus cunninghamii* (myrtle). To date, fossil evidence does not suggest any previous distribution beyond Tasmania.

Like Huon pine, it is a very valuable timber due to its straight grain, durable and easily worked timber, it is often found in old window frames and also used for boat building.

Where to see King Billy pines

The most easily accessible places to see King Billy pines are near Waldheim in the Cradle Valley area and some walks departing from Lake St Clair. At Heritage Landing on the Gordon River a single tree has survived the ravages of lightning strikes and escaped the piner's axe, continuing to grow into its third millennium.

Pencil pine

Athrotaxis cupressoides

A close relative of the King Billy pine, the pencil pine is largely restricted to sub-alpine areas above 800 m. It often surrounds tarns, streams and lakes due to its complete intolerance to fire and the shelter these wet habitats offer. Like its relative, it can reach ages greater than 1200 years. The trees appear to be conical in shape with a markedly tapering trunk.

The timber from this species is not easily worked so has not been used for craft or commerce.

Where to see pencil pines

Pencil pines are best seen in our alpine areas surrounding tarns and lakes. Some easily accessible sites are at Mt Field, Dove Lake, Crater Lake and the Hartz Mountains.

Hybrid: King Billy & Pencil pines

Athrotaxis laxifolia

This hybrid occasionally occurs between Pencil and King Billy pines. Some obvious examples of *A. laxifolia* can be seen at Waldheim and areas around Cradle Mountain, along the Overland Track, in Tasmania's Wilderness World Heritage Area and along Tarn Shelf at Mt Field.

Celery top pine

Phyllocladus aspleniifolius

The celery top pine is so named because of the resemblance of its 'leaves' to those of celery. In fact, they are not true leaves, but rather cladodes (flattened stems), and very young seedlings have needle-like leaves. The trees grow to 30 metres in height and may live for 800 years.

Celery top pines are found on areas of low fertility as they have nitrogen fixing bacteria on their roots, and so are able to survive on low nutrient conditions. They often grow in association with myrtle, sassafras and leatherwood trees and can be found outside rainforests due to seed dispersal by birds. The female "flower" is a seed bearing scale, pink and fleshy and can be seen during March/April.

Historically, celery top pines were ideal for ship masts as they provide a strong, long lasting, straight timber, that does not shrink when dried and which is stronger than huon pine. Celery top pines are very susceptible to *Phytophthora* (root rot fungus).

Where to see celery top pines

They can be found in the wetter regions of the state, in rainforests from sea level to 900 m. Cradle Mt and Mt Field offer great opportunities to view celery top pines.

Oyster Bay pine

Callitris oblonga

A compact grey-green tree, usually with a single straight trunk growing to about 10 m in height. It is riparian and occurs along some east coast rivers such as the Apsley and St Pauls river as well as the South Esk.

Creeping pine

Microcachrys tetragona

A small prostrate creeping pine, found low to the ground among alpine coniferous heath, it is also known as strawberry pine, due to the shape and colour of the female fruiting bodies. It appears to have square stems due to the overlapping leaves that wind their way around the stem almost in the form of a plait.

It is found in alpine areas between 1350 and 1500 m, mostly in the west and southwestern mountains, but can also be found in the unburnt areas of the central plateau.

The male and female cones are found on different plants, the females being somewhat more spectacular than the males, having a red, fleshy fruit during January and February each year.

Further Information

Alpine Tasmania; An illustrated guide to the flora and vegetation. Jamie Kirkpatrick, 1997

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