

Threatened species walk

1. *Cryptandra amara* pretty pearl flower

Listed as endangered (e) under the TSPC Act

About me:

The pretty pearl flower is a low growing, intricately branched shrub to 0.5m in the Rhamnaceae family. This species is found in the driest areas of eastern Tasmania on fertile rocky substrates in locations ranging from near-riparian rockplates to grassland or grassy woodland. There is estimated to be a total population of 1500-2000 plants in Tasmania comprising numerous small subpopulations containing fewer than 50 mature individuals. It also occurs in Queensland, New South Wales, South Australia and Victoria.

Why I'm rare?

Major threats include inappropriate fire regimes, land clearance, browsing by stock, woody weed invasion, roadside maintenance and dam construction.



2. *Calocephalus citreus*

lemon beauty heads

Listed as rare (r) under the TSPC Act

About me:

The lemon beauty heads is a tufted, erect perennial herb in the Asteraceae (daisy) family. The entire plant is covered in small, white hairs including the slender 30-60cm tall erect stems which terminate in bright yellow clustered flower heads. In Tasmania lemon beauty heads occurs in a number of locations in the south-east, where it inhabits disturbed dry grasslands on roadsides and paddocks on private land. This species also occurs in South Australia, Victoria and New South Wales.

Why I'm rare?

Lemon beauty heads does not tolerate heavy disturbance associated with urban and industrial developments, stock grazing, farming practices and the use of fertilizers.



3. *Scleranthus fasciculatus* spreading knawel

Listed as vulnerable (v) under the TSPC Act

About me:

Spreading knawel is a lax, straggling, ground dwelling perennial in the Caryophyllaceae (carnation) family. In Tasmania, spreading knawel can be found growing in a few locations in the midlands and south-east. This species also grows naturally in Victoria, New South Wales and New Zealand.

Why I'm rare?

Spreading knawel mostly occurs in silver tussock grasslands and grassy woodlands where it is reliant upon fire and stock grazing to maintain the inter-tussock space it requires. The main threats to the continued survival of the species include disturbance from fire, herbicide use, road construction and maintenance, forest clearance, weed competition and excessive native and domestic animal grazing.



4. *Ozothamnus reflexifolius* reflexed everlasting bush

Listed as vulnerable (v) under the TSPC Act, and Vulnerable (VU) under the EPBC Act

About me:

The reflexed everlasting bush is a 0.5 to 1.3m high, slender branched woody shrub in the Asteraceae (daisy) family. This Tasmanian endemic species consists of just a single subpopulation of 4000 to 5000 mature individuals near Hobart in the south-east of the state. The plants are located on a large dolerite rock plate where they occupy an area of less than 5 hectares in either *Allocasuarina verticillata* (drooping she oak) woodland, open heathy vegetation or tucked in the crevices of sheer dolerite rock.

Why I'm rare?

The limited range of occurrence of a single subpopulation dictates that the reflexed everlasting bush faces an uncertain future. There is the potential for the species to become endangered in a very short period of time due to human activity and stochastic events. Inappropriate fire regimes, drought and projected climate change present the greatest threats.



5. *Callitris oblonga* subsp. *oblonga*

South Esk pine

Listed as vulnerable (v) under the TSPC Act and Endangered (EN) under the EPBC Act.

About me:

The South Esk pine is a Tasmanian endemic small tree or shrub growing 2-5m high in the Cupressaceae (cypress) family. This species is restricted to riparian scrub and woodland in low rainfall areas and usually sandy soils. South Esk pine primarily occurs on the east coast of Tasmania with a total population of less than 4000 individuals across an estimated 28 populations.

Why I'm rare?

Inappropriate fire regimes, invasion of habitat by woody weeds, land clearance and livestock damage are threats to the ongoing survival of this species.



6. *Banksia serrata* saw banksia

Listed as rare (r) under the TSPC Act

Banksia serrata woodland is listed as a threatened community under the Nature Conservation Act 2002

About me:

The saw banksia is a small tree or shrub in the Proteaceae (protea) family that can attain a height of 12m. In Tasmania the species is confined to 3-5 populations comprising 3 000-10 000 individuals in open woodland and sedgeland habitats around Sisters Hills near Rocky Cape in the north of the state and on Flinders Island. *B. serrata* is more widespread on the mainland where it occurs on the Queensland, New South Wales and Victorian coastlines.

Why I'm rare?

Inappropriate fire regimes, over-grazing by native animals, non-forestry harvesting, urban development and root rot disease (*Phytophthora cinnamomi*) present ongoing threats to this species.



7. *Spyridium vexilliferum* var. *vexilliferum* helicopter bush

Listed as rare (r) under the TSPC Act

About me:

The helicopter bush is a slender, multi-branched 30-90cm tall shrub in the Rhamnaceae family. In Tasmania this species grows on rocky outcrops and sandy heaths in the north, east and west of the state. The species also naturally occurs in New South Wales, Victoria and South Australia.

Why I'm rare?

Fire presents the biggest threat. A fire more frequent than 5-6 years has the potential wipe-out a population of helicopter bush.



8. *Epacris stuartii* Stuart's heath

Listed as endangered (e) under the TSPC Act and Critically Endangered (CR) under the EPBC Act.

About me:

Stuart's heath is a small, erect or semi-prostrate shrub growing up to 1m tall. The species is endemic to Tasmania where it is known from a single locality on well-drained shallow soils on exposed dolerite headlands at Southport Bluff in the far south-east of the state.

Why I'm rare?

The most serious threat is root rot disease (*Phytophthora cinnamomi*) which has been detected less than one kilometer away from where plants are located. This is a significant concern given that disease spread could easily be facilitated through animal and visitor movement into the area. Inappropriate fire regimes, drought and excessive salt loads from storms present additional threats.



9. *Boronia gunnii* river boronia

Listed as vulnerable (v) under the TSPC Act and Vulnerable (VU) under the EPBC Act

About me:

The river boronia is an upright, multi branched woody shrub up to 1.2m tall in the Rutaceae (citrus) family. Populations of this Tasmanian endemic species occur in riparian habitats amongst boulders and in rock crevices along the St Pauls, Dukes and Apsley rivers in the east of Tasmania. This species, occupying an area of just 3 to 5 hectares, is estimated to comprise less than 1 000 individuals.

Why I'm rare?

Key threats to the river boronia include: Root rot disease (*Phytophthora cinnamomi*); inappropriate fire regimes; permanent flooding of its habitat; increased runoff and sediment loads from upstream activities and invasion of habitat by exotic weed species.



10. *Pneumatopteris pennigera* lime fern

Listed as endangered (e) under the TSPC Act

About me:

The lime fern is an erect fern occasionally forming a small trunk to 1m tall in the Thelypteridaceae family. This species is confined to several sites in Tasmania's northwest and on King Island where it grows on alluvial flats and the banks of rivers and creeks on alkaline soils. Until recently, Tasmania's largest subpopulation was at Copper Creek with 2500 individuals. Due to a combination of threatening processes that subpopulation is presumed extinct and there are now thought to be less than 400 plants left in the wild. The lime fern also occurs in Queensland, Victoria and New Zealand.



Why I'm rare?

Land clearance, hydrological changes, browsing by native animals, trampling by cattle, weed invasion and possible thrip infestations have resulted in the decline of populations. Climate change may present a significant threat in the future due to available habitat reduction.

11. *Westringia angustifolia*

narrow leaf westringia

Listed as rare (r) under the TSPC Act

About me:

The narrow leaf westringia is an attractive 1-3m tall shrub in the Lamiaceae (mint) family that has slender, rigid branches. This Tasmanian endemic is found mainly in dry, shrubby understory habitats most commonly on dolerite. Interestingly, the species is frequently associated with other endemic species.

Why I'm rare?

Fire, invasion of habitat by weeds, land clearance and livestock damage are the main threats to this species.



12. *Allocasuarina duncanii* conical she oak

Listed as rare (r) under the TSPC Act

About me:

The conical she oak is a small, erect evergreen tree to 8m high in the Casuarinaceae family. It is endemic to southern Tasmania where it typically grows on shallow soils over dolerite and sandstone at elevations over 500m. There is estimated to be 150 000 to 200 000 mature plants occupying a total area of between 130 and 140 hectares.

Why I'm rare?

Inappropriate fire regimes, drought and predicted climate change impacts are the main threats.



13. *Prostanthera rotundifolia*

roundleaf mint bush

Listed as vulnerable (v) under the TSPC Act

About me:

The roundleaf mint bush is a many branched, woody shrub up to 2m tall in the Lamiaceae (mint) family. In Tasmania the species is found in the north and east of the state along riverbanks and on rocky hillsides in moist, well drained soils. It is estimated that there are 12 populations comprising in excess of 2 000 individuals in Tasmania. The roundleaf mint bush also occurs in South Australia, Victoria and New South Wales.

Why I'm rare?

A combination of agricultural pressures and adverse human-mediated fire regimes since European settlement has resulted in a fragmented and weed-infested habitat.



14. *Eucalyptus barberi* Barbers gum

Listed as rare (r) under the TSPC Act

About me:

The Barbers gum is a shrubby plant in the Myrtaceae (myrtle) family that grows to 5 m with several stems arising from the base and no main trunk or a small tree 6-8 m tall. This endemic Tasmanian species grows on the edges of dolerite rock plates in dry sclerophyll forest and scrub in eastern parts of the state.

Why I'm rare?

Frequent fires, intensive grazing and land clearing activities are the main threats to this species.



15. *Cyphanthera tasmanica*

Tasmanian rayflower

Listed as rare (r) under the TSPC Act

About me:

The Tasmanian rayflower is a short-lived, upright shrub with creamy-yellow flowers in the Solanaceae (potato) family. This Tasmanian endemic species grows 2-4m tall and has yellowish appearing branches and leaves due to the presence of stalked, star-shaped hairs. The Tasmanian rayflower is confined to the states east coast and offshore islands in gullies and on steep rocky hillsides.

Why I'm rare?

This species is usually present after fire, at which time it appears in large numbers and lives for about a decade. The seed persists in the soil for at least 20 years. The threats primarily relate to inappropriate fire regimes.



16. *Isopogon ceratophyllus* horny conebush

Listed as vulnerable (v) under the TSPC Act

About me:

The horny conebush is a low growing, dense, spiky shrub in the Proteaceae (protea) family that has a thick woody rootstock and yellow cone-shaped flowers. In Tasmania horny conebush is found in dry heathlands on acidic, sandy soils around the islands including Clarke, Cape Barren and Flinders Islands.

Why I'm rare?

The most serious threat to this species is the root rot pathogen (*Phytophthora cinnamomi*) which kills plants and degrades the general landscape causing erosion. Occasional fires may be necessary to ensure horny



conebrush does not become outcompeted by larger species.

17. *Hibbertia calycina* lesser guineaflower

Listed as vulnerable (v) under the TSPC Act

About me:

The lesser guineaflower is an erect 1m tall shrub in the Dilleniaceae family that has prominent, hairy branches and yellow flowers. The distribution of *H. calycina* is extremely limited with Tasmanian populations occurring only in the north-east of the state near Scamander and St Helens. The lesser guineaflower grows on north and west facing slopes in shallow, free draining, low nutrient soils in *Eucalyptus sieberi* forest. There is estimated to be around 4 000 individual plants in Tasmania. On the mainland this species occurs in Victoria and New South Wales.

Why I'm rare?

The main threat to this species is its susceptibility to infection by root rot (*Phytophthora cinnamomi*).



18. *Eryngium ovinum* blue devil

Listed as vulnerable (v) under the TSPC Act

About me:

The blue devil is an erect annual or short-lived 60cm tall perennial herb in the Apiaceae (carrot) family with spiny foliage and metallic-blue flower-heads. Blue devil occupies about 24 sites in Tasmania's far southeast and east where it grows in fertile heavy soils in grassy woodlands. The blue devil also occurs in New Zealand and in Queensland, New South Wales, Australian Capital Territory, Victoria and South Australia.

Why I'm rare?

Main threats include: Land clearing and/or habitat modification; inappropriate fire regimes; invasive weeds (e.g. gorse); inappropriate grazing regimes; quarrying; timber harvesting and road construction and maintenance.



19. *Bertya tasmanica* subsp. *tasmanica*

Tasmanian bertya

Listed as endangered (e) under the TSPC Act and Endangered (EN) under the EPBC Act.

About me:

The Tasmanian bertya is a 2.5m high, multi-branched Tasmanian endemic woody shrub in the Euphorbiaceae (euphorbia) family that has small golden bell-shaped flowers and is easily identified by its 'rosemary-like' foliage. Tasmanian bertya is a low altitude riparian species that occurs on alluvial sandy or sandy loam soils in the midlands and East Coast regions. It is estimated that between 700 to 800 mature plants remain in the state, occupying an area of less than 1 hectare with about half that number growing on the Apsley River.

Why I'm rare?

Major threats to this species include: Weed competition; inappropriate fire regimes; land clearing; dam construction and chance events.



20. *Barbarea australis* native wintercress

Listed as endangered (e) under the TSPC Act and Endangered (E) under the EPBC Act.

About me:

Native wintercress is an annual or short-lived perennial herb that belongs to the Brassicaceae (cabbage) family. It is only found in Tasmania and occurs on 10 flood-prone river systems from the north of the state to the Central Highlands. It grows on the margins of riverine scrub, usually in exposed rocky areas where there is little competition from surrounding species.

Why I'm rare?

As a short-lived plant native wintercress is dependent on disturbance and ongoing germination of seed for recruitment. Plants will produce many seedlings following disturbance such as flood but only a few survive to maturity. Habitat loss and modification, over grazing and fluctuations in populations from year to year pose the greatest threat to survival.

