Australian Government



PROTECTING 30 THREATENED PLANTS

Australia's Threatened Species Strategy, launched in July 2015, sets out a bold, action-based approach to protecting and recovering our threatened species. On plants, it includes targets to (i) improve trajectories of 30 threatened plants by 2020, and (ii) to insure all known threatened plants against extinction by 2020. Actions to save Australia's threatened plants will include seed collection, seed banking, habitat protection and restoration, replanting wild populations and planting conservation collections off site, including in Australia's world class botanic gardens.

Work is already underway through Australian Government initiatives such as the Green Army, 20 Million Trees and National Landcare Programmes, the Australian Seed Bank Partnership, state and territory governments and in Commonwealth National Parks managed by Parks Australia.

To get involved in protecting Australia's plants, contact the Threatened Species Commissioner on Facebook @TSCommissioner or at <u>ThreatenedSpeciesCommissioner@environment.gov.au</u>.

IMPROVING THE TRAJECTORIES OF 30 PLANTS BY 2020

These 30 plant species were identified, assessed and prioritised by the Office of the Threatened Species Commissioner through consultation with some of Australia's leading plant scientists, the Threatened Species Commissioner's informal advisors, the Threatened Species Scientific Committee, state and territory governments, the Australian Seed Bank Partnership, national and state botanic gardens and the broader conservation community. They were considered against the Principles for Prioritisation in the Strategy.

- Small purple pea
- Little mountain palm
- Vincentia banksia
- Caley's grevillea
- Magenta lilly pilly
- Fairy bells
- Mongarlowe mallee
- Central Australian cabbage palm
- Kakadu hibiscus
- Ormeau bottle tree

- Ant plant
- Purple wattle
- Mossman fairy orchid
- Bulberin nut
- Silver daisy bush
- Whibley's wattle
- Fleurieu leek orchid
- Blue top sun orchid
- Shy susan
- Southport heath

- Morrisby's gum
- Spiny rice flower
- Turnip copperburr
- Silver gum
- Button wrinklewort
- Matchstick banksia
- Fitzgerald's mulla-mulla
- Scaly-leaved featherflower
- Black grevillea
- Glossy-leafed hammer-orchid

LITTLE MOUNTAIN PALM

EPBC status	Critically endangered
Found at	Lord Howe Island
Main threats	Predation of seed by introduced rats, invasive weeds.
About	The little mountain palm is an endemic palm found only on the summit of Mt Gower on Lord Howe Island. It grows to 3 metres in height, and its natural habitat covers an area of less than 4 square kilometres.
Action	 Maintain the number and size of wild populations Control rats on Lord Howe Island to enable recruitment of the species. Prevent the invasion of weeds into the species' habitat

LEPIDORRHACHIS MOOREANA



MATCHSTICK BANKSIA

EPBC status	Endangered
Found in	South-west Western Australia
Main threats	Phytophthora dieback, habitat fragmentation, invasive weeds, changed fire regimes
About	This spectacular banksia species grows in the wheatbelt region near Perth. Its name comes from its bright pink flower spikes that look like match sticks. There are only about 500 of these plants left in the wild at 11 different sites, with much of its habitat having been historically cleared for agriculture.
Action	 Protect remaining remnants Implement rabbit control actions Control invasive weeds Enhance habitat through revegetation Collect and bank seed and establish off site populations

BANKSIA CUNEATA

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PURPLE WATTLE

EPBC status	Critically endangered
Found in	North-east Queensland
Main threats	Habitat loss, grazing by cattle, mining, road works, invasive weeds, illegal collecting
About	This wattle is the only Australian wattle with purple flowers. It grows on rocky slopes in north-eastern Queensland and flowers between May and September. There are only about 500 plants left in the wild, including at Bush Heritage's Yourka Station in Queensland.
Action	 Identify priority populations Protect existing habitat through removing invasive weeds, fencing off populations and excluding stock Seed collection and banking Establish off site populations

ACACIA PURPUREOPETALA

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MORRISBY'S GUM

EPBC status	Endangered
Found in	South-east Tasmania
Main threats	Changed fire regimes, drought and browsing of seedlings by native animals, rabbits and insects
About	This gum tree occurs at only two places in south- eastern Tasmania, with only about 2,000 plants left in the wild. Low seed production could have implications if the species is exposed to drought or frequent fires.
Action	 Manage grazing impacts at existing sites through fencing Weed and vegetation management to reduce competition and fire risk Collect seed and replant the species at existing sites and in off-site conservation collections

EUCALYPTUS MORRISBYI

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SMALL PURPLE PEA

EPBC status	Endangered
Found in	ACT, NSW central slopes and Mt Chiltern VIC
Main threats	Loss of habitat, invasive weeds, grazing and soil erosion
About	Once widespread across south-eastern Australia, this small herb with bright purple flowers is now restricted to a few locations in the ACT, NSW and Victoria. It is associated with the Box Gum Grassy Woodland Threatened Ecological Community. To thrive again, careful habitat management is required at sites where the plant is found.
Action	 Weed control Fencing around existing populations Habitat protection and restoration, replenishing wild populations with propagated plants Ecological burns

Seed collection and surveys

SWAINSONA RECTA

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CALEY'S GREVILLEA

EPBC status	Endangered
Found in	Sydney, NSW
Main threats	Habitat loss, invasive weeds, changed fire regimes and human disturbance
About	This spectacular grevillea grows only in the northern suburbs of Sydney in the Terrey Hills area. It can be found in and around school grounds and other community facilities including in the gardens of the Baha'i Temple at Ingleside. The grevilleas here are being carefully maintained by the community.
Action	 Protect existing populations Community engagement and education Remove invasive weeds Facilitate ecological burns every 5-15 years to promote germination



VINCENTIA BANKSIA

EPBC status	Not listed. Listed as critically endangered in NSW
Found in	NSW south coast
Main threats	Development, invasive weeds, disturbance, fire
About	This banksia species was only discovered in 2015, growing in a single location on the NSW south coast. There are only six plants known to exist. The species is listed as critically endangered in NSW and because of its rapid decline the Threatened Species Commissioner is working with the Threatened Species Scientific Committee to have the species nationally listed.
Action	 Raise awareness about the species Manage sites sensitively in conjunction with the community, local and state government and local businesses Collect and bank seed

- Establish off site populations

BANKSIA VINCENTIA



MAGENTA LILLY PILLY

EPBC status	Vulnerable
Found in	Eastern NSW
Main threats	Habitat loss and fragmentation, changed fire regimes, invasive weeds
About	The magenta lilly pilly is a rainforest tree with a total population of around 1,200 plants spread across a 400 kilometre stretch of coastal NSW. Its bright pink edible fruit is dispersed by flying foxes and rainforest birds. One population grows in Booderee National Park at Jervis Bay and is being protected by Parks Australia. Four Green Army Teams and a 20 Million Trees grant are protecting this species across its distribution through seed collection, revegetation and habitat restoration.
Action	 Protect known sites from fire, grazing and habitat loss Collect seed and establish new populations Undertake weed control, but avoid spraying weeds close to magenta lilly pilly plants

SYZYGIUM PANICULATUM

VU



FAIRY BELLS

EPBC status	Vulnerable
Found in	Central tablelands, NSW
Main threats	Feral animal impacts, grazing, habitat loss, inappropriate fire regimes
About	Fairy bells grow in woodland habitats around the western slopes and central tablelands regions of NSW, including in the nationally Threatened Box Gum Grassy Woodland Ecological Community. Populations of the species were once in the Wollemi National Park, however they are now presumed extinct. The species flowers throughout the year with graceful yellow and pink flowers.
Action	Rabbit and goat controlProtect and restore habitatStock exclusion

Survey to locate new populations

Collect seed and store at national seed banking

HOMORANTHUS DARWINIODES

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MONGARLOWE MALLEE

facilities

EPBC status	Critically endangered
Found in	Southern highlands of NSW
Main threats	Phytopthora dieback, habitat loss, disturbance
About	This gum tree, also known as the 'ice age gum' is the rarest eucalypt in Australia - with only 6 individuals remaining at 3 sites in NSW. The existing plants could be over 10,000 years old. Establishing off-site specimens of this plant is essential for its survival.
Action	 Fence off existing populations Protect from phytophthora through site hygiene Collect and bank seed and establish off site insurance populations Weed control and revegetation

EUCALYPTUS RECURVA

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CENTRAL AUSTRALIAN CABBAGE PALM

LIVISTONA MARIAE

EPBC status	Vulnerable
Found in	Finke Gorge National Park, Henbury Station, NT
Main threats	Exotic grass invasion (buffel grass and couch), increased fire exposure, changed hydrology, tourism impacts
About	The central Australian cabbage palm is of significant cultural importance to central Australian Indigenous groups, being a food resource and cultural symbol. The species is almost wholly contained within Finke Gorge National Park in the West MacDonnell Ranges. It is separated from other <i>Livistona</i> palm species by over 1,000km.
Action	 Remove invasive buffel grass and couch grass to help seedlings grow and reduce the risk of wildfire Raise awareness of impacts of trampling on palm seedlings by visitors to tourist sites

- Restrict stock and feral animals



KAKADU HIBISCUS

EPBC status	Vulnerable
Found in	Kakadu National Park
Main threats	Inappropriate fire regimes
About	This native hibiscus is known from only one population in west Arnhem Land in Kakadu National Park. It grows in sandstone gullies and cliffs over a small area of around 1.5 square km with approximately 440 plants in the total population.
Action	 Collect and bank seed and establish off site populations Manage fire through an appropriate fire management plan

HIBISCUS BRENNANI

VU



ORMEAU BOTTLE TREE

EPBC status	Critically endangered
Found in	South-east Queensland
Main threats	Habitat loss, invasive weeds, low genetic diversity, fire, insect attack.
About	This iconic rainforest tree has a range of less than 1 square kilometre with only 161 individual trees. They grow to be over 120 years old and occur along creeks and rivers around the Gold Coast area.
Action	 Seed collection and banking, propagation and replanting Secure remaining sites and protect through fencing Control invasive weeds and revegetate habitat

BRACHYCHITON SP. ORMEAU

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ANT PLANT

EPBC status	Vulnerable
Found in	Coastal woodlands and mangroves between Cooktown and Ingham, QLD
Main threats	Habitat loss, invasive weeds, removal of plants by plant and butterfly collectors
About	This unique epiphyte (a plant that lives harmlessly on another plant) grows in the wet tropics of QLD. The ant plant has a special association with the golden ant which lives in the chambers of the tuber, and the apollo jewel butterfly which lays its eggs on the plant. The golden ants carry the butterfly eggs into the chambers where they develop into butterflies.
Action	 Protect, maintain and expand habitat through weed control, revegetation and fencing Raise awareness about impacts of illegal collecting Grow horticulturally

MYRMECODIA BECCARII

BULBERIN MACADAMIA NUT

EPBC status	Endangered
Found in	Rainforest around Bundaberg, QLD
Main threats	Changed fire regimes, weed invasion, disease, feral pigs, illegal collection and timber harvesting
About	The Bulberin nut is one of four threatened macadamia species endemic to Australia. There are only around 60 plants left in the wild in an area of less than 1 hectare. The community has already begun work to establish four insurance populations in the surrounding area and another at the botanic gardens in Gladstone.
Action	 Protect the remaining population by controlling invasive weeds, improving habitat and implementing a fire management plan for the area Establish insurance populations

MACADAMIA JANSENII



EUCALYPTUS CRENULATA



SILVER GUM

EPBC status	Endangered
Found in	South-central Victoria
Main threats	Hybridisation, waterlogging and changes to hydrology, invasive weeds and pathogens, insect attack and grazing.
About	The silver gum occurs naturally at only 2 sites in central Victoria with less than 670 plants remaining in the wild. The species is a relic of the cooler climate eucalypts that were once widespread in southern Australia when temperatures were much cooler. It is also grown as an ornamental tree due to its attractive flowers and foliage.
Action	 Protect existing populations from weed invasion, disease and wildfire Work with landholders to secure populations occurring on private land



MOSSMAN FAIRY ORCHID

EPBC status	Rediscovered in 2015 and listed as critically endangered
Found in	Mossman Gorge, QLD
Main threats	Illegal collecting, invasive weeds, site disturbance
About	Until 2015, the Mossman fairy orchid had not been seen since the 1960s and was declared extinct. Over many years botanists surveyed the area where it had last been located. In 2015 an unknown orchid was found in Mossman Gorge and experts confirmed the orchid to be the long lost Oberonia. The Threatened Species Commissioner worked with the Threatened Species Scientific Committee to have it added back onto the national list as critically endangered.
Action	 Protect habitat Bank tissue culture Establish off-site conservation collections

OBERONIA ATTENUATA





SILVER DAISY BUSH

OLEARIA PANNOSA SUBSP. PANNOSA

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EPBC status	Vulnerable
Found in	Eyre and Yorke Peninsulas, Kangaroo island, Flinders and Mt Lofty Ranges and the Murray Basin SA
Main threats	Livestock grazing, invasive weeds, habitat fragmentation
About	The silver daisy-bush is endemic to South Australia where it is scattered throughout agricultural areas. Its tuberous roots provided Indigenous people with water and food resources during summer. The 20 Million Trees Programme is supporting the community to protect the species through habitat management through 5 projects.
Action	 Protect existing habitat through weed control, revegetation and fencing off stock Collect seed to establish additional populations Store seed in Australia's conservation seed banks



WHIBLEY'S WATTLE

EPBC status	Endangered
Found in	The Eyre Peninsula, SA
Main threats	Habitat fragmentation, salinity, grazing pressure and invasive weeds.
About	Whibley's wattle is found at only two locations near Tumby Bay in South Australia. There are about 320 plants, some of which are growing on roadsides and at an old quarry site. The seeds of this wattle are dispersed by ants, and the species is associated with the Peppermint Box Grassy Woodland Threatened Ecological Community.
Action	 Seed collection and translocations Species insurance through seed banking Protect habitat on roadsides including through

stock exclusion fencing

ACACIA WHIBLEYANA

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TURNIP COPPERBURR

EPBC status	Endangered
Found in	Western NSW and Victoria
Main threats	Invasive weeds, habitat loss and degradation, changed fire regimes, grazing, soil salinity
About	While the turnip copperburr might look a bit like a weed, it is an endangered plant that only occurs at only 25 sites in NSW and Victoria – less than 1% of its original distribution. This plant is a member of the saltbush family and grows mainly in grassland and remnant Buloke woodland habitats.
	 Protect habitat through fencing, including on private land Control invasive weeds and pest animals Collect and bank seed
Action	Establish off site conservation populationsCommunity engagement

SCLEROLAENA NAPIFORMIS





FLEURIEU LEEK ORCHID

EPBC status	Critically endangered
Found in	The Fleurieu Peninsula, SA
Main threats	Habitat loss and degradation, stock trampling, changed hydrology
About	The Fleurieu leek orchid is a tall flowering orchid that occurs in swamp habitats associated with the critically endangered Swamps of the Fleurieu Peninsula Threatened Ecological Community. The fragmented populations have suffered since quality swamp habitat has declined by around 75 per cent. Scientists at the Royal Botanic Gardens in Melbourne are working to propagate enough plants to reinforce and secure wild populations.
Action	 Protect existing habitat, particularly the threatened ecological community Manage fire regimes Collect seed and associated fungus and protect in

off-site conservation populations

PRASOPHYLLUM MURFETII

CR



BLUE-TOP SUN-ORCHID

EPBC status	Critically endangered
Found in	The Fleurieu Peninsula , SA
Main threats	Habitat loss and degradation, grazing, invasive weeds
About	The blue-top sun-orchid is known from only one location on the Fleurieu Peninsula with approximately 130 individual plants. They grow in manna gum (<i>Eucalyptus viminalis</i>) swampy woodland. The species was a traditional food resource for local Indigenous people, having an edible underground tuber.
Action	 Work with the private sector to protect wild populations on private land Collect seed and associated fungi to secure off-site conservation populations Exclude stock Manage invasive weeds

THELYMITRA CYANAPICATA

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SHY SUSAN

EPBC status	Critically endangered
Found in	Beaconsfield, Tasmania
Main threats	Phytophthora dieback, inappropriate fire regimes, land clearance
About	The shy susan is a purple flowering shrub that occurs on serpentine outcrops near Beaconsfield. There are less than 100 mature plants left in the wild over a range of less than 5 square km. The species is naturally rare and all sites where it occurs are considered to be important for the species survival.
Action	 Survey for new populations, germination events and implement phytophthora controls Establish clones off-site for species insurance Work with landholders to secure sites on private land

TETRATHECA GUNNII

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SOUTHPORT HEATH

EPBC status	Critically endangered
Found in	Southport Bluff, Tasmania
Main threats	Phytophthora dieback, inappropriate fire regimes, damage from severe storms
About	The Southport heath occurs in only one location on Southport Bluff in south-east Tasmania, where there are less than 1,000 plants in the wild. The species is thought to be so isolated because of the short range of its seed dispersal (less than a few metres per plant).
Action	 Maintain walking tracks and site hygiene to prevent infection by phytophthora Manage fire at the site Install protective fencing Establish off site conservation populations Seed collection and banking

EPACRIS STUARTII

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SPINY RICE-FLOWER

PIMELEA SPINESCENS SUBSP. SPINESCENS

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EPBC status	Critically endangered
Found in	Grasslands of Victoria
Main threats	Invasive weeds, habitat loss and fragmentation, grazing impacts, fire
About	The spiny rice flower is a small shrub, endemic to the grasslands of Victoria. It is typically associated with the critically endangered Natural Temperate Grassland of the Victorian Volcanic Plain Threatened Ecological Community. The population is severely fragmented over around 180 sites.
Action	 Identify critical or potential habitat Manage threats to populations such as invasive weeds, inappropriate fire regimes, habitat loss

- Build community support for conservation



SCALY-LEAVED FEATHERFLOWER

VERTICORDIA SPICATA SUBSP. SQUAMOSA

EPBC status	Endangered
Found in	Geraldton, Western Australia
Main threats	Habitat loss, invasive weeds, rabbits, inappropriate fire regimes
About	The featherflower grows in mallee scrublands near Geraldton in WA. Much of the habitat for this species has been historically cleared, and it now grows mainly along roadsides. There are less than 40 plants in the wild, with some plants being from established translocations.
Action	 Collect seed and cuttings, translocate populations to safe havens Protect habitat on private land through fencing and removing invasive weeds



BUTTON WRINKLEWORT

EPBC status	Endangered
Found in	Southern Tablelands of NSW and ACT, the Gippsland Plains in eastern Victoria and the Volcanic Plains of western Victoria
Main threats	Habitat loss, invasive weeds, changed fire regimes, grazing, herbicide and mowing impacts
About	The button wrinklewort is a perennial wildflower that grows in grassland and woodland communities in NSW, ACT and Victoria. It is known from less than 30 sites and enhancing genetic diversity is very important for its recovery.
Action	 Remove invasive weeds from existing sites Manage fire regimes Enhance the genetics of small populations

- Enhance the genetics of small populations through translocations
- Protect sites from grazing

RUTIDOSIS LEPTORRHYNCHOIDES



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FITZGERALD'S MULLA-MULLA

EPBC status	Endangered
Found in	South-west Western Australia
Main threats	Habitat loss, salinity, water-logging, grazing by stock, rabbits and kangaroos, invasive weeds
About	Fitzgerald's mulla-mulla is a perennial plant with woolly flowers. It was presumed extinct until it was rediscovered in 1987. There are now 11 known subpopulations in WA with around 3,000 plants. The 20 Million Trees programme is working to protect habitat for this species through a large-scale revegetation project.
Action	 Monitor known populations to identify key threats Investigate options for linking, enhancing or establishing additional populations Prevent grazing pressure Seed collection and banking

PTILOTUS FASCICULATUS



BLACK GREVILLEA

EPBC status	Endangered
Found in	Western Australia
Main threats	Habitat loss, invasive weeds, herbicide overspray, frequent fire, grazing animals, phytophthora dieback
About	The black grevillea grows in open woodland and heath in south-west Western Australia, where it is known from only 6 populations in an 8 km range. It is cultivated throughout Australia through the commercial nursery industry.
Action	 Monitor known populations to identify and manage threats Control invasive weeds Fence populations to exclude stock Develop and implement a fire management strategy

GREVILLEA CALLIANTHA

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GLOSSY-LEAVED HAMMER-ORCHID

EPBC status	Endangered
Found in	South-west Western Australia
Main threats	Habitat loss, fire, invasive weeds, grazing animals, salinity.
About	This hammer-orchid species grows at only 42 locations with a total population size of around 230 plants. To survive, the orchid relies on a specific fungus which assists germination and provides nutrients. It is also dependent on a single species of wasp that pollinates its flowers.
Action	 Remove weeds and fence off populations Collect seed and associated fungus Hand pollinate Ensure habitat for the pollinating wasp is intact and protected from phytophthora impact

DRAKAEA EL.ASTICA

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This page Caley's grevillea and fairy bells © Erin Lake, Department of the Environment and Energy

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