

Threatened species of the central Murray region NSW

A guide to their identification and conservation

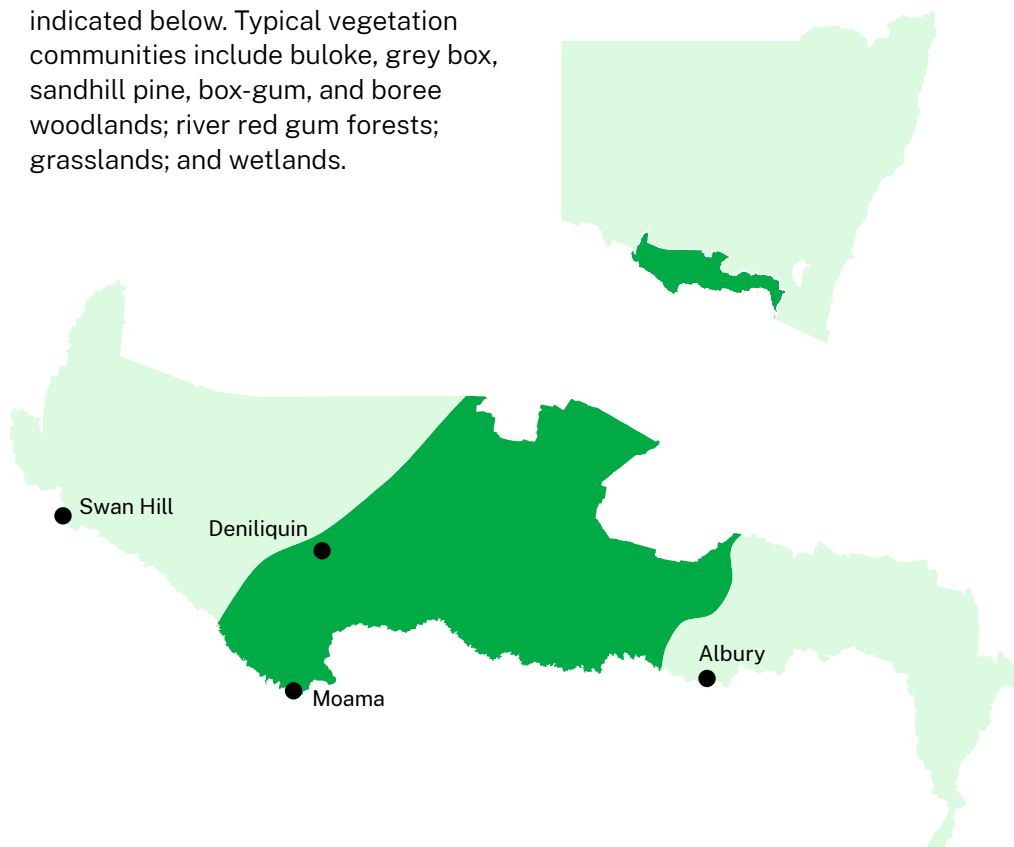


About this guide

This guide is intended to aid the rapid identification of some threatened animals and plants of the central Murray Local Land Services region, NSW. The information provided is introductory only. Each species includes its conservation status according to the NSW *Biodiversity Conservation Act 2016* and/or the Federal *Environment Protection and Biodiversity Conservation Act 1999*, along with relevant threat codes explained on pages 3–4.

The central Murray Local Land Services region broadly corresponds to the 350–650 mm rainfall zone, where remnant native vegetation has been extensively cleared. The NSW Murray Biodiversity Management Plan generally identifies this region as a high-priority area for repairing and restoring native vegetation.

The area covered by this guide is indicated below. Typical vegetation communities include buloke, grey box, sandhill pine, box-gum, and boree woodlands; river red gum forests; grasslands; and wetlands.



Key threats and actions

Each threatened species listed in this guide has a combination of “Key threats and actions” codes in their description. The following defines each code used.

A — Clearing of native vegetation

Avoid any further clearing of native vegetation, particularly large, old, standing trees, alive and dead.

B — Fragmentation and loss of connectivity

Improve habitat connectivity by creating corridors and connections between isolated patches of existing trees.

C — Reduced habitat condition

Improve the condition of existing habitat patches and the extent of these patches. This could include activities such as:

- manage grazing intensity of both stock and pest animals
- enhance structure and diversity through revegetation
- extend or link habitat by planting and/or direct seeding out from existing habitat patches
- retain fallen timber where possible.



Credit: Shanna Rogers



Credit: Simon Dallinger

D — Pest animal predation and competition for resources

Control pest predators, particularly cats and foxes, and pests competing for habitat and food resources (e.g. rabbits, common myna, and feral honeybees).

E — Altered fire regimes

Manage fire and burning off to reduce impact on existing remnant trees (particularly large old paddock trees) and remnant patches.



Credit: Kelly Coleman

F — Altered flow regimes

Manage water for the environment to introduce water flows back into systems that have been altered by dams, weirs, locks, or from too much flooding and riparian habitat degradation.

G — Other

Refer to each species profile for specific management actions.

Scan the QR code to search for more information.



Credit: Simon Dallinger

Help save our threatened species

You can contribute to conserving threatened species by reporting wildlife and plant sightings.

1. Familiarise yourself with the plants and animals in your local area. Refer to local experts, websites, books, and mobile phone apps that can help you identify species.
2. Observe and record species you see in the wild by taking photographs and writing down their name, date, and location details. Avoid disturbing native plants and animals when taking observations.
3. Report your sightings, for example:
 - iNaturalist [inaturalist.org](https://www.inaturalist.org)
 - FrogID frogid.net.au
 - Birddata birddata.birdlife.org.au
4. Many methods are available for controlling feral cats, foxes, feral pigs, rabbits and goats. Your Local Land Services can provide advice on dealing with declared pest species.
5. Look after habitat
 - Leave fallen logs and debris, as many small animals rely on these structures for survival.
 - Retain areas of intact remnant vegetation habitat, including large old trees with hollows, which is critical for many threatened species.
 - Manage total grazing pressure to ensure that understorey and ground layer vegetation is kept in good condition and plants can regenerate.
 - Retain paddock trees, as many birds, mammals, reptiles, and insects rely on them as stepping-stone habitats for movement through the landscape.
 - Protect rivers, creeks, and wetlands by restricting livestock access to allow native plants to regenerate and reduce streambank erosion.
6. Find out more about your environment through **Local Land Services** (left) or search for threatened species with the **NSW BioNet database** (right).

Scan the QR code for more information.



Local Land Services



NSW BioNet

Vegetation communities



Credit: Natasha Lappin

Buloke woodland

Endangered ecological community

This woodland is dominated by buloke (*Allocasuarina luehmannii*) and typically occupies patches of red-brown loamy sands with alkaline sub-soils on the alluvial plains of the Murray River and its tributaries in south-western NSW. The community occurs in small patches within this range and is currently estimated to cover less than 500–1,500 hectares. Buloke woodlands provide important habitats for threatened birds like hooded robins and brown treecreepers.



Credit: Shanna Rogers

Inland grey box woodland

Endangered ecological community

Inland grey box woodlands consist mainly of grey box (*Eucalyptus microcarpa*), often with white cypress pine, kurrajong, buloke, yellow box and sometimes white box. These woodlands are vital habitats for bush stone-curlews, grey-crowned babblers and flame robins.

Sandhill pine woodland

Endangered ecological community

This woodland is dominated by white cypress pine (*Callitris glaucophylla*). Sandhill pine woodlands are typically associated with prior streams and aeolian source-bordering dunes. They occupy red-brown loamy sands with alkaline subsoils on the alluvial plain of the Murray River and tributaries and parts of the sandplain in southwestern NSW. These woodlands are important habitats for superb parrots, sand-hill spider orchids and Oaklands donkey orchids.



Credit: Shanna Rogers

White box–Yellow box–Blakely's red gum woodland

Critically endangered ecological community

This open woodland is characterised by the presence or prior occurrence of white box (*Eucalyptus albens*), yellow box (*Eucalyptus melliodora*) and/or Blakely's red gum (*Eucalyptus blakelyi*) and a generally grassy understorey. This woodland generally occurs on the lower parts of the landscape where soil fertility is relatively high compared to the surrounding landscape, and remnants often contain large old trees with hollows. This woodland is a critical habitat for squirrel gliders, regent honeyeaters and swift parrots.



Credit: Shanna Rogers



Credit: Shanna Rogers

Boree/Myall woodlands

Endangered ecological community

Boree woodlands typically occur on red-brown earth and heavy grey and brown alluvial soils. They are characterised by the presence of Boree (*Acacia pendula*) as the dominant or only tree species. The understorey includes an open layer of chenopod shrubs and other woody plant species and an open to continuous ground cover of grasses and herbs. These woodlands are important habitats for painted honeyeaters, superb parrots, and bush stone-curlews.



Credit: Simon Dallinger

River red gum forests

Ramsar listed site: NSW Central Murray Forests

River red gum forests are found along the banks of the Murray River and rely on adequate water flows to fill wetlands and maintain the health of river red gums. The river red gum is the dominant species of tree, with some over 200 years old. They are important breeding and feeding sites for species such as southern bell frog, trout cod, Australasian bitterns, Australian painted snipes and superb parrots. They also provide refuge for migratory birds. The forests of the Central Murray are culturally and spiritually significant to local Aboriginal people.

Murray Valley grasslands

Critically endangered ecological community

Murray Valley grasslands are natural temperate grasslands with semi-arid characteristics. They occur across the southern parts of the Riverina Bioregion in NSW on heavy-textured or poorly drained grey, brown, and red clay soils. They have an open grass and forb structure in which trees and shrubs are sparse to absent. These grasslands are critical habitats for plains-wanderers, slender darling peas, and Mossgiel daisies.



Credit: Natasha Lappin

Seasonal herbaceous wetlands

Critically endangered ecological community

Seasonal herbaceous wetlands are isolated freshwater wetlands that are inundated seasonally through rainfall. The vegetation structure is open, dominated by grasses, sedges and forbs, with little woody cover present. The vegetation community is dominated by wetland plants during inundation – these plants may become dormant during dry periods. They are found on alluvial deposits within the central Murray region. These wetlands are critical habitat for southern bell frogs, Sloane's froglet, waterbirds, floating swamp wallaby-grass, and austral pillwort.



Credit: Simon Dallinger

Threatened woodland and grassland birds



Credit: Dave Smith

Grey-crowned babbler

Pomatostomus temporalis temporalis

Largest Australian babbler species at 30 cm with distinctive long curve-shaped bill. Their short, rounded wings aid gliding. Typically found hopping or gliding between branches in open woodlands. Defends their territory (less than 50 hectares) all year round. Their call is a loud “ya-hoo” duet between the female (“ya”) and the male (“hoo”).

Vulnerable

Key threats and actions: A B C D E G — manage noisy miner abundance; retain dead timber.



Credit: Andrew Rock

Speckled warbler

Chthonicola sagittata

A small (13 cm) ground-dwelling bird. Well-camouflaged with substantial streaking on their grey-brown wings, tail and back, and have a pale underbody. Dwells often in relatively undisturbed rocky ridges and gullies dominated by eucalypts with an open canopy and grassy understorey. Has a harsh churring chatter alarm call.

Vulnerable

Key threats and actions: A B C D E G — manage noisy miner abundance.

Varied sittella

Daphoenositta chrysoptera

A small (10 cm) songbird. Typically, has a grey head with dark brown streaks, prominent white rump and orange wing-bar in flight. Distinctive slightly upturned bill, yellow feet and eyes, and short tail barred underneath. Inhabits eucalypt forests and woodlands containing smooth-barked gums and rough-barked species. Exhibits acrobatic behaviour working their way down from the heads of trees to branches and trunk in a constant motion.

Vulnerable

Key threats and actions: A B C D

G — manage noisy miner abundance; retain dead timber in open forests and woodlands.



Credit: Jan Palmer

Brown treecreeper (eastern subspecies)

Climacteris picumnus victoriae

Australia's largest treecreeper. Characterised by their brown-grey and streaked appearance, with a dark eye-band and crown. Sedentary and territorial they can be found year-round in a variety of sites. Typically found in pairs or in groups of 8-12 birds. Has a loud "pink" call, often heard in series of 5-10 descending notes.

Vulnerable

Key threats and actions: A B C D E



Credit: Damian Michael



Male — Credit: Damian Michael

Hooded robin (south-eastern form)

Melanodryas cucullata cucullata

Large (17 cm) Australian robin. Males have distinctive white shoulders, striking black back and hood extending down their white breast, and black tail with white side-panels. Females and young males are duller with a brown-grey underbody and may be confused with other species. Inhabits structurally diverse open eucalypt woodlands with small shrubs and tall native grasses.

Vulnerable

Key threats and actions: A B C D E G — manage noisy miner abundance.



Male — Credit: Damian Michael

Scarlet robin

Petroica boodang

Small (13 cm) Australian robin. Males have a black head with white forehead patch, white belly, tail edges and wing stripes, and a distinctive scarlet-red chest. Females have similar features, with pale brown underparts, black back, and dull red breast. Inhabits dry woodlands and eucalypt forests with an abundance of fallen trees or logs. Found occasionally in wetlands, tea-tree swamps, mallee and wet forest communities, and open grasslands and paddocks during autumn and winter.

Vulnerable

Key threats and actions: A B C D E G — manage dense regeneration and noisy miner abundance.

Flame robin

Petroica phoenicea

Small (14 cm) Australian robin. Males have dark grey heads with a small white forehead patch, white lower-belly, tail and wing stripes, and bright orange chest and upper-belly. Females are brown and darker in colour with an off-white throat and lower-belly. Breeding occurs in upland woodlands and eucalypt forests in spring–summer. Migrates to drier lowland open habitats in winter. Foraging behaviour includes pouncing on prey from low perches.

Vulnerable

Key threats and actions: A B C D E G — manage noisy miner abundance.



Male — Credit: Dave Smith

Superb parrot

Polytelis swainsonii

A large bright green parrot with back-angled wings in flight and a long narrow tail. Males have a red crescent and yellow throat and forehead. Females have a duller green colour and have dull blue forehead, throat, and crescent. Found in boree, box-cypress pine and box-gum woodlands and river red gum forests. Nests in small colonies in river red gum forests of the Murray River in large tree hollows (>6 cm entrance diameter) about 3.5 m above ground.

Vulnerable

Key threats and actions: A B C D E G — reduce any grain spillage from transport trucks.



Male — Credit: Damian Michael



Credit: Adobe Stock

Purple-crowned lorikeet

Glossopsitta porphyrocephala

Small (17–18.5 cm) parrot with a purple crown (appears black). They have bright green upperparts, bronze nape and mantle, green-yellow underparts, light-blue belly, yellow-orange forehead and ear coverts. Wing-bend has bright blue edges and underwing is a distinctive bright red. Inhabits open woodlands and forests with large flowering eucalypts, feeding on pollen and nectar. Has a metallic high-pitched “tziet, tziet, tziet” call.

Vulnerable

Key threats and actions: A C G — investigate impact of honeybees and reduce impacts.



Credit: Adobe Stock

Regent honeyeater

Anthochaera phrygia

Medium-sized (20–24 cm, 35–50 g) honeyeater with a distinctive curved bill and black and yellow colouring. Males and females have a black head to upper breast and bill, pale yellow with black scalloped patterned back and lower breast, and bright yellow edged tail and wings. Males are bigger and have a larger patch of facial skin around their eyes. Has a soft bell-like metallic call, typically heard outside breeding season.

Critically endangered

Key threats and actions: A B C D E G — maintain a captive population; maintain mature key nectar tree species; avoid the removal of mistletoes at key sites.

Dusky woodswallow

Artamus cyanopterus cyanopterus

Medium-sized (16–19.5 cm, 35 g) bird with a long tail. Has a dark grey-brown body merging to black on the tail, small black-brown mask, bluish bill with black tip, whitish underwings, and dark blue-grey upper-wings. Inhabits dry open woodlands and eucalypt forests. Calls include brassy “chirps, chirups”, brisk “peet, peet”, soft and low “vut, vut”, can also mimic other bird calls.

Vulnerable

Key threats and actions: A B C D



Credit: Damian Michael

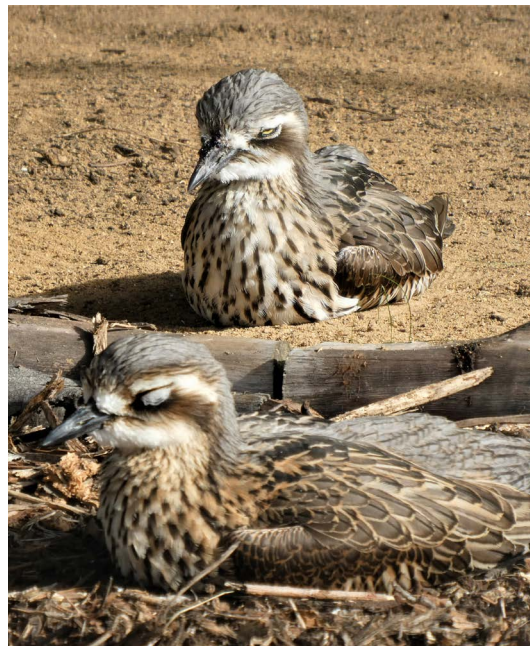
Bush stone-curlew

Burhinus grallarius

Tall standing (55 cm) nocturnal ground-dwelling bird. Their back is grey-light brown with black blotches and streaked rump. Has a white underbody with dark streaks and black bands from eyes to neck. Distinguishing large yellow eyes, hunched over stance, and long legs. When disturbed or threatened, lies on the ground flat, extending its neck and head out. Their call is a loud wailing “wee-loo”.

Endangered

Key threats and actions: A B C D G — limit pesticide use around nesting sites and habitat.



Credit: Rhonda Vile



Credit: David Parker

Plains-wanderer

Pedionomus torquatus

A small, ground-dwelling, quail-like bird that inhabits semi-arid, lowland native grasslands. They stand around 15 cm tall, have a yellow bill and legs, and fawn-coloured feathers with black rosettes. The sexes differ in appearance, with females being slightly larger with a black and white collar above a reddish-brown breast patch (pictured).

Critically endangered

Key threats and actions: A B C D E G — maintain grassland habitat in a condition suitable for plains-wanderers especially during extended periods of drought or wet weather.



Credit: Karen Emery

Spotted harrier

Circus assimilis

Medium-sized bird of prey. Characterised by its slender body, owl-like facial features, and bare, long, yellow legs. Has blue-grey upperparts, black wingtips, and chestnut underparts, inner-wing patch and face. Tail is banded with a wedge-shaped tip. Juveniles have ginger and brown streaks, and mottling, ginger shoulders, fawn rump and banded tail. Lives in grassy open woodlands including mallee and *Acacia* remnants, riparian woodland, grassland and shrubland.

Vulnerable

Key threats and actions: A G — avoid secondary poisoning from both rabbit pindone programs and rodenticides.

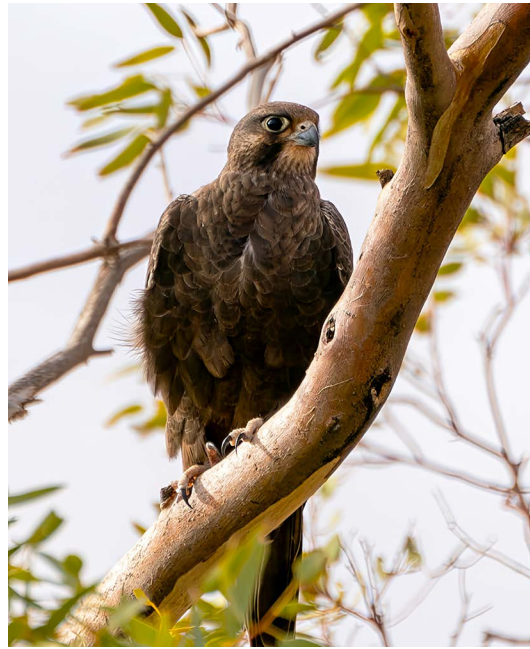
Black falcon

Falco subniger

A large, chocolate brown to dark sooty brown falcon with very pointed wings. At close range, the white chin and some fine pale barring under the wings and tail may be visible. Long thigh feathers hide the short legs. They live in woodland, grassland and tree-dotted agricultural land in flat to undulating terrain, and will hunt over pasture and crops.

Vulnerable

Key threats and actions: A G — avoid secondary poisoning from rabbit baiting, minimise nest disturbance from over-abundant ravens and cockatoos.



Credit: David Cook

Little eagle

Hieraaetus morphnoides

Medium-sized bird of prey occurring in two colour variations. Colourations are pale brown with an unclear underwing pattern or dark brown upperparts, pale underparts, rusty head, and distinctive underwing pattern with a pale 'M' marking, and black wingtip. Both variations have feathered legs, short square-tipped barred tail, pale shoulder band, and a black streaked crested head.

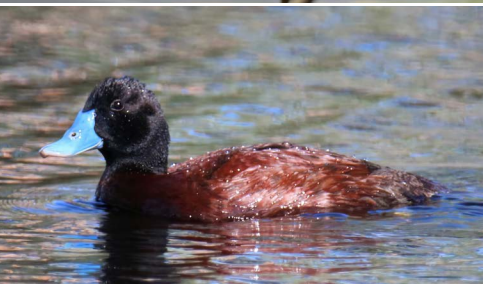
Vulnerable

Key threats and actions: G — avoid secondary poisoning from rabbit baiting.



Credit: Judy Kirk

Threatened waterbirds



Credit: Elaine McDonald (top-female),
Damien Michael (bottom-male)



Credit: Scott Rolph

Blue-billed duck

Oxyura australis

A small (40 cm), compact duck. Females have brownish-black upperparts, with narrow bands of light brown and mottled light brown, black underparts, and a dark grey-green bill. Males may resemble a dark female except during breeding season when the bill turns blue. The tail is held flat on the water, except during courtship or when alarmed and it is held erect.

Vulnerable

Key threats and actions: C E F

G — manage salinity in affected catchments; avoid use of chemicals near wetlands; report illegal hunting.

Freckled duck

Stictonetta naevosa

A dark grey-brown bird with a large head and distinctive narrow up-turned bill. Plumage is evenly freckled with buff or white. During breeding season (winter-spring) the males bill turns crimson at the base. Inhabits freshwater creeks and swamps with heavy tea-tree, cumbungi or lignum communities. During the dry season they migrate to permanent water sources, such as lakes, reservoirs or farm dams.

Vulnerable

Key threats and actions: C F G — report illegal shooting.

Australian painted snipe

Rostratula australis

A small freshwater wader, with a long bill that droops slightly at the tip. Females have a chestnut-black hood with a bold white eye-patch and a cream stripe along the middle of the crown. Back and wings are patterned bronzy-greenish-grey with a few cream streaks and white underparts. Males are slightly smaller and have greyer, less contrasting, patterns and large cream spots on their wings.

Endangered

Key threats and actions: C D E F

G — protect wetlands from clearing or disturbance; protect wetlands and watercourses from pollution and avoid use of pesticides nearby.



Credit: Barry Deacon

Curlew sandpiper

Calidris ferruginea

A small (18–23 cm) migratory shorebird with a medium-length, down-curved bill and longish black legs. In Australia they are in their non-breeding plumage, which is mottled grey above and paler below, with white eyebrows and a white rump. They arrive in Australia, from Siberia, between August and November, leaving between March and mid-April, where they forage in or at the edge of shallow water, occasionally on exposed algal mats or waterweed.

Critically endangered

Key threats and actions: C D F G —

reduce human disturbance as roosting and foraging sites.



Credit: Patrick Kavanagh



Credit: Peter Merritt

Australasian bittern

Botaurus poiciloptilus

A large, stocky bird up to 75 cm, with a long neck, brownish-yellow bill, and mottled brown upper surface. Its underside is buff with dark brown stripes, and it has a pale throat, yellow eyes, and pale green feet and legs. Prefers freshwater wetlands with dense vegetation, such as reeds, rushes, and bullrushes. They can also be found in flooded pastures. Breeding occurs in summer, with nests built in secluded wetland areas.

Endangered

Key threats and actions: A B C D E F G — limit use of chemicals and nutrients near wetlands.



Credit: Stephen J Ward

Brolga

Grus rubicunda

A huge bird standing 1.3 m tall with a wingspan of approximately 2.5 m. It is pale bright grey with a broad band of bare red skin from the beak around the nape of the neck. They have black, long legs, and a loose skin fold under the chin. Young birds are darker, without the red band or loose skin fold under the chin. Their call is a far-carrying brassy trumpeting.

Vulnerable

Key threats and actions: C F G — report persecution of Brolgas to National Parks and Wildlife Service.

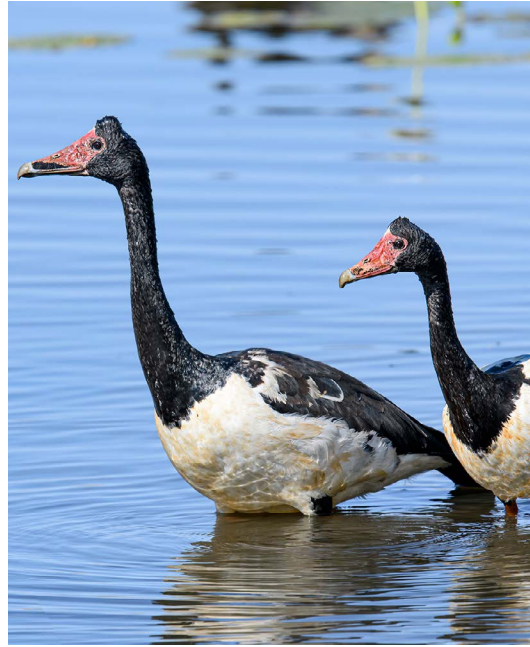
Magpie goose

Anseranas semipalmata

A large (70–90 cm), black and white waterbird with prominent knob on the head and orange legs. It is black at each 'end', head, neck and upper chest, plus rump and tail, with white body and wings. Immature birds have no head-knob and their white parts are mottled grey or brown. It is not a duck or goose but regarded as a primitive relative.

Vulnerable

Key threats and actions: C D E F G — limit use of chemicals and nutrients near wetlands.



Credit: Mark Lethlean

White-bellied sea-eagle

Haliaeetus leucogaster

A large white and grey eagle 75–85 cm in length with a 180–220 cm wingspan. Has a large, hooked, grey bill and dark brown eyes. Legs and feet are cream-white, with long black talons. Prefers large areas of open water including rivers, swamps, lakes and the sea. Nest trees are typically large eucalypts often with dead branches or large dead trees nearby used as 'guard roosts'. Nests are large structures built from sticks and lined with leaves or grass.

Vulnerable

Key threats and actions: A G — avoid disturbance during breeding season.



Credit: Kelly Coleman

Threatened frogs and reptiles



Credit: Dave Hunter

Sloane's froglet

Crinia sloanei

A small ground-dwelling frog with a grey or grey-olive back, with darker patches. Males throat is greyish green. Their call is described as a short metallic “chick, chick, chick” repeated frequently. Associated with periodically inundated areas in grassland, woodland and disturbed habitats.

Endangered

Key threats and actions: B C F G — ensure appropriate wetland habitat structure at breeding sites, avoid habitat fragmentation and create new habitat where appropriate.



Credit: Helen Waudby

Southern bell frog

Litoria raniformis

Large frog (104 mm long) with females typically larger than males. Olive to bright emerald with a pale green stripe down the back. Gold, bronze, brown or black irregular spots, colouration may vary. Underparts are white, but during breeding season males may become dark grey/black or yellow. Lack webbing on their fingers. Males make a growling “waaa, waaa, waaa” call.

Endangered

Key threats and actions: A B C D E F G — avoid use of chemicals near wetlands.

Pink-tailed worm lizard

Aprasia parapulchella

Also known as the pink-tailed legless lizard. Worm-like, with a dark-brown head and nape, merging with the pale grey or grey-brown body. The tail is pink or reddish-brown towards the tip. Snout and tail are both rounded. Has no external ear openings. Their broad, non-forked tongue is frequently used to wipe their eyes. Small hind-limb flaps distinguishes it from a juvenile snake. Grows to about 25 cm. Inhabits rocky outcrops in burrows beneath small, partially embedded rocks.

Vulnerable

Key threats and actions: B C D G — avoid rock disturbance, collection or smashing and maintain open rocky hill tops.



Credit: Dave Smith

Threatened fish and crustaceans



Credit: R Creed

Trout cod

Maccullochella macquariensis

A large, sedentary, predatory freshwater fish growing to 85 cm in length and 16 kg. Mostly olive but can range from blue-grey to dark brown with a speckled dark grey to black spots, its underside is grey-white. Distinguishing features include overhanging upper jaw, long pointed snout, straight head profile, and large eyes.

Endangered

Key threats and actions: A B C D F G — manage cold water pollution, overfishing and illegal fishing practices.



Credit: Luke Pearce

Southern pygmy perch

Nannoperea australis

A small 65–85 mm long fish. Individuals vary in colour depending on habitat and other environmental conditions, typical base colour ranges from pale-cream to green-brown, paler on the belly with dark blotches along the body. Breeding males display brighter colours with dorsal and anal fins becoming bright red with black edges.

Endangered

Key threats and actions: A B C D F G — manage cold water pollution.

Flathead galaxias

Galaxias rostratus

A small fish, growing to 14 cm, it has a flattened head, large mouth, light olive-green body, and small, transparent fins. This small fish grows to 14 cm and prefers still or slow moving waterbodies such as wetlands and lowland streams. The species is now only known from the upper Murray River near Tintaldra and wetland areas near Howlong.

Critically endangered

Key threats and actions: C D F G — manage cold water pollution, open fish passages .



Credit: Gunther Schmida (via DPIRD)

Murray crayfish

Euastacus armatus

Second largest freshwater crayfish in the world growing to over 2.5 kg. Their body is dark green to green-brown, with three rows of large white spines on each side of their tail. Distinguishing features include their bright white claws which lighten in colour with age. Males generally have larger claws and females have broader abdomens.

Vulnerable

Key threats and actions: A B C D F G — extreme weather events; pollution; overfishing and illegal fishing practices.



Credit: Brett Vercoe

Threatened mammals



Credit: Peter Merritt

Squirrel glider

Petaurus norfolcensis

Adults grow up to 20 cm with a tail about 27 cm in length. Fur is blue-grey to brown-grey above, a dark stripe from between the eyes to the mid-back, white on the belly, and the end of the tail is black. Twice the size of sugar gliders. Family groups nest in bowl-shaped, leaf lined nests in tree hollows. Squirrel gliders require abundant tree hollows for refuge and nest sites.

Vulnerable

Key threats and actions: A B C D E G — remove barb wire on fences in known flight paths.



Credit: Damian Michael

Koala

Phascolarctos cinereus

An arboreal marsupial with fur ranging from grey to brown above, and white underparts. Has large furry ears, a prominent black nose and no tail. Spends most of its time in trees and has long, sharp claws, adapted for climbing. Adult females weigh 5–8 kg and adult males are larger weighing 6–12 kg. During breeding, males advertise with loud snarling coughs and bellows.

Endangered

Key threats and actions: A B C E G — avoid predation by domestic dogs; avoid vehicle strike in blackspot areas.

Spotted-tailed quoll

Dasyurus maculatus

Mostly nocturnal, this carnivorous marsupial is easily identifiable by its rich coloured rust to dark-brown fur with irregular white spots on the back and tail. Close to the size of a domestic cat with males (3.5 kg) having a greater average adult body weight than females (2 kg). Uses logs, hollow bearing trees, caves, rock outcrops, and other animal burrows as den sites.

Vulnerable

Key threats and actions: A C D G — consult with NSW Department of Climate Change, Energy, the Environment and Water if spotted-tailed quolls are raiding poultry rather than taking direct action.



Credit: Martin Costechareire

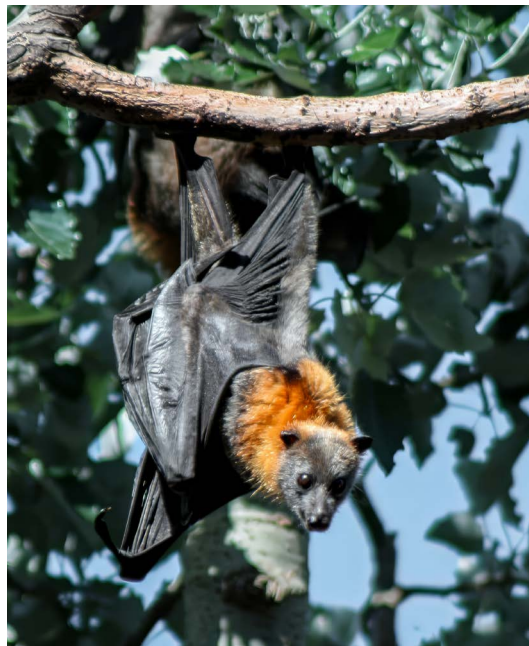
Grey-headed flying-fox

Pteropus poliocephalus

With its distinctive grey head and orange collar, they are one of the largest flying-foxes in Australia at 600–1000 g, with a 1.5 m wingspan. They form large colonies in tall vegetation. Their diet includes pollen, nectar, fruit, and flowers from 201 plant species. They will migrate to follow flowering and fruiting trees. Females give birth in Spring.

Vulnerable

Key threats and actions: A B C E G — remove barb wire and use wildlife-freindly fruit netting techniques in known feeding ranges.



Credit: Kelly Coleman



Credit: Wynn Russell

Southern myotis

Myotis macropus

Also known as fishing bats, because they feed on aquatic insects and small fish. Their feet are disproportionately large (less than 8 mm long) with widely spaced, distinctly hairy toes and long, curved claws. Their fur is dark-grey to reddish-brown upperparts and paler underparts. Weighs up to 15 g, with a wingspan of approximately 28 cm. Previously called the large-footed myotis (*M. adversus*).

Vulnerable

Key threats and actions: A G — minimise the use of pesticides adjacent to foraging areas; protect roosts from damage or disturbance.



Credit: Jon Luly

Yellow-bellied sheath-tail-bat

Saccolaimus flaviventris

A distinctive, large (up to 87 mm), insectivorous bat with long, narrow wings, black back, and white to yellow belly extending to the shoulders and behind the ear. Its head is flattened with a sharply pointed muzzle. Their tail is covered with an elastic sheath. Males have a prominent throat pouch, whilst females have a patch of bare skin in the same place.

Vulnerable

Key threats and actions: A B C G — reduce pesticides use in areas adjacent to known habitat.

Threatened plants

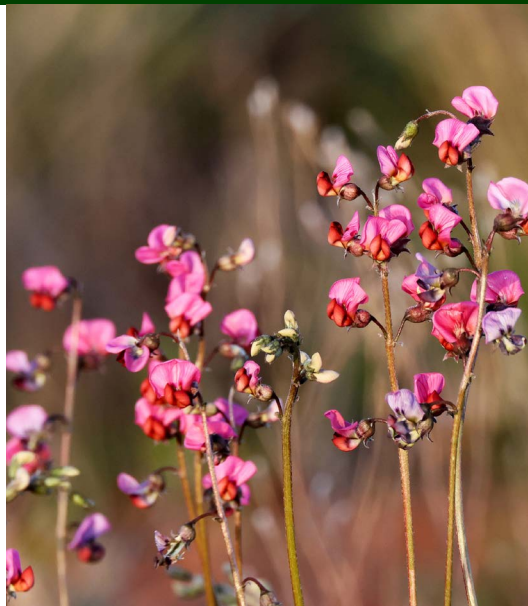
Slender Darling-pea

Swainsona murrayana

An erect perennial forb covered in sparse fine hair with greyish, stiffly leathery pods. The species flowers in spring to early summer producing purple or pink, red striped flowers with hairy slender stalks. Distinguished by its twisted hypanthium and retracted tipped keel. Found in clay-based soils, red-brown earths, and loams. Often found growing with *Maireana* species.

Vulnerable

Key threats and actions: A C D E



Credit: Sandy Horne

Red Darling-pea

Swainsona plagiotropis

A prostrate perennial forb, that typically grows to 15 cm and has hairy stems. The pea-like flowers are reddish-purple to bright red, 10-15 mm long, with a strong, upwardly-curved keel petal. Flowering occurs from August to November, and the fruit is an oval to oblong pod. Found in flat grassland and heavy red soil, often in table drains, mainly in the Jerilderie area.

Vulnerable

Key threats and actions: C D G — control of weeds as required; monitor all populations.



Credit: Peter Ewin



Credit: Judy Kirk

Silky swainson-pea

Swainsona sericea

A small, short-lived perennial plant that grows up to 10 cm in height. Stems and leaves are covered in a thick layer of hairs. The species flowers in spring producing purple pea-shaped flowers clustered in groups of up to 8 flowers on each stem. Sometimes found growing with cypress pines (*Callitris* species).

Vulnerable

Key threats and actions: A C G — protect from changes to land use; undertake weed control in and adjacent to populations.



Credit: Shanna Rogers

Sand-hill spider orchid

Caladenia arenaria

A plant characterised by its five long spreading petals and down-curved labellum. Leaves are densely haired and reddish at the base, growing to 10 cm in length and 6 mm wide. The flower-stalk can grow up to 40 cm tall. Flowering occurs between September to November, producing 1–2 pale yellow flowers with stiffly spread, cross-shaped petals, and sepals with red hairy tips. Found in woodlands with sandy soils dominated by white cypress pine (*Callitris glaucophylla*).

Endangered

Key threats and actions: C D G — control of weeds as required; monitor all populations.

Oaklands donkey orchid

Diuris calitrophilla

A large species of orchid identifiable by its unique white and purple flowers. Leaves are robust and long. Flower-stem can grow up to 50 cm tall and can carry up to 9 flowers. Grows in white cypress pine (*Callitris glaucophylla*) woodlands with sandy loam soils, typically found amongst grasses and forbs in either flat areas or low sandhills.

Endangered

Key threats and actions: C D G — control of weeds as required.



Credit: Shanna Rogers

Claypan daisy

Brachyscome muelleroides

Also called the Mueller daisy, this annual herb only grows to 20 cm high. Mostly hairless with thread-like leaves that grow from the stem. Flower heads form on a single stalk during September to November. They have white petals, 2–4.5 mm long with yellow centres. Grows in damp areas on the margins of claypans in moist grassland, as well as near lagoons.

Vulnerable

Key threats and actions: A C F G — retain vegetation in and around swamps where the species occurs, and avoid prolonged grazing at known sites.



Credit: Neville Walsh



Credit: Damien Cook and Elaine Baynes

Floating swamp wallaby-grass

Amphibromus fluitans

A slender aquatic or semi-aquatic perennial grass that grows to 1 m tall. Spreads by its stems both above-ground and underground. Flowering section of the stalk is erect and can be 35 mm long whilst the remainder of the flower-stalk is sprawling. Leaf blade is rough and deeply ribbed, covering the flower head until seeds are almost mature. Flowering occurs between spring to autumn. Found in permanent waterbodies.

Vulnerable

Key threats and actions: C G



Credit: Bernadette Lingham

Turnip copperburr

Sclerolaena napiformis

A low, 30 cm tall, subshrub with slender branches covered sparsely with curled short hairs. Leaves are narrow and linear growing 5–15 mm long. Fruiting period occurs between November to May, producing hard 2–3 cm long fruit with 1–4 mm stout spines. Grows in tussock grasslands of *Chloris truncata* and *Austrostipa nodosa* with clay-loam soils.

Endangered

Key threats and actions: A C G — monitor and control weeds as required.

Austral pillwort

Pilularia novae-hollandiae

A semi-aquatic fern that resembles fine grass. The fronds grow up to 8 cm long and are thread-like and tufted. The fern has an underground creeping stem system. Grows in shallow waterways and swamps and typically found amongst grasses and sedges or in drying mud.

Endangered

Key threats and actions: F G — erect signage and fencing around roadside sites.



Credit: Harry Lurling

Bitter quandong

Santalum murrayanum

A tall shrub growing to 5 m, with long loose hanging branches and smooth bark. Grey-green or silvery-green narrow tapering leaves growing opposite or in whorls of 3 from each other. Flowers are small and cream-coloured, clustered together. It's green to brownish red fruit are spherical, 2–3 cm in diameter. The fruit is very bitter and considered inedible.

Endangered

Key threats and actions: A B D E G — manage erosion impacts; manage overgrazing of host species.



Credit: Darcy Whittaker

Notes

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Disclaimer

The information contained in this publication is based on knowledge and understanding at the time of writing June 2024. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Local Land Services or the user's independent adviser

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Superb parrot (female), Damian Michael