GRASSY WOODLANDS
OF THE GOULBURN BROKEN CATCHMENT

IDENTIFICATION AND MANAGEMENT HANDBOOK

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GOULBURN BROKEN
CATCHMENT MANAGEMENT AUTHORITY

Australian Government

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INTRODUCTION

Grassy Woodlands - their 'original' condition

The early European explorers and settlers in northern Victoria recorded - to a greater or lesser extent - their observations of the woodlands that they encountered in the early 19th century. Their descriptions provide us with the earliest written accounts of the appearance of these areas before European-imposed stock grazing, vegetation clearance and altered fire regimes transformed these landscapes.

In July 1841 Edward Curr, one of the first settlers ('squatters') in north-central Victoria, described the landscape north of Colbinabbin:

> *"the grass...consisted of sparsely-scattered tussocks of the primest descriptions; the wire-grass, however, largely predominating over the kangaroo grass. As it was then winter, the interstices were filled with luxuriant herbage; the yam generally, and in some cases the myrnong, or native carrot, prevailing. The bed of Paboinboolok [Lake Cooper], which seemed to have been long dry, was almost one field of myrnong..."*

Although Curr, here, was talking of the plains of grasslands (and an ephemeral wetland) that he encountered at this spot, the descriptions of the ground layer that he conveys would have also pertained to the grassy woodlands of the wider region.

A few years before this, in 1836, Major Thomas Mitchell

described the scene that he came upon near Pyramid Hill (in north-central Victoria):

> *"...the view was exceedingly beautiful over the surrounding plains, shining fresh and green in the light of a fine morning. The scene was different from anything I had ever before witnessed, either in New South Wales or elsewhere. A land so inviting, and still without inhabitants! As I stood, the first European intruder on the sublime solitude of these verdant plains, as yet untouched by flocks or herds; I felt conscious of being the harbinger of mighty changes; and that our steps would soon be followed by the men and the animals for which it seemed to have been prepared."*

Impressions and depictions provided by early explorers and settlers give us some sense of the open grassy (and wildflower) nature, and rich diversity, of the woodlands that the first Europeans came into, and eventually settled.

The vegetation structure, and plant and animal make-up, of the woodlands that the early Europeans encountered were the result of hundreds of thousands of years of evolution, and more than 40 000 years of Indigenous Australians' land management, through the use of fire, and what was, effectively, plant and animal farming and harvesting.

Frequent burning, at low intensity, kept the woodlands open and the ground layer vegetation predominantly grassy and herbaceous, because it favoured the latter over woody vegetation. Fire, on the whole (depending on frequency and intensity), can work, over time, to kill off woody vegetation, but allow grasses and herbs (with their vegetative reproductive parts insulated below ground) to reshoot and regenerate after the fire or grazing event.

What is a woodland?

A woodland differs from a forest (and any other vegetation type) firstly by the nature and structure of the overstorey present.

In south-east Australia woodlands most commonly have an overstorey that consists - entirely or predominantly - of eucalypts. The exceptions to this are woodlands dominated by Buloke or sheoaks (Allocasuarina spp.) or native pines *(Callitris spp.)*. Common dominant eucalypts for the woodlands of the mid Goulburn Broken Catchment are White Box, Yellow Box, Blakely's Red Gum, Grey Box, River Red Gum and Yellow Gum.

The trees in undisturbed or unmodified, mature, woodlands are large and widely spaced, such that their canopies do not meet each other (compare this with the touching or overlapping canopies in a forest). Depending on the exact vegetation type that you are within the canopy cover can be anything from 10 to 20% cover.

Woodland trees are shorter than their forest counterparts: mature woodlands do not get taller than about 30 metres - and low woodlands reach only about 10 metres in height.

Woodland understoreys often have a large grassy component: this is particularly the case with the woodlands this booklet is concerned with.

Where are these woodlands, and what do they look like?

Within eastern mainland Australia woodlands mostly occur in a broad band inland of the Dividing Range, extending from southern Queensland to western Victoria. This booklet covers plant species that occur in parts of the woodlands of the Goulburn Broken catchment within Victoria, more specifically within three Nationally-listed vegetation communities:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland [or Box-Gum Grassy Woodlands, here referred to as grey box woodlands];
- Grey Box *(Eucalyptus microcarpa)* Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia [or Grey Box Grassy Woodlands, here referred to as grey box woodlands]; and
- Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions [or Buloke Woodlands, in short].

Note that the communities above have been defined and described at the National level: there are no Victorian Ecological Vegetation Classes (EVCs) with these names, or that describe these particular vegetation associations. Rather, a number of Victorian EVCs correspond to these Nationally-defined and described communities. The number of Victorian EVCs that are included in these three communities are too numerous to list here. For the full list of these Victorian EVCs, and background information on and descriptions of, the Nationally-listed communities, as well as maps of their distribution, go to the Federal environment department's relevant webpage:

www.environment.gov.au/cgi-bin/sprat/public/publiclookupcommunities.pl

A number of broad features of each of these communities are given here to provide some guidance to the reader as to what to look for in identifying these communities.

Box-Gum Grassy Woodlands

Dominated by White Box, Yellow Box, or Blakely's Red Gum, or in combination, or with other species that may occur in association, such as Red Box, Grey Box, Red Stringybark, Long-leaved Box (Bundy), Candlebark, Drooping She-oak, and Kurrajong; a sparse, scattered shrub layer; a groundlayer of grasses and herbs.

Grey Box Grassy Woodlands

Occur in the 375-700 mm rainfall band; Tend to occur on relatively fertile soil, usually in flat to undulating landscapes; Grey Box *(Eucalyptus microcarpa)* is dominant or co-dominant (i.e. is at least 50% of the overstorey); other tree species that may occur in association are: Buloke, White Cypress Pine, White Box, River Red Gum, Black Box, Yellow Box, and Kurrajong; the mid-storey and shrub layers may vary from moderately dense to sparse; the ground layer has a large component of grasses, and herbs and lilies may be present; and there can be a soil crust of mosses and lichens.

Buloke Woodlands

Buloke is usually the dominant or co-dominant tree; other tree species that may occur in association are: Slender Cypress Pine, White Cypress Pine, Black Box, and Grey Box. Note that the distribution of Buloke Woodlands cannot be easily explained on the basis of climate and soil type alone, and may also be a result of Aboriginal land management practices in times past.

Flowcharts that help to determine whether or not one of these Nationally-listed communities occurs at a given site are also provided on the Federal government environment website, and are reproduced in Appendix 2.

Management of Grassy Woodlands

Along with other grassy vegetation communities (e.g. Grasslands) Grassy Woodlands require active intervention or management to maintain a ground layer that has a sparse shrub layer, with a diverse mix of grasses and herbs. Intervention may take the form of (stock) grazing or the use of fire, at certain frequencies and at certain times of the year.

Discussion of the management techniques, and when to employ them, is beyond the scope of this booklet. The reader is directed to specialist references on the ecology and management of grassy woodlands. See reference list.

How this booklet is arranged

The plants shown in this booklet are arranged according to which structural layer they occur within the woodland (i.e. their height, coupled with the presence or absence of woodiness). The sections, corresponding to each plant's structural position, are: groundcovers and herbs; grasses; shrubs below 1m; shrubs 1-8m; and trees. Within this structural grouping plants are grouped by genera.

Many of the plants presented here can be commonly encountered in remnants or roadsides, that are at least of moderate condition, across the region covered by this booklet. Others, in particular some of the groundcover plants, will be less commonly encountered, and will only occur at less disturbed sites. A smaller number are rare or have very restricted distributions.

FLORA SPECIES

Brush Wire-grass

Aristida behriana

Photos: Wendy D'Amore

Description	Short, tufted perennial with stiff wiry stems to 30 cm high.
Foliage	Leaves, smooth, mostly grow from base, to 20cm long. Ligule has fringe of hairs and tufts of hair to sides.
Flowers	Seed heads are a dense and brush-like panicle, aging to a pale straw colour, 6-12 cm long. The three-pronged awns are often purple, to 60mm long. Mainly Spring to Summer flowering, or in response to rain.
Habitat	Widespread in northern parts of catchment. Found on drier areas on light soils, often occurring with Wallaby grasses and/or Spear-grasses.
Special Notes	Unpalatable for stock. Seeds are sharp, can damage animal hides and contaminate wool.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Purple Wire-grass

Aristida ramosa

Photos: Wendy D'Amore

Also known as	Cane Wire-grass
Description	Tufted perennial, with stiff, wiry stem to 80 cm high, usually branched.
Foliage	Few leaves, smooth and narrow, with margins rolled inwards, to 10cm long.
Flowers	Seed heads are slender or slightly spreading panicle, to 15 cm long. The outer husk of the spikelet is purple. The three-pronged awn to 7 - 20 mm long. Mainly Spring to Summer flowering.
Habitat	Scattered in northern and central parts of the catchment. Found on poor, shallow sandy soils, or skeletal soils in drier rocky sites.
Special Notes	Unpalatable for stock. Seeds are sharp, can damage animal hides and contaminate wool.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Dense Spear-grass

Austrostipa densiflora

Photos: Robert Hall and Wendy D'Amore

Also known as	Foxtail
Description	Coarsely tufted perennial grass up to 1.5m high.
Foliage	Tussock forming with fine leaves, rough to touch.
Flowers	Fine, multi-branched seed head (panicle) tending to age to a purplish colour. Seed has long awns to 70 mm. Seed heads are dense clusters and are brush-like. Awn twice bent. Mainly Spring-Summer flowering, or in response to rain.
Habitat	Occurs amongst rocks or on shallow soils overlying rock on drier elevated sites.
Special Notes	Sharp awns can pierce animal skin and contaminate wool. Grows all year.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Knotty Spear-grass

Austrostipa nodosa

Photos: David Francis

Description	Coarsely tufted perennial grass up to 1.2m high. Colonises disturbed sites.
Foliage	Tussock forming with fine leaves, rough to touch.
Flowers	Fine, multi-branched seed head (panicle) tending to age to a purplish colour. Seed has long awns to 70 mm. Awn is scythe-shaped, with very short hairs. Leaves are quite narrow. Mainly Spring-Summer flowering, or in response to rain.
Habitat	Occurs mostly on heavier, more fertile soils than *A scabra*.
Special Notes	Sharp awns can pierce animal skin and contaminate wool. Grows all year.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Rough Spear-grass

Austrostipa scabra

Photo: Wendy D'Amore

Description	Coarsely tufted perennial grass up to 0.6m high.
Foliage	Tussock forming with fine leaves, rough to touch.
Flowers	Fine, multi-branched seed head (panicle) tending to age to a purplish colour. Seed has long awns to 70mm. Panicle to 30cm long. Awn, scythe-like. Mainly Spring-Summer flowering, or in response to rain.
Habitat	Adaptable. Widespread. Shallow soils on higher elevations.
Special Notes	Sharp awns can pierce animal skin and contaminate wool. Grows all year.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Fibrous Spear-grass

Austrostipa semibarbata

Photos: Chris Findlay

Description	Coarsely tufted perennial grass up to 1.5m high. Colonises disturbed sites.
Foliage	Tussock forming with fine leaves, rough to touch.
Flowers	Seed heads are a dense cluster, with the column of the awn covered in minute, bristly hairs. Awn twice bent.
Habitat	Varied habitat.
Special Notes	Sharp awns can pierce animal skin and contaminate wool. Grows all year.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Red-leg Grass

Bothriochloa macra

Photos: Wendy D'Amore

Description	Perennial grass that spreads via rhizomes. Numerous wiry, dark reddish purple flowering stems, 30 -50 cm high. Distinctive red or purple colour in summer in native pasture.
Foliage	Basal leaves, sparsely hairy. Leaf edges rough.
Flowers	Seed heads have up to 5 silky spikes. Spikes short and reddish with white silky hairs and twisted or bent awns, 2-2.5 cm long. Mostly in Summer. Each spikelet is enclosed by a hairy glume and has a crooked awn.
Habitat	Mainly on plains and low-lying sites prone to brief, intermittent flooding. Often colonises disturbed areas.
Special Notes	Summer growing. Leaves are palatable when green.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Windmill Grass

Chloris truncata

Photos: Wendy D'Amore

Description	Erect, hairless annual or short lived perennial grass to 50 cm high.
Foliage	Dense, low crown of short, narrow, pale-green leaves. Leaves folded inwards along length. Sometimes with short, branched stolons. Ligule has fine hairs.
Flowers	Seed head usually has 6-9 spikes radiating horizontally from a common point at the end of stem like a 'windmill'; initially green, then aging to purplish in colour. Spikelets black, arranged in two rows on underside of each radiating arm. Late Winter to Summer.
Habitat	Found on most soil types.
Special Notes	Often grazed spring and summer. Relatively short-lived. An important Spring-Summer native pasture grass, sometimes persisting on degraded sites.
Value to Wildlife	Food for seed-eating birds, including finches such as the threatened Diamond Firetail.

Long-hair Plume-grass

Dichelachne crinita

Photos: Chris Findlay

Description	Perennial, tufted grass to 1 m high, forming sparse tussocks. Flowering panicles are open and feathery when mature.
Foliage	Leaves flat, green to green-blue, up to 20 cm long.
Flowers	Inflorescence cylindrical, slender and dense, 6 -29 cm long. Spikelets with thread-like, long and thin awns, wavy 20 - 40 mm long, or twisting in the lower part. Spring to Summer.
Habitat	Open and cleared areas on sandy soils.
Special Notes	The awned seeds may catch in clothing and cause skin irritation.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Common Plume-grass

Dichelachne rara

Photos: Marilyn Gray

Description	Perennial tufted grass to 70 cm high, sometimes taller forming sparse tussocks. Flowering panicles are open and feathery when mature.
Foliage	Leaves flat or with edges rolled inwards, green, sometimes downy, up to 15cm long.
Flowers	Inflorescence cylindrical, slender and dense, to 15cm long. Spikelets with thread-like awns 10 - 25 mm long, twisting once or twice. Spring to Summer.
Habitat	Widespread.
Special Notes	The awned seeds may catch in clothing and cause skin irritation.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Tall Wheat-grass

Elymus scaber

Photos: Wendy D'Amore

Description	Open, sparsely tufted, perennial grass to 1.2m high. Flowers have been described as 'wheat-like' hence name.
Foliage	Narrow, green to bluish leaves with a half twist, rough along edge.
Flowers	Slender seed heads, 15-25cm long with outward curving awns up to 5cm long. Seed heads rough to touch. Spikelets alternate on sides of stem, giving the flower stalk a zig-zag effect. Green, becoming straw-coloured. Mid-Spring – mid-Summer.
Habitat	Widespread and adaptable, preferring well-drained soils.
Special Notes	Very palatable, although rarely abundant enough to be considered a significant pasture species. Seed may injure eyes and contaminate wool.
Value to Wildlife	Food plant for caterpillars of native butterflies and moths.

Spider Grass

Enteropogon acicularis

Photos: Wendy D'Amore

Also known as	Curly Windmill Grass or Umbrella Grass
Description	Dense, clumping, perennial tussock grass to 50cm high.
Foliage	Bluish-green leaves from erect, usually branching, stems. Leaf blades flat. Old leaves often curl or spiral: up to 20cm long and 6mm wide.
Flowers	Seed head has 7-15 spikes radiating from the top of stem. The spikes, up to 18cm long, have black spikelets arranged in two rows on one side. Awns are 10-22mm long. Develops numerous dark seeds. Flowers in response to rain.
Habitat	Widespread. Mainly on heavier soils.
Special Notes	Stabilises sandy soils. Very similar in appearance to Windmill Grass.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

Brown's Love-grass

Eragrostis brownii

Photos: Wendy D'Amore

Also known as	Common Love-grass
Description	Tufted, perennial grass; 30-60cm high, with open panicles with flattened spikelets containing many flowers.
Foliage	Smooth, flat, bright-green leaves to 30 cm long. Nodes purplish in color.
Flowers	Seed head is an open panicle, with spikelets on long slender branches, 4-17 cm long. Dull green to purplish-green. Spring to Autumn, or in response to rain.
Habitat	Widespread, occurring mostly in moist areas near watercourses and in gullies.
Value to Wildlife	Food for seed-eating birds.

Close-headed Love-grass

Eragrostis elongata

Photo: John Tann

Also known as	Clustered Love-grass
Description	Tufted annual or perennial to 80cm high, with open panicles with flattened spikelets containing many flowers.
Foliage	Smooth, flat leaves: 10-20cm long to 2mm wide. Ligule is fringed with hairs.
Flowers	Seed head is a linear panicle, 8-23cm long with clustered spikelets. Flowering Summer, or in response to rain.
Habitat	Widespread on a variety of soils and sites, including moist sites and disturbed sites.
Value to Wildlife	Food for seed-eating birds.

Weeping Grass

Microlaena stipoides

Photos: Judy Allen and John Tann

Description Tufted, slender perennial grass to 70cm high. Green all year. Spreads via rhizomes.

Foliage Leaf blades flat, 2-8cm long. Ligule, fringed with hairs.

Flowers Slender, delicate, green, drooping seed head or panicle, 8-20cm long. Spikelets occur on short stalk. Two awns, rough to the touch, to 20mm long on each spikelet. Flowers chiefly in Summer to Autumn, but can flower throughout the year.

Habitat Widespread. Prefers moist well-drained soils, of moderate to high fertility, in partial shade. Common along creeklines and in shaded gullies.

Soft Tussock-grass

Poa morrisii

Photos: Russell Best and Ron Litjens

Also known as	Velvet Tussock-grass
Description	Soft, hairy tufted grass to 90cm high. Flowering stems erect to spreading; downy covering.
Foliage	Leaves soft, velvety, grey to bluish, to 25cm.
Flowers	Finely branched, green or purplish, open seed head (panicle), pyramid-shaped to 25cm high. Spring to early Summer.
Habitat	On poor, often rocky soils.
Special Notes	Aboriginal source of fibres to make string for nets, bags and mats. Some species are good forage and can be useful in controlling erosion.
Value to Wildlife	Refuge for small birds and reptiles. Food for seed-eating birds. Food plant for caterpillars.

Grey Tussock-grass

Poa sieberiana

Photo: Wendy D'Amore

Also known as	Snow grass
Description	Perennial tussock to 1 m high
Foliage	Fine, grey-green leaves, rough to touch, rolled inwards; to 0.3 - 0.4 mm diameter. No ligule.
Flowers	Small seeds in tall, finely-branched seed head, pyramid-shaped. Turn from green to light-brown as they mature. Spring to early Summer.
Habitat	Widespread. Prefers well-drained soils on mid-slopes to ridges.
Special Notes	Aboriginal source of fibres to make string for nets, bags and mats. Some species are good forage and can be useful in controlling erosion.
Value to Wildlife	Refuge for small birds and reptiles. Food for seed-eating birds. Food plant for caterpillars.

Wallaby Grass

Rytidosperma spp.

Photos: Wendy D'Amore and Chris Findlay

Description	Common, tussock grass with long, graceful flower stalks, up to 1m high.
Foliage	Fine leaves. Hairy ligules. Grey-green to blue-green.
Flowers	Linear, narrow flowers, often green to purple. Distinctive fluffy seed heads develop. Mainly Spring and Summer or in response to rain. Awns twisted at base.
Habitat	Widespread, hardy and persistent on undisturbed ground.
Special Notes	Palatable to stock. Grows all year.
Value to Wildlife	Food for seed-eating birds. Attracts moths, butterflies and insects.

The various species of Wallaby Grass are distinguished through magnified examination of their seed and using a specialised key guide. See VicFlora: online descriptions and key. (See reference page).

Kangaroo Grass

Themeda triandra

Photos: Robert Hall

Description	Dense, clumping, perennial tussock grass to 50cm high. Deep rooted.
Foliage	Leaves have rough sharp edges and prominent mid-vein.
Flowers	Flower spikes are initially green with distinctive purple or green flower heads and black crooked awns, becoming red-brown in summer, to 1m high. Seed heads, 30-50cm long. Flower heads are in a fan-shaped cluster at several joints along the stem. Summer active grass; germinates in hot conditions and responds to summer rainfall.
Habitat	Adaptable to any soil type.
Special Notes	Aboriginal people used stems and leaves as string to make nets. Seeds can be ground and and the flour baked.
Value to Wildlife	Refuge for small birds and reptiles. Food for seed-eating birds. Attracts moths and butterflies.

Rigid Panic

Walwhalleya proluta

Photos: Russell Best and NVGBRP

Description	Erect, often loose, perennial tussock up to 1m high.
Foliage	Flat, bright-green leaves, narrow and pointed up to 20cm long.
Flowers	Inflorescence is a widely spreading panicle which protrudes beyond leaves, to 1m high. Seeds on long, fragile stalks remain attached to the panicle which becomes windblown at maturity. Spring to Autumn. Responds quickly to Summer rainfall.
Habitat	Found on the northern plains on heavy soils. Common on wet sites.
Special Notes	Windblown seed heads will form piles against any barriers. Aboriginal people ground seeds for flour.
Value to Wildlife	Food for seed-eating birds.

Pale Vanilla Lily

Arthropodium milleflorum

Photos: Kevin Sparrow and Robert Hall

Description	Tufted, perennial herb with leaves 30-60cm long. Tuber-like roots. Leaves die back in dry season.
Foliage	Fine grass-like, dark-green leaves to 30cm.
Flowers	White to pale blue or pink, fragrant flowers in clusters of 2 or 3 on slender stems. Late Spring to Summer.
Habitat	Occurs in the southern part of catchment. Prefers moist, clay soil.
Special Notes	Aboriginal food source. Tubers can be eaten raw or roasted throughout the year.
Value to Wildlife	Flowers provide a nectar source for insects.

Chocolate Lily

Arthropodium strictum

Photos: Robert Hall and Stephen Prothero

Description	Tufted, perennial herb to 1m high. Tuber-like roots.
Foliage	Grass-like leaves, narrow and flat 10-60cm long.
Flowers	Deep pink or mauve to violet, chocolate-scented flowers opening in succession along branched stems. Purple anthers are hairless. Mid-Spring to early Summer.
Habitat	Widespread. Occurs on well-drained soils.
Special Notes	Aboriginal food source. Tubers can be eaten raw or roasted throughout the year. Leaves die back over summer and re-shoot in autumn.
Value to Wildlife	Flowers provide a nectar source for insects.

Blue Pincushion

Brunonia australis

Photos: Janet Hagen and Robert Hall

Description	Perennial herb with short stems to 30cm and small rosette of soft, silky leaves.
Foliage	Pale-green, hairy leaves, spoon-shaped to 6cm long.
Flowers	Deep blue, small flowers in clusters of up to 50 per flowerhead on erect single stems. Mostly flowering in late Spring, but can flower sporadically through Summer and Autumn.
Habitat	Occurs in the southern parts of the catchment on sandy or shallow soils.
Special Notes	Very sensitive to soil phosphorous levels. Lifespan to 3 years.
Value to Wildlife	Flowers provide nectar source to native butterflies and moths.

Bulbine Lily

Bulbine bulbosa

Photos: Ron Litjens and Robert Hall

Also known as	Pike (Aboriginal name), Golden Lily or Native Leek
Description	Small, tufted, perennial herb to 75cm high. Thick fleshy roots and bulb-like tuber. Dies back to underground tuber after flowering and reshoots in Autumn.
Foliage	Succulent, strappy leaves.
Flowers	Bright yellow flowers opening in succession along stems. Spring to Summer.
Habitat	Found usually on heavy, water-retentive or seasonally inundated soils.
Special Notes	Bulbous roots are an Aboriginal food source.
Value to Wildlife	Flowers provide a nectar source to native butterflies, moths and insects.

Milkmaids

Burchardia umbellata

Photos: Wendy D'Amore and Robert Hall

Description	Small tufted perennial herb to 65cm high with a corm and tuberous roots . Dies back after flowering.
Foliage	1-2 fleshy basal leaves, 10-30cm. 1-2 smaller stem leaves (bracts).
Flowers	Umbel of 2-10 white flowers with pale pink on the outside and pink centre at end of stem. Honey-scented. Spring flowering.
Habitat	Widespread. Often in damp or swampy areas.
Special Notes	Raw or roasted starchy tubers are an Aboriginal food source.
Value to Wildlife	Flowers provide a nectar source to insects.

Small-leaved Goosefoot

Chenopodium desertorum ssp. microphyllum

Photo: Stephen Prothero

Also known as	Desert Goosefoot
Description	Perennial, prostrate herb to 30cm high with many branched stems. All parts are covered in hairs.
Foliage	Pale-green leaves to 10mm long, powdery-white below.
Flowers	Small loose clusters. Flowers and fruiting bodies are covered with small, dull, grey to white sacs filled with fluid. Mainly Spring to early Autumn.
Habitat	Occurs on the northern plains, generally on heavier soils.

Common Everlasting

Chrysocephalum apiculatum

Photos: Wendy D'Amore and Robert Hall

Also known as	Yellow Buttons
Description	Silver perennial herb, 7-60cm high with variable form. Generally covered in woolly hairs.
Foliage	Silver-grey, hairy leaves, lance to egg-shaped, to 6cm long. Leaves end in short blunt point.
Flowers	Clusters of golden-yellow flowers at the end of stems. Mostly flowering through Spring.
Habitat	Occurs on a range of soils, usually on open or disturbed sites.
Special Notes	May die back in dry conditions and reshoot after rain.
Value to Wildlife	Flowers are a nectar source for butterflies, moths and insects.

Clustered Everlasting

Chrysocephalum semipapposum

Photos: Robert Hall

Description	Aromatic erect perennial herb, 15-100cm high. Can spread via underground stems (rhizomes).
Foliage	Grey-green, narrow to oblong leaves to 5cm long. Generally sticky and hairy.
Flowers	Clusters of small, yellow flowers at end of woolly stems most of year. but mainly Spring to early Summer.
Habitat	Scattered throughout the catchment on hills, plains or rocky rises.
Value to Wildlife	Flowers are a nectar source for butterflies and insects and foliage. Food source for caterpillars.

Pink Bindweed

Convolvulus erubescens

Photo: Janet Hagen

Also known as	Blushing Bindweed
Description	Small perennial with trailing and twining stems and highly variable leaves.
Foliage	Lobed, green leaves, sparse to moderately hairy.
Flowers	Pink, funnel-shaped flower to 25mm wide. Mainly Spring and Summer.
Habitat	Occurs on the plains and foothills.
Special Notes	Aboriginal medicinal plant.
Value to Wildlife	Insect pollinated.

Button Everlasting

Coronidium scorpioides

Photos: Robert Hall

Description	Perennial, herbaceous shrub to 50cm high. Woolly, upright, unbranched stems. Spreads from underground stems. Plants die back after flowering.
Foliage	Basal rosette of broad leaves becoming smaller up the stem. Leaves to 9cm long.
Flowers	Single, yellow, button-like daisy flower heads to 30mm across on long leafy stems. Papery bracts surround the flower head. Flowers in Spring to early Summer.
Habitat	Widespread on reasonably well-drained soils.
Value to Wildlife	Flowers provide a nectar source for butterflies. The plant is a food for caterpillars.

Slender Tick-trefoil

Desmodium varians

Photos: Wendy D'Amore and Janet Hagen

Description	Prostrate or climbing, perennial, leguminous herb. Stems are 15-50cm high. Dies back to rootstock in Summer.
Foliage	Dark-green, trifoliate leaves. Leaflets are variable, oblong to circular.
Flowers	Pink to white 4-60 pea flowers in loose raceme. Flowers to 5mm long, in Spring to Autumn.
Pods	Distinct, scalloped on one edge to 20mm long. Seed pods have dense coverings of hooked hairs which aids their dispersal through attachment to animals.
Habitat	Widespread. Not common.
Special Notes	Legume, improves soil fertility by nitrogen fixation.

Black-anther Flax-lily

Dianella admixta

Photos: Wendy D'Amore

Description	Tufted, perennial herb with rhizomes or tuberous roots.
Foliage	Strap- like, upright leaves. Mat forming. Leaves to 85 cm long, often glaucous with a smooth midrib.
Flowers	Flowers dark blue or violet with black anthers. Spring – Summer, with flower stems generally taller than the leaves.
Fruits	Shiny, dark blue berries.
Habitat	Widespread. Hardy.
Special Notes	Aboriginal people used fibre from leaves for baskets and cord.
Value to Wildlife	Seed-eating birds are attracted to the berries.

Pale Flax-lily

Dianella longifolia var longifolia

Photos: Geoff Boyes and Judy Ormond

Also known as	Smooth Flax-lily
Description	Tufted, perennial herb with rhizomes or tuberous roots.
Foliage	Strap- like, upright leaves. Grey-green leaf blades sub-erect to 80cm. Leaf sheath is rounded on lower surface. Plant with inflorescence to 1.5m.
Flowers	Flowers pale blue with yellow anthers. Spring – Summer.
Fruits	Pale blue berries.
Habitat	Widespread. Hardy.
Special Notes	Aboriginal people used fibre from leaves for baskets and cord. There is no evidence that the berries were eaten by Aboriginal people.
Value to Wildlife	Seed-eating birds are attracted to the berries.

Also Dianella tarda (Late Flax-lily) is very similar; 35-160cm high, leaf V-shaped in cross-section and midrib rough near base. Inflorescence to 2m high. Pale blue flowers open late in the day. China-blue to white berries.

Nodding Saltbush

Einadia nutans

Photos: NVGBRP and Sharon Terry

Also known as	Climbing Saltbush
Description	Herbacious, perennial with weak trailing or climbing stems, 30cm x 1.2m.
Foliage	Ovate to triangular grey-green leaves to 20mm wide. Pointed at tip. Older leaves are glabrous on the lower surface.
Flowers	Insignificant, greenish flowers in Summer-Autumn.
Fruit	Succulent red or orange edible berries.
Habitat	Found on the plains and low hills. Occurs in dryish, rocky or disturbed. Tolerates salinity.
Value to Wildlife	Food plant for caterpillars of native butterflies and moths.

Twining Glycine

Glycine clandestina

Photos: Robert Hall and John Tann

Description	Small, delicate, slender climbers. Twining stems that can twine up to 2m long
Foliage	Trifoliate leaves (occurs in 3s). All have small appendages at base of leaves Stiff hairs on narrow, oblong leaves..
Flowers	Mauve or white pea flowers. Spring to Autumn.
Pods	Pods are narrow and 1-5cm long.
Habitat	Occurs on the plains and foothills.
Special Notes	Legume improves soil fertility through fixing nitrogen. Roots are edible. Heavily grazed by stock as nutritious and palatable.
Value to Wildlife	Good habitat. Flowers provide a nectar and pollen source for native insects. Food plant for butterfly caterpillars.

Clover Glycine

Glycine latrobeana

Photos: Lance Williams and Wendy D'Amore

Description	Low, trailing plant, with short and erect bristly stems.
Foliage	Trifoliate leaves (occurs in 3s). All have small appendages at base of leaves. Leaves are clover-like in shape.
Flowers	Flowers deep purple. Spring to Autumn.
Pods	Pods are oblong and 2-2.5cm long.
Habitat	Occurs on the plains and foothills.
Special Notes	Legume improves soil fertility through fixing nitrogen. Roots are edible. Heavily grazed by stock as nutritious and palatable. Listed as Vulnerable under the Federal Environment Protection and Biodiversity Conservation Act.
Value to Wildlife	Good habitat. Flowers provide a nectar and pollen source for native insects. Food plant for butterfly caterpillars.

Vanilla Glycine

Glycine tabacina

Photos: Phil Hunter and Sharon Terry

Description	Scrambler or climber, spreading by stolons. Without twining stems.
Foliage	Trifoliate leaves (occurs in 3s), broader than Twining Glycine. Long stalks.
Flowers	Flowers blue to mauve on a raceme up to 14cm long. Spring to Autumn.
Pods	Pods 1.5-3cm long and sparsely hairy.
Habitat	Occurs on the plains and foothills.
Special Notes	Legume improves soil fertility through fixing nitrogen. Roots are edible. Heavily grazed by stock as nutritious and palatable.
Value to Wildlife	Good habitat. Flowers provide a nectar and pollen source for native insects. Food plant for butterfly caterpillars.

Purple Coral-pea

Hardenbergia violacea

Photos: Robert Hall and Wendy D'Amore

Also known as	Native Sarsparilla or Happy Wanderer
Description	Climbing or prostrate scrambler, stems often to 2m long.
Foliage	Green, leathery leaves to 10cm long. Paler below. Oval to lanceolate leaf shape.
Flowers	Sprays of 10-30 purple pea flowers with green and white centre; during Spring.
Habitat	Widespread, except for the northern plains.
Special Notes	Hardy, fast growing. Nitrogen-fixing in soil.
Value to Wildlife	Flowers, nectar and pollen are a food source for native insects including moths, butterflies, bees and wasps. Native insects and birds feed on seed.

Rock Isotome

Isotoma axillaris

Photos: Robert Hall

Also known as	Showy Isotome
Description	Low, bushy, perennial herb to 50cm high.
Flowers	Bright blue to mauve bluebell-shaped flowers, mainly Spring to Autumn. Flowers abundantly.
Habitat	Found on crevices on rocky cliffs and slopes, especially on granite and sandstone outcrops.
Special Notes	Milky sap can irritate skin and eyes.
Value to Wildlife	Flowers attracts native bees and other insects.

Running Postman

Kennedia prostrata

Photos: Janet Hagen and Robert Hall

Also known as	Scarlet Coral Pea or Scarlet Runner
Description	Prostrate or twining perennial herb; 1-2.5m wide. Sometimes noted after disturbance by machinery or fire. May die back to rootstock in harsh conditions and re-shoot later.
Foliage	Blue-green trifoliate leaves with wavy margins, hairy below. Leaflets, 6-35mm across.
Flowers	Single, scarlet pea flowers in Spring on long stalks along branches. Downy seed pods, 2-5cm long.
Habitat	Found in mid elevations.
Special Notes	Legume improves soil fertility through nitrogen fixation. Stems used for twine. Leaves used by early settlers as substitute for tea.
Value to Wildlife	Food plant for caterpillars of native butterflies and moths, nectar source for insects.

Scaly Buttons

Leptorhynchos squamatus

Photos: Janet Hagen and Wendy D'Amore

Description	Erect, perennial herb to 40cm high, branching from the base, often with hairy stems.
Foliage	Leaves are linear, pointed, usually 1-4cm long, dark-green above and woolly-white below with curved margins.
Flowers	Small, yellow, button flower heads on long, scaly stems, overtopping leaves in Spring to early Summer.
Habitat	Widespread, usually on heavier soils that are seasonally inundated.

Hoary Sunray

Leucochrysum albicans

Photo: Robert Hall

Description	Dense, clumping, perennial herb to 30cm high. Covered in cottony hairs.
Foliage	Hairy, greyish leaves, flat and very narrow, 3-9cm long. Margins rolled under.
Flowers	Yellow flower heads on long stems surrounded by yellow papery bracts in late Winter to early Autumn.
Habitat	Widespread. Generally occurs on heavier soils.
Value to Wildlife	Flowers are a nectar source for insects and butterflies including Australian Painted Lady. Seeds eaten by insects and ants.

Native Flax

Linum marginale

Photos: NVGBRP and Robert Hall

Description	Delicate perennial herb, erect spindly plant to 60cm. Tuberous rootstock. Dies back after flowering.
Foliage	Small, smooth, narrow tapered leaves, bright bluish-green to 20cm long. Leaves grow along erect, wiry stems.
Flowers	Open, blue, occasionally white, flowers with five petals borne on loose terminal clusters in Spring-Summer. Followed by round, papery fruit and prolific seed.
Habitat	Widespread
Special Notes	Aboriginal people use fibrous parts of plant for making cords and nets. Seeds are eaten.

Wattle Mat-rush

Lomandra filiformis

Photos: Wendy D'Amore and Geoff Boyes

Description	Tufted, perennial tussock with runners extending from base. Tough, narrow pointed in short, spreading clumps to 50cm across.
Foliage	Strappy, upright, tough leaves. Blue, grey or light-green leaves to 40cm tall.
Flowers	Creamy or yellow male and female flowers on flower spike in Spring.
Habitat	Found on sandy or rocky soils.
Special Notes	Aboriginal source of fibre for basket weaving and eel traps.
Value to Wildlife	Food plant for caterpillars of native moths and butterflies. Attracts seed-eating native birds.

Many-flowered Mat-rush

Lomandra multiflora

Photos: Robert Hall and John Tann

Description	Tufted, perennial tussock with runners extending from base. Tough, narrow pointed in short, spreading clumps to 50cm across.
Foliage	Strappy, upright, tough leaves. Leaves slender and 25-90cm long.
Flowers	Striking inflorescence from 1-3 quarters as long as the leaves, with flower clusters around the leaf base. Creamy or yellow male and female flowers on flower spike in Spring.
Habitat	Found on sandy or rocky soils.
Special Notes	Aboriginal source of fibre for basket weaving and eel traps.
Value to Wildlife	Food plant for caterpillars of native moths and butterflies. Attracts seed-eating native birds.

Wingless Bluebush

Maireana enchylaenoides

Photos: Jo Doolan

Also known as	Wingless Fissure-weed
Description	Prostrate or weakly erect, perennial, blue-green shrub to 30cm high. Has strong taproot. Sparsely branched and may be hairy.
Foliage	Pointed, fleshy, linear leaves, alternating along stems, sparsely to densely hairy, to 20mm long.
Flowers	Inconspicuous solitary flowers on end of stems in Spring.
Fruit	Capsule develops 5 papery wings and blackens as it dries. Fruits downy, 3.5-5mm wide, mainly mid Spring - Summer.
Habitat	Heavier loamy soils in full sun. Mostly in irrigation areas around Shepparton. Good coloniser on heavy soils. Tolerates salinity to some degree.

Yam Daisy

Microseris lanceolata

Photos: Janet Hagen and Wendy D'Amore

Also known as	Murnong (Aboriginal name) or Native Dandelion
Description	Perennial herb to 50cm high with tuberous root – branched or turnip-shaped. Regenerates annually.
Foliage	Basal, shiny, narrow leaves to 30cm long, toothed leaves with 'teeth' downward pointing.
Flowers	Single, bright yellow daisy-like flower head, 1-3cm wide on long stalk to 50cm. Flower bud nodding before opening (exotic dandelion bud erect). Mid-Winter to Summer. Seed heads ripen to a cluster of fluffy, wind-dispersed seeds.
Habitat	Widespread
Special Notes	The tuberous roots were a staple Aboriginal food source prior to white settlement.
Value to Wildlife	Flowers are a nectar source for butterflies, moths and insects.

Austral Stork's-bill

Pelargonium austral

Photos: Wendy D'Amore

Also known as	Native Stork's-bill or Native Pelargonium
Description	Rounded, soft, sprawling or erect, perennial herb to 50cm high. Fleshy taproot. May die back to root stock in Summer and reshoot in Autumn.
Foliage	Slightly aromatic pairs of roundish-lobed leaves with wavy margins to 9cm across on long stalks. Underneath leaves are velvety. Hairy stems.
Flowers	Clusters of flowers – 5 petals on long stalks. Pink with crimson to purple markings. Spring to Autumn.
Habitat	Occurs throughout catchment except on the northern plains; generally on rocky outcrops.
Special Notes	Useful soil binder. Aboriginal people may have eaten astringent taproot.

Cottony Fireweed

Senecio quadridentatus

Photos: Ron Litjens

Description	Erect, perennial herb, up to 100cm high. Spreads by underground stems (rhizomes) and by seed. Many branches from base. May die back in dry conditions to root stock until rain occurs.
Foliage	Stems and leaves have dense, cottony, white hairs giving leaves a greyish look. Narrow pointed leaves to 12cm with few widely-spaced teeth on margins.
Flowers	Loose panicles of greenish-yellow daisy-like flower heads. Spring – Autumn.
Fruit	Small, dry, tapering, reddish, green or dark brown.
Habitat	Widespread on low fertile soils; colonises readily after fire or disturbance.
Special Notes	Most common of the Fireweeds.
Value to Wildlife	Food plant for caterpillars.

Yellow Rush-lily

Tricoryne elatior

Photos: Kevin Sparrow and Robert Hall

Description	Spreading or erect, wiry stemmed herb to 70cm high. Many branches. Stems may be rough or ribbed. Spreads by underground rhizomes.
Foliage	Grey-green, long and narrow, grass-like leaves to 10cm at base wither early. Leaves on stem smaller.
Flowers	Star-shaped, 6 petalled, yellow flowers occur in clusters of 2-10. Flowers through Spring and early Summer. The seeds separate into 1-3 slightly fleshy nutlets, turning brown-black when ripe.
Habitat	Found mostly in foothills.

Slender Speedwell

Veronica gracilis

Photo: Russell Best

Description	Slender, perennial herb to 1m spreading by underground rhizomes.
Foliage	Bluish-green, lanceolate leaves; slightly toothed on the margins to 3cm long.
Flowers	Flowering stems usually 2-25cm tall. 1-6 pale lilac or blue flowers at the end of each stem with darker veins. Flowers are 8-15mm wide. Spring to Summer.
Habitat	Swampy sites.

Fuzzy New Holland Daisy

Vittadinia cuneata

Photos: Phil Hunter, NVGBRP and Janet Hagen

Also known as	Fuzzweed
Description	Round to erect perennial herb, Rigidly erect stems 10-40cm high.
Foliage	Leaves arranged alternately along the stem, 5-30mm long. Wedge-shaped leaves folded; to 16 mm long. Greyish-green leaves with short, rigid hairs.
Flowers	Mauve to purple flowers in loose clusters on leafy stalks. Spring – Autumn flowering. Seed heads fluffy.
Habitat	Occurs throughout catchment except on the northern plains; generally on rocky outcrops.
Value to Wildlife	Attractive to insects and butterflies as a nectar source.

Woolly New Holland Daisy

Vittadinia gracilis

Photos: Kevin Sparrow and Russell Best

Description	Stems and young leaves covered in dense white, cottony hairs giving it a greyish appearance. This is the main distinguishing feature from *Vittadinia cuneata*.
Foliage	Leaves arranged alternately along the stem, 5-30mm long. Narrow leaves to 40mm long.
Flowers	Mauve flowers. Spring – Summer flowering. Seed heads fluffy.
Habitat	Widespread on plains in more loamy soils.
Value to Wildlife	Attractive to insects and butterflies as a nectar source.

Hairy Annual Bluebell

Wahlenbergia gracilenta

Photos: Russell Best

Description	Annual or ephemeral herb to 50 cm high, stems single or a few.
Foliage	Multi-branched fine stems with narrow, green leaves forming a clump. Leaves hairy, with margins sometimes wavy; arranged oppositely. Upper half of stems leafless; usually with stiff hairs.
Flowers	Tiny, pale blue flowers, sometimes white or pink. Star-shaped flowers with 5 lobes on long stems. Edible. Winter –Summer.
Habitat	Widespread. Mainly on slopes and plains.
Value to Wildlife	Flowers are a nectar source for butterflies, moths and insects.

Sprawling Bluebell

Wahlenbergia gracilis

Photos: Chris Clarke and Russell Best

Also known as	Sprawling perennial, 10-80 cm high with tap root.
Description	Perennial herb to 50cm high with tuberous root – branched or turnip-shaped. Regenerates annually.
Foliage	Multi-branched fine stems with narrow, green leaves forming a clump. Upper leaves alternate, narrow and toothed.
Flowers	Flowers pale blue bells. Star-shaped flowers with 5 lobes on long stems. Edible. Spring – Summer.
Habitat	Widespread, chiefly on loamy soils.
Special Notes	The tuberous roots were a staple Aboriginal food source prior to white settlement.
Value to Wildlife	Flowers are a nectar source for butterflies, moths and insects.

Tall Bluebell

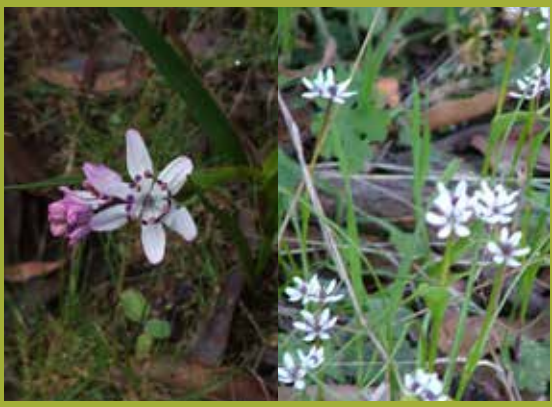
Wahlenbergia stricta

Photos: Wendy D'Amore

Also known as	Common or Austral Bluebell
Description	Erect or sprawling perennial herb 35-50cm high.
Foliage	Multi-branched fine stems with narrow, green leaves forming a clump.
Flowers	Bell-shaped flowers, blue with white throat to 30 mm wide. Flowers throughout the year, but mostly late Spring – Summer.
Habitat	Widespread, including shallow, stony soils on hilltops. Not found on the Riverine plains.
Value to Wildlife	Flowers are a nectar source for butterflies, moths and insects.

Early Nancy

Wurmbea dioica



Photos: Robert Hall

Description	Small, perennial herb to 30cm high with bulbous rootstock. Dormant over Summer: shoots after Autumn rain.
Foliage	Narrow, fleshy leaves to 7cm long, with a broad sheath at the base that clasps the stem.
Flowers	Honey-scented spikes of white, starry flowers with a purplish band near inner base of petals. Male and female flowers can be on separate plants or on the one. Male flowers have red or purple anthers. Female flowers have a purple oval shaped fruit in the centre of the flower. Late Winter to early Spring.
Habitat	Usually in moist or seasonally-wet areas.
Special Notes	It is the first lily to flower each year. Tubers are an Aboriginal food source.

Sticky Everlasting

Xerochrysum viscosum

Photos: Robert Hall

Description	Erect, open annual to biennial herb, 20-100cm tall. Multi-branched.
Foliage	Narrow, dark–green, sticky leaves with a rough surface to 14cm long. Pointed tip. Margins curved.
Flowers	Bright yellow, daisy flower heads to 3.5cm wide at end of each stem. Long lasting. Spring – Summer.
Habitat	Scattered populations, usually on sandy to sandy-loam soils. Establishes readily after soil disturbance.
Special Notes	Food plant for caterpillars. Flowers provide a nectar source for butterflies and other insects.

Thin-leaf Wattle

Acacia aculeatissima

Photos: Janet Hagen and Geoff Boyes

Also known as	Snake Wattle
Description	Open, sprawling shrub, prostrate to 50cm high with finely ribbed, hairy, slender branchlets.
Foliage	Stiff, smooth, spiked, flattened phyllodes at varying angles from stem, 5-15mm long.
Flowers	Lemon-yellow balls along branches, 1-3 per leaf axil. Late Winter to Spring.
Habitat	Found in foothills, often in rocky areas, or on embankments as a groundcover. Occurs on a wide range of soil types.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Attracts seed-eating birds and insects.

Ploughshare Wattle

Acacia gunnii

Photos: Wendy D'Amore and Geoff Boyes

Also known as	Dog's Tooth Wattle
Description	Prostrate or erect shrub to 1m high, usually with hairy branchlets.
Foliage	Pointed, triangular phyllodes with prominent mid-vein: 4-15mm long.
Flowers	Pale to golden-yellow balls, one per leaf axil. Mid Winter to mid Spring.
Pods	Curved or coiled.
Habitat	Found scattered in foothills.
Special Notes	Legume, improves soil fertility through nitrogen fixation. Useful in controlling soil erosion.
Value to Wildlife	Flowers are a source of pollen and nectar for many insects and birds.

Mitchell's Wattle

Acacia mitchelli

Photos: Wendy D'Amore

Description	Prostrate to spreading shrub to 50cm high. Branchlets hairy.
Foliage	Small, dull blue-green and feathery bipinnate leaves,1cm long.
Flowers	Pale-yellow balls, 1-3 per leaf axil. Flowering mainly in Spring to Summer. Regularly flowers twice in one season.
Habitat	Occurs between Seymour and Euroa on poor sandy or granitic soils.
Special Notes	Legume, improves soil fertility through nitrogen fixation. Useful in controlling soil erosion.
Value to Wildlife	Good food source for seed-eating birds and insects.

Honey-pots

Acrotriche serrulata

Photo: Geoff Boyes

Description	Dense, prostrate to low shrub, 30-60cm high.
Foliage	Narrow, pointed, hairy leaves on erect branchlets.
Flowers	Tiny, green, honey-scented tubular flowers clustered on old wood. Mainly Winter and Spring.
Fruits	Greyish green and edible.
Habitat	Widespread in foothills and forests, on sandy loamy or skeletal soils.
Special Notes	Nectar and fruit are an Aboriginal food source.
Value to Wildlife	Flowers are a source of nectar for many insects and birds.

Cranberry Heath

Astroloma humifusum

Photo: Robert Hall

Also known as	Native Cranberry
Description	Mat forming, or dense small shrub to 70cm high. Branchlets with soft, short hairs.
Foliage	Prickly, blue-green, narrow leaves: to 18mm long.
Flowers	Bright red, tubular flowers with 5 spreading lobes, occurs along branches, may be hidden by leaves. Mainly Autumn.
Fruits	Globular, sweet, edible fruit turns from green to red to purple.
Habitat	Widespread, except on the northern plains, on well drained soil.
Special Notes	Sweet fruits are an Aboriginal food source.
Value to Wildlife	Provides nectar for native birds.

Creeping Bossiaea

Bossiaea prostrata

Photos: Trevor Parton and Geoff Boyes

Description	Small spreading sub-shrub, 0.5m high x 1.5m wide.
Foliage	Small, grey-green, oblong leaves up to 24mm long. Fine spikes, 1-2mm long, project from the base of leaves.
Flowers	Yellow and red-brown pea flowers 1cm wide, single or in small groups at the end of stems. Spring to early Summer. Seed pod, oblong, 20-30mm long.
Habitat	Widespread. Prefers well-drained soil.
Value to Wildlife	Seeds attract birds.

Daphne Heath

Brachyloma daphnoides

Photos: Lance Williams and Robert Hall

Description	Erect shrub up to 1m high, with bristly branchlets.
Foliage	Small, dull or bright -green, leaves: 5-10mm. Leaves arranged alternately, clustered at the stem tips.
Flowers	Creamy, honey-scented tubular flowers with sharp lobes: 3-6mm. Mainly Spring to early Summer.
Fruits	Globular, 3-4mm.
Habitat	Found mostly on drier areas on sandy or rocky sites.
Special Notes	The raw fruit is a food source for Aboriginal people.

Grey Parrot-pea

Dillwynia cinerescens

Photos: Wendy D'Amore

Description	Open, erect or spreading shrub to 1.5m high.
Foliage	Narrow, rigid, grey-green leaves with bent tips: to 20mm long.
Flowers	Small, yellow and orange pea flowers, clustered at the end of branches in Spring.
Habitat	Lower elevations in the catchment, including along creek banks. Occurs in sheltered positions in dry, well-drained soil.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers are a nectar source for native wasps and bees. Wallbies graze foliage.

Showy Parrot-pea

Dillwynia sericea

Photos: Robert Hall

Description	Erect to prostrate shrub, 0.5-1m high.
Foliage	Stiff, hairy stems and narrow, spirally twisted leaves: 5-20mm long.
Flowers	Conspicuous yellow and red pea flowers in Spring to early Summer.
Habitat	Found on hills and slopes.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers are a nectar source for native wasps and bees. Wallbies graze foliage.

Common Eutaxia

Eutaxia microphylla var. microphylla

Photos: Wendy D'Amore and Janet Hagen

Description	Low-growing shrub to 1m, but may also form prostrate mats up to 1.5m across.
Foliage	Thickly clustered, very small, narrow leaves along stiff stems, sometimes spiny-tipped, to 7mm long.
Flowers	Small, yellow and red pea flowers in Spring. Flowers variable in colour; may be all yellow.
Habitat	Mainly on the northern plains. Occurs in a wide variety of conditions, but prefers open, drier areas and well-drained soils.
Special Notes	Useful for controlling erosion in small areas due to fibrous roots. Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers are a nectar source for native wasps and bees.

Common Wedge-pea

Gompholobium huegelii

Photos: Geoff Boyes and Trevor Parton

Also known as	Pale Wedge-pea
Description	Open, spreading, small shrub to 1m high.
Foliage	Fine foliage with trifoliate, bluish-green leaves consisting of 3 linear leaflets, 5-20mm long.
Flowers	Pale to bright yellow flowers on long stalks beyond foliage. Buds and backs of petals dark olive-green. Spring to mid Autumn.
Pods	Oval, dark grey pod to 15mm long.
Habitat	Scattered across low slopes and hills, often on sandy and gravelly soils.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers are a nectar source for native wasps and bees.

Tall Raspwort

Gonocarpus elatus

Photos: Chris Lindorff

Description	Erect perennial herb or sub-shrub, 18-35cm high. Ribbed stems have sharp, stiff hairs, giving it a raspy feel.
Foliage	Leaves, hairy and toothed in upper half, occurring alternately. Some plants develop reddish leaves.
Flowers	Small, reddish brown petals, racemes on end of stems. Mid-Spring to mid-Summer.
Habitat	Occurs mainly in the Strathbogies and Warby Ranges on dry, rocky hillsides or outcrops with well-drained soils.

Common Raspwort

Gonocarpus tetragynus

Photos: James Booth and Lance Williams

Description Erect perennial herb to 30cm. Ribbed stems have sharp, stiff hairs pressing against them, giving it a raspy feel.

Foliage Leaves oppositely arranged, with stiff hairs and small teeth on margins; 2cm long.

Flowers Tiny green to reddish flowers occur on loose spikes. Reddish bracts. Spring to Summer.

Habitat Widespread, in dry open woodland.

Euroa Guinea-flower

Hibbertia humifusa subsp. erigens

Photos: Ron Litjens

Description	Prostrate shrub with trailing hairy branches up to 25cm in length.
Foliage	Bright green, narrow leaves to 9mm long, margins rolled under.
Flowers	Wavy, yellow, 5-petalled flowers on short or no stems in Spring.
Habitat	Occurs in a restricted area in the northern foothillls of the Strathbogie Ranges, roughly between Warrenbayne and south-west of Euroa. In shallow sandy loams to gravelly clay loams.
Special Notes	Nationally Threatened Species.
Value to Wildlife	Flowers are a nectar source for native insects, butterflies, wasps and bees.

Grey Guinea-flower

Hibbertia obtusifolia

Photos: Wendy D'Amore and Robert Hall

Description	Softly hairy, small, open shrub to 40cm.
Foliage	Grey-green, broad-tipped, hairy leaves, up to 20mm long.
Flowers	Yellow, 5-petalled flowers, 20mm in diameter, in Spring to early Summer.
Habitat	Occurs in drier forest in the eastern part of the catchment on shallow, often gravelly soils.
Value to Wildlife	Flowers are a nectar source for native insects, butterflies, wasps and bees.

Erect Guinea-flower

Hibbertia riparia

Photos: Jo Doolan and Russell Best

Description	Low, open, usually upright shrub to 60cm high.
Foliage	Narrow, stiff leaves to 10mm.
Flowers	Rich yellow, 5-petalled flowers. Spring to Summer.
Habitat	Scattered occurrence across the catchment except for the northern plains.
Value to Wildlife	Flowers are a nectar source for native insects, butterflies, wasps and bees.

Silky Guinea-flower

Hibbertia sericea

Photo: Robert Hall

Description	Low spreading shrub to 70cm high. Branches hairy.
Foliage	Dark-green, oblong, hairy leaves: to 25mm.
Flowers	Yellow, 5-petalled flowers in clusters at end of branches in late Winter to early Summer.
Habitat	Found across the central part of catchment in well-drained sandy soils.
Value to Wildlife	Flowers are a nectar source for native insects, butterflies, wasps and bees.

Urn Heath

Melichrus urceolatus

Photos: Lance Williams and Sue Ablitt

Description	Erect, stiffly-branched shrub to 60cm high. Downy branches.
Foliage	Narrow, bluish-green, sharply pointed leaves.
Flowers	White, cream or yellow green urn-shaped flowers from the bases of the leaves. Five outward curving lobes. Buds are conical-shaped. Autumn to Spring.
Habitat	Occurs on the lower slopes and foothills, often on skeletal, sandy or loamy soil.
Special Notes	Regenerates from lignotuber.
Value to Wildlife	Fruits are edible.

Curved Rice-flower

Pimelea curviflora

Photos: John Edwards and Sharon Terry

Description	Erect, silky, hairy shrub, 10cm to 50cm high.
Foliage	Alternate, pale green foliage; narrow leaves to 25mm long. Densely hairy below, sparsely hairy to smooth above, and upward pointing.
Flowers	Small cluster of trumpet-shaped flowers, curved, yellow-green. Arranged at the tips of branches or leaf axils. Mid-Spring to mid-Summer
Habitat	Occurs northern plains and low hills, often on sandy soils.
Value to Wildlife	Flowers provide an important nectar source for butterflies.

Common Rice-flower

Pimelea humilis

Photos: Robert Hall

Description	Small, straggling or erect shrub to 50cm high.
Foliage	Grey-green leaves with blunt tips to 15mm long. Unbranched stems.
Flowers	Creamy white, tubular, fragrant flowers arranged in a cluster on each stem. Spring.
Habitat	Widespread on lower elevations, on sandy, sandy loam or skeletal soils.
Value to Wildlife	Flowers provide an important nectar source for butterflies.

Dwarf Bush-pea

Pultenaea humilis

Photos: Wendy D'Amore and Ron Litjens

Description	Erect or prostrate shrub, 50-100cm high. Branchlets sparsely to moderately hairy.
Foliage	Green, narrow, oblong leaves with an incurved margin, 4-16mm long on short stems. Upper leaf smooth, darker below.
Flowers	Yellow to orange to red-brown pea flower. Occurs in clusters near the ends of branches. Mid to late Spring.
Habitat	Found in dry to damp areas, on sand, loam or clay soils.
Special Notes	Legume – improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers provide a nectar source for native wasps and bees.

Twiggy Bush-pea

Pultenaea largiflorens

Photos: Robert Hall and Wendy D'Amore

Description	Erect shrub to 1m, with silky, downy stems.
Foliage	Narrow leaf, 3-10mm long with underneath being darker and hairy.
Flowers	Orange-yellow with red or crimson occurring in clusters at end of branches in Spring.
Habitat	Scattered widely through [northern and central parts of the catchment in light soils.
Special Notes	Legume – improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers provide a nectar source for native wasps and bees. Food plant for caterpillars of native butterflies and moths.

Loose-flower Bush-pea

Pultenaea laxiflora

Photos: Wendy D'Amore

Description	Low spreading shrub to 60cm high, occasionally semi-prostrate.
Foliage	Stems hairy when young. Light green, smooth, narrow leaves, broader at tip, 5-15mm long. Grooved on upper surface.
Flowers	Orange and red pea flowers occurring in clusters at tips of stems in Spring.
Habitat	Usually in sandy soils in drier, open forest.
Special Notes	Legume – improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers provide a nectar source for native wasps and bees.

Matted Bush-pea

Pultenaea pedunculata

Photos: Robert Hall and Wendy D'Amore

Description	Prostrate, mat-forming shrub to 20cm high and 1m or more wide.
Foliage	Small, flat, dark green leaves to 5-12mm long, occurring alternately. Hairy underneath. Apex and margins recurved. Stipules (appendage at base of leaf), 2-3mm long.
Flowers	Orange-yellow pea flowers with red markings, occurring singly on long hairy stalks. Flower colour may be variable. Spring to early Summer.
Habitat	Found in dry areas and disturbed sites on a range of soils.
Special Notes	Legume – improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers provide a nectar source for native wasps and bees.

Flat-leaf Bush-pea

Pultenaea platyphylla

Photo: Robert Hall

Description	Erect, rigidly branched, leafy shrub to 1.5m high, with angled stems that are hairy when young.
Foliage	Leaves arranged alternately: 8-20mm long. Paler underneath.
Flowers	Showy red and yellow 'egg and bacon' flowers in clusters on the end of branchlets. Spring.
Habitat	Found on granite hills in the Warby Ranges on sandy soils.
Special Notes	Legume – improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers provide a nectar source for native wasps and bees.

Heathy Bush-pea

Pultenaea procumbens

Photos: Robert Hall and Wendy D'Amore

Description	Spreading shrub to 1m high.
Foliage	Stems hairy when young. Narrow pointed leaves with recurved fine point: 4-10mm long, sparsely hairy.
Flowers	Orange with red centre, singly at the leaf axils. Clustered towards tips of branches. Spring.
Habitat	Scattered from Euroa to eastern edge of catchment, usually in dry forest, often on rocky hillsides.
Special Notes	Legume – improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers provide a nectar source for native wasps and bees.

Leafy Templetonia

Templetonia stenophylla

Photos: Chris Findlay and Jo Doolan

Description	Small, trailing shrub with one to several stems to 50cm long.
Foliage	Sparse, narrow leaves with rounded tips and prominent veins, 1-7cm long.
Flowers	Large, pale-green pea flowers with brown and green centres, 10-12mm wide, single or in pairs in leaf axils. Early to mid Spring.
Pods	Oblong, 15-20mm long
Habitat	Scattered across the plains in dry, open situations, in well-drained soils.
Special Notes	Legume – improves soil fertility through nitrogen fixation.

Diggers Speedwell

Veronica plebeia

Photos Russell Best

Also known as	Creeping or Trailing Speedwell
Description	Perennial sub-shrub with semi-woody stems. Spreads via stolons, up to 1m in length.
Foliage	Stems with short hairs, longer and denser at nodes. Roughly triangular leaves up to 2cm long with toothed margins. Leaves oppositely arranged.
Flowers	Flower stems to 10cm. Loose clusters (raceme) of 3-10 blue to mauve flowers with 4 petals, tubular at base. Mainly Spring to Summer. Capsule has sparse hairs.
Habitat	Occurs in a wide range of conditions.

Gold-dust Wattle

Acacia acinacea

Photos: Wendy D'Amore

Description	Open, spreading shrub to 2m high, often with arching branches. Branchlets flattened.
Foliage	Stalkless, small phyllodes with one main vein, 0.5-2cm long. Leaf shape may vary from round to oblong between plants of different locations.
Flowers	Golden-yellow balls on fine stems along branches, 1-2 flowers per leaf axil. Flowers profusely in Winter through to Spring.
Pods	Curved or coiled, 3-7cm long.
Habitat	Widespread on northern slopes and plains, in sandy, clay and loam soils.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Good source of pollen, nectar and seed for many birds and insects. Key food source for Superb Parrots in the Murray River region.

Rough Wattle

Acacia aspera

Photos: Jim Begley and Lance Williams

Description	Sticky, spreading, small shrub, 0.5-2m high, with all parts of the plant having a covering of short, stiff hairs.
Foliage	Long, narrow phyllode with one main vein, 1-4cm long. Sparsely hairy and rough, with a pointed tip.
Flowers	Pale to golden-yellow balls, 1 or 2 per leaf axil. Winter to Spring.
Pods	Curved and hairy, 2-7cm long.
Habitat	Found usually on the ranges in shallow, stony or gravelly soils.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Good source of pollen and nectar for many birds and insects.

Bent-leaf Wattle

Acacia flexifolia

Photos: Wendy D'Amore and Ron Litjens

Description	Bushy, dense, spreading shrub to 1.5m with angled or flattened ribbed branchlets.
Foliage	Grey-green, smooth, slender phyllodes with prominent mid-vein, distinctively bent near base, 1-2.5cm long.
Flowers	Pale or lemon-yellow balls, mostly 2 per leaf axil. Fragrant. Winter to Spring.
Pods	Long and very narrow, straight to curved, 4-12cm long.
Habitat	Found on dry, shallow soils. Listed as rare in Victoria (Department of Environment, Land, Water and Planning).
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Good source of pollen and nectar for many insects and birds.

Spreading Wattle

Acacia genistifolia

Photos: Wendy D'Amore and Cathy Powers

Also known as	Early Wattle
Description	Open, spiny, erect or spreading shrub, 0.6-3m high.
Foliage	Stiff, spiky, sharp, phyllodes with one main vein: 15-30mm long.
Flowers	Autumn to Spring. Long flowering. Pale yellow to cream balls on long stalk, 2-4 per leaf axil.
Pods	Narrow, straight to curved, 3-11cm long.
Habitat	Occurs on a variety of soils on lower elevations.
Special Notes	Legume, improves soil fertility through nitrogen fixation. Fast growing and hardy.
Value to Wildlife	Refuge and nesting site for small birds, due to its prickly habit.

Cinnamon Wattle

Acacia leprosa

Photos: James Booth

Description	Sticky, aromatic shrub or small tree, 2-4m, often weeping. Closely related to Acacia verniciflua. Different variants occur.
Foliage	Thin, straight to slightly curved phyllode with one main vein, 30-150mm long. Leaves covered with tiny gland dots. When crushed has cinnamon fragrance.
Flowers	Late Winter to Spring. Abundant golden to pale yellow scented balls, 2 or more in leaf axils.
Pods	Straight to slightly curved and thin, 4-8cm long x 2-4mm wide.
Habitat	Scattered. Three variants occurring in the catchment, around Marysville, Seymour-Longwood, and Buxton.
Special Notes	Legume, improves soil fertility through nitrogen fixation. Useful in controlling soil erosion. Timber used for wood turning.
Value to Wildlife	Good source of pollen and nectar for many insects and birds.

Mallee Wattle

Acacia montana

Photos: Ron Litjens and Wendy D'Amore

Description	Dense and rounded shrub to 3m. Fissured, grey bark.
Foliage	Straight-edged phyllodes and rounded at tip, often sticky with varnished appearance, 1-4cm long. 2-4 main veins with branching minor veins in-between.
Flowers	Golden-yellow balls, on slender stalk, 1-2 per leaf axil in Spring.
Pods	Almost straight with a dense, white, woolly covering.
Habitat	Widespread on the northern plains. Adaptable to a wide variety of soils. Very hardy.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers a source of pollen for butterflies, moths and for many insects; also attracts insect-eating birds.

Hedge Wattle

Acacia paradoxa

Photos: Wendy D'Amore

Also known as	Kangaroo Thorn or Prickly Wattle
Description	Dense and spreading shrub, 2-4m. Covered with fine thorns on intricate branches.
Foliage	Dark-green, leathery phyllodes with one main vein, wavy on margins, 1-3cm long.
Flowers	Golden-yellow balls in late Winter to Spring.
Pods	Straight or curved, with erect white hairs giving furry appearance, 2-7cm long.
Habitat	Widespread on a variety of soils.
Special Notes	Legume, improves soil fertility through nitrogen fixation. Useful in controlling soil erosion. Tolerates short-term inundation.
Value to Wildlife	Refuge and nesting site for small birds due to prickly habit. Pollen and seed are a food source for birds and insects.

Golden Wattle

Acacia pycnantha

Photos: Wendy D'Amore, NVGBRP and Janet Hagen

Description	Erect or spreading shrub to small tree, 3-8m high. Loosely branching with spreading crown.
Foliage	Broad and curved, dark green, glossy phyllodes with one main vein, 6-20cm long. Prominent gland where the phyllode tapers at the base.
Flowers	Golden, large fragrant balls in long stout flowering stalk to 15cm in length. Mid Winter to mid-Spring.
Pods	Flattish almost straight-edged, 5-14cm long.
Habitat	Widespread at lower elevations in the catchment, on sandy or loam soils.
Special Notes	Short-lived. Legume, improves soil fertility through nitrogen fixation. Useful in controlling soil erosion. Aboriginal people dissolved gum in hot water for a sweet drink.
Value to Wildlife	Pollen, nectar and seed are a food source for birds and insects. Gum is an important food for gliders, particularly in the cooler months.

Red-stem Wattle

Acacia rubida

Photos: Geoff Boyes

Description	Usually upright shrub, 1.5-5m high with brownish, finely fissured bark.
Foliage	Phyllodes can vary from straight to curved or sickle-shaped, hanging with one main vein, 5-20cm long. Gland is prominent where the phyllode tapers to join the leaf stem. Juvenile bipinnate leaves remain on plant with adult leaves until 2m high. Leaf stems often red.
Flowers	Pale to golden-yellow balls in racemes in late Winter to Summer.
Pods	4-12cm long.
Habitat	Occurs mostly in the eastern parts of the catchment on hills and mountains on drier soils. Tolerates short-term inundation.
Special Notes	Legume, improves soil fertility through nitrogen fixation. Fast growing.
Value to Wildlife	Pollen, nectar and seed are a food source for birds and insects.

Varnish Wattle

Acacia verniciflua

Photos: Sharon Terry and Wendy D'Amore

Description	Weeping shrub to 4m. Branchlets sometimes pendulous.
Foliage	Long, narrow and shiny phyllodes with 2 main veins, often sticky as if varnished, 3-14cm long. Very variable.
Flowers	Pale to golden-yellow balls on stalk, 1-3 per leaf axil. Late Winter to Spring.
Pods	Flat and straight to curved, 2.5-10cm long.
Habitat	Widespread, except in irrigation areas. Often found along rocky streams or skeletal ridges on shallow soils.
Special Notes	Legume, improves soil fertility through nitrogen fixation. Useful in controlling soil erosion. Seeds and pods are an Aboriginal food source.
Value to Wildlife	Pollen and seed are a food source for birds and insects.

Sweet Bursaria

Bursaria spinosa

Photos: Wendy D'Amore and NVGBRP

Description	Large, thorny shrub or small tree, up to 8m.
Foliage	Narrow, dark green leaves clustered to 25mm long. Slender spines along branches to 1cm long.
Flowers	Fragrant, creamy-white flowers in loose, pyramidal clusters at end of branches. Spring to Summer. Followed by red-brown seed capsules thin, dry and purse-like.
Habitat	Widespread, mostly on heavier soils.
Special Notes	Useful for controlling erosion. Nectar can be sucked from the flowers. Long lived.
Value to Wildlife	Refuge and nest sites for small birds. Flowers attract butterflies, moths and insects.

Common Cassinia

Cassinia aculeata

Photo: Robert Hall

Also known as	Dogwood or Cauliflower bush
Description	Erect open shrub, 1-2.5m high. Fast-growing, pioneer species. Short lived.
Foliage	Narrow, aromatic, dark green leaves with rolled under margins, 1-3cm long. Branchlets have minute, glandular hairs.
Flowers	Crowded, domed heads of creamy white, or straw coloured small flowers. Summer – Autumn.
Habitat	Occurs on sandy or gravelly soils.
Special Notes	May cause skin irritation.
Value to Wildlife	Food source for native birds including parrots.

Drooping Cassinia

Cassinia arcuata

Photos: Wendy D'Amore and Janet Hagen

Also known as	Chinese Shrub or Chinese Tree-scrub
Description	Open shrub to 2m. Branches long and slender with white hairs. Pioneer species.
Foliage	Drooping, small, narrow leaves to 10mm long with spicy aroma.
Flowers	Flower heads shiny, pale-brown, drooping in plumes. Spring to Autumn.
Habitat	Lower elevations on a wide range of soil types. Colonises bare soils and disturbed sites. Fast growing.
Special Notes	Used by the Chinese miners in the Victorian Goldfields as roofing material for their huts. May cause skin irritation.
Value to Wildlife	Food source for native birds including parrots.

Common Fringe-myrtle

Calytrix tetragona

Photos: Geoff Boyes and Ron Litjens

Description	Erect or spreading shrub; 50 cm to 2m high.
Foliage	Small aromatic narrow green leaves to 12mm long. Soft dark bark.
Flowers	Dense clusters of white to pink starry flowers in the upper leaf axils. Flowers have 5 petals, a cluster of prominent stamens in the centre and a deep red calyx (on outside of petals) which persists after flowering. Mainly Sep-Feb.
Habitat	Occurs in the central part of the catchment on sandy and gravelly soils and on rocky outcrops. Tolerates periodic inundation.
Special Notes	Variable species. Colonizes bare sites. Fruits are edible.
Value to Wildlife	Good refuge for small birds. Flowers provide a food source for moths, butterflies and insects.

Narrow-leaf Bitter-pea

Daviesia leptophylla

Photo: Janet Hagen

Also known as	Slender Bitter-pea
Description	Multi-stemmed, open, erect shrub to 2m high. Upper branches often leafless.
Foliage	Dull, yellow-green, narrow linear leaves to 9cm long.
Flowers	Perfumed, yellow and red to brown pea flower, clustered on short raceme in leaf axils. Late Winter to early Summer. Followed by triangular seed pods.
Habitat	Widespread except on the northern plains of the catchment. Found on dry sites, on poor, skeletal soils.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers source of pollen and nectar for birds and insects.

Gorse Bitter-pea

Daviesia ulicifolia

Photos: Robert Hall and Ron Litjens

Description	Rigid, spiny shrub, to 1.5m high with stiff angular branchlets.
Foliage	Narrow, pointed, prickly, dark green leaves, 5-20mm long.
Flowers	Yellow and red- brown pea flower: 1-3 in leaf axil. Late Winter to mid Summer. Richer flower colour than other Daviesia species.
Pods	Triangular.
Habitat	Widespread, except on the northern plains.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Prickly foliage provides refuge for small birds. Flowers source of pollen and nectar for birds and insects.

Wedge-leaf Hop-bush

Dodonea viscosa subsp. cuneata

Photos: Robert Hall and Wendy D'Amore

Description	Open to dense shrubs with leaves arranged alternately. Small to medium shrub 1-2m.
Foliage	Leaves green, variably wedge shaped, 1-3cm long, slightly paler beneath.
Flowers	Reddish, inconspicuous flowers at various times of year.
Pods	Distinctive winged, papery seed pod, green turning red-brown.
Habitat	Common in dry rocky areas, drier slopes and sandy sites. Scattered across plains, slopes and low hills in the catchment.
Special Notes	Fast growing. Aboriginal medicinal plant.
Value to Wildlife	Fruits and seed capsules food source for native birds, including parrots. Pollen source for moths, butterflies and insects.

Narrow-leaf Hop-bush

Dodonea viscosa ssp. angustissima

Photos: Wendy D'Amore

Also known as	Slender Hop-bush
Description	Open to dense shrubs with leaves arranged alternately. Erect shrub, 1-4m.
Foliage	Leaves long narrow, sticky, 3-8 cm long and dotted with resin glands.
Flowers	Reddish, inconspicuous flowers at various times of year.
Pods	Distinctive winged, papery seed pod, green turning red-brown.
Habitat	Common in dry rocky areas, drier slopes and sandy sites. Scattered across plains, slopes and low hills in the catchment.
Special Notes	Fast growing. Aboriginal medicinal plant.
Value to Wildlife	Fruits and seed capsules food source for native birds, including parrots. Pollen source for moths, butterflies and insects.

Cat's Claw Grevillea

Grevillea alpina

Photos: Wendy D'Amore and Robert Hall

Also known as	Alpine Grevillea, Mountain Grevillea or Goldfields Grevillea
Description	Spreading to almost prostrate shrub, 0.3-2m high. All parts have short hairs.
Foliage	Grey-green, narrow, hairy leaves with margins rolled under, 1-2.5cm long.
Flowers	Flower colour range can vary from cream, green, salmon pink, yellow and apricot, but bright red and yellow curled flowers are most common, 1-3cm. Mostly late Winter to early Summer.
Habitat	Found usually on sandy soils, and sometimes on granitic hills or slopes.
Special Notes	Highly variable in leaf shape, height and flower colour. Can be very variable across a short geographic range.
Value to Wildlife	Flowers provide nectar source for native moths, butterflies and birds, especially honeyeaters.

Austral Indigo

Indigofera australis

Photo: Wendy D'Amore

Description	Open, spreading shrub to 2.5m high. Long, slender, stiff stems.
Foliage	Soft, green, drooping, paired leaflets along the stem, 4-10cm long.
Flowers	Mauve to purple pea-like flowers in Spring.
Pods	Almost cylindrical, 2-4cm x 3mm.
Habitat	Widespread in catchment, except on the northern plains. Commonly occurs in hilly areas, on poor shallow soils.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers pollen and nectar source for native insects including bees and wasps. Food for butterflies and caterpillars.

Grey Everlasting

Ozothamnus obcordatus

Photo: Robert Hall

Description	Small, slender or spreading shrub, 1-2m high. Erect branches and shiny, often sticky new growth.
Foliage	Leaves dark green and shiny above, woolly and grey below. Short, broad and somewhat rounded leaves.
Flowers	Golden-yellow and profuse tiny, tubular flower heads forming dense, flat top clusters to 10cm wide. Late Winter to early Summer.
Habitat	Found on shallow gravelly soils.
Special Notes	Fast growing and short lived.
Value to Wildlife	Nectar and seed are a food source for insects.

Hairy Geebung

Persoonia rigida

Photos: David Francis and Martin Roberts

Description	Dense erect to spreading shrub, 1-3m high. Thick, rigid branches and hairy branchlets.
Foliage	Pale to bright green leaves, minutely hairy on both sides. Margins turn down, and the tip is a short stiff point, 2-4cm long x 5-20mm.
Flowers	Profuse yellow flowers occurring in leaf axils. Late Spring to Summer.
Fruits	Green, often streaked purple fruit (drupe), egg-shaped to 14mm long.
Habitat	Occurs mostly in eastern parts of catchment on sandy or rocky acidic soils.
Value to Wildlife	Flowers pollinated by native bees. Emus, possums and gliders eat the fruit.

Large-leaf Bush-pea

Pultenaea daphnoides

Photos: Robert Hall

Description	Erect shrub, 1-3m high. Stems have fine hair.
Foliage	Broad, oblong or wedge-shaped leaves with a pointed tip, 8-30mm long. Dark green above and pale underneath with prominent mid vein.
Flowers	Large yellow and red pea flowers, arranged in dense clusters at end of stems in Spring.
Habitat	Found on sandy soil in dry and damp areas.
Special Notes	Legume, improves soil fertility through nitrogen fixation.
Value to Wildlife	Flowers provide a nectar source for native wasps and bees.

Silver Wattle

Acacia dealbata

Photos: Wendy D'Amore, NVGBRP and Janet Hagen

Description	Open shrub to tall tree, 2 – 30 m tall. Deeply fissured dark grey to almost black bark. Can be confused with *Acacia mearnsii*.
Foliage	Feathery; silver-grey or greyish-green bipinnate leaves to 130 mm long. Evenly spaced glands at the base of each 'pinnae' distinguishes it from *Acacia mearnsii* when not flowering.
Flowers	Bright, lemon-yellow balls in racemes, strongly scented. Late Winter to early Spring.
Pods	Straight-edged and flattish
Habitat	Widespread, particularly along watercourses. Adaptable to dry conditions. Shoots from the base or ground if cut or disturbed.
Special Notes	Improves soil fertility through fixing nitrogen. Fast growing and often short lived. Useful in controlling gully and bank erosion. Wood is used for Aboriginal weapons and plant gum used as a food or adhesive.
Value to Wildlife	The gum is an important food source for Sugar Gliders and Squirrel Gliders. Pollen, nectar and seed attract birds and insects.

Lightwood

Acacia implexa

Photos: Wendy D'Amore and Sharon Terry

Description	Upright, small to medium tree up to 15m high.
Foliage	Narrow, sickle-shaped green leaves with many main veins, to 20cm long. Juvenile bipinnate leaves may remain on young plants.
Flowers	Pale yellow to almost white balls, arranged in racemes. Late Summer to Autumn.
Habitat	Widespread. Generally found on shallow drier soils. Intolerant of waterlogging.
Special Notes	Improves soil fertility through nitrogen fixation. Long lived. Aboriginal people used the fibre for string, leaves as fish poison and bark to treat skin diseases.
Value to Wildlife	Pollen and seed attracts birds and insects.

Black Wattle

Acacia mearnsii

Photos: Wendy D'Amore

Description	Open, spreading tree to 15m high with blackish bark on trunk.
Foliage	Shining, dark green and feathery or fern-like, bipinnate leaves to 20cm long. Glands found along the leaf stem are hairy, numerous and irregularly spaced.
Flowers	Pale yellow balls, strongly scented, in dense racemes. Spring.
Habitat	Found on floodplain and on gentle to moderate slopes on dry shallow soils.
Special Notes	Improves soil fertility through nitrogen fixation. Fast growing and often short lived. Wood used for Aboriginal weapons, and bark provides twine and medicine.
Value to Wildlife	The gum is an important food source for Sugar Gliders and Squirrel Gliders. Pollen, nectar and seed attracts birds and insects.

Buloke

Allocasuarina luehmannii

Photos: Wendy D'Amore and NVGBRP

Description	Small to medium tree to 15m. Long wire-like branchlets. Deeply furrowed bark. Trees are either male or female.
Foliage	Branchlets dull-green and cylindrical, fairly thick, long, wiry and ascending.
Flowers	Male flower spikes; long, yellowish to red spikes, 2.5cm long in Spring. Female flower is very small; cones short and round.
Habitat	Scattered across the mid to the northern plains. More common on sandy soils.
Special Notes	Improves soil fertility through nitrogen fixation.
Value to Wildlife	Attracts seed-eating birds including parrots, cockatoos and finches.

Drooping Sheoak

Allocasuarina verticillata

Photos: Wendy D'Amore and Robert Hall

Description	Small tree with rounded crown, 4-10m high. Weeping branchlets. Trees are either male or female.
Foliage	Branchlets grey-green, narrow and cylindrical, long and pendulous.
Flowers	Male flower is a yellowish-brown spike in Spring. Female produces hard woody cones, large and spiky.
Habitat	Occurs on plains, dry ridges and rocky outcrops generally on shallow, gravelly soils.
Special Notes	Long-lived: 50-100 years. Improves soil fertility through nitrogen fixation. Aboriginal people used the red timber to make boomerangs and digging sticks.
Value to Wildlife	Attracts seed-eating birds, parrots, cockatoos and insects.

Silver Banksia

Banksia marginata

Photos: Sharon Terry

Also known as	Honeysuckle
Description	Compact shrub to small tree: up to 12m.
Foliage	Leaves stiff, dark green above, white and hairy underneath, notched tips, may have toothed margins. Up to 60 mm long. Arranged alternately on grey branchlets.
Flowers	Flower spikes pale yellow, honey scented, 5-10cm long, profuse in late Summer to Winter. Flower spikes age to brown then grey cones that persist on plant.
Habitat	Previously widespread across the plains. Often occurs in gullies or riparian zone. Found on a variety of soil types but prefers well drained sandy loams. Highly sensitive to elevated phosphorus levels in soil. Intolerant of long periods of dry conditions. Likes some moisture.
Special Notes	Aboriginal people used the nectar as a sweetener and as a treatment for colds and sore throats. Fast growing and long lived.
Value to Wildlife	Flower spikes provide a nectar source for native birds especially honeyeaters, native bees and other insects, small mammals such as gliders and dense foliage provides good shelter. Winged seed eaten by cockatoos.

White Cypress-pine

Callitris glaucophylla

Photos: Ron Litjens, Wendy D'Amore and NVGBRP

Also known as	Murray Pine
Description	Broad, conical tree up to 20m. Single trunk with thick, fibrous bark.
Foliage	Bluish-grey branchlets, narrow and cylindrical. Leaves are scale like.
Fruits	Plant has both male spikes and female globular cones.
Habitat	On the northern plains. Found on loamy plains, sandy rises and granite outcrops. Can occur in pure stands.
Special Notes	Slow growing and long-lived. Aboriginal use includes resin for water-proof adhesive, and wood for many implements. Leaves contain an antiseptic oil.
Value to Wildlife	Attracts seed-eating birds such as parrots, cockatoos. Mature trees are important habitat for Grey-crowned Babblers and Apostlebirds.

White Box

Eucalyptus albens

Photos: Wendy D'Amore, NVGBRP and Geoff Boyes

Description	Medium to large tree up to 25 m with large crown. Branches typically begin high up on trunk. Fine, whitish-grey fibrous bark over trunk and to base of large branches; smooth above.
Foliage	Large bluish-green, leaves, 8-15cm long, with broad base tapering to tip. Juvenile leaves glaucous, wide and rounded.
Flowers	Creamy-white flowers in late Winter to Summer, although not every year. Buds are glaucous, tapered both ends, 10-15mm and in clusters of 3-7.
Fruits	Long, cylindrical, often glaucous. Valves very deep.
Habitat	Occurs in lower elevations on usually fairly fertile soils.
Special Notes	Broadly similar to Grey Box, but foliage is more blue-grey in appearance, and buds and fruits are larger.
Value to Wildlife	Flowers are an important nectar source for birds, including the Regent Honeyeater and Swift Parrot, gliders, moths, butterflies and insects. Attracts seed and insect-eating birds.

Blakely's Red Gum

Eucalyptus blakelyi

Photos: Robert Hall

Also known as	Hill Red Gum
Description	Medium tree up to 20m with large crown. Smooth, white bark with grey to brown or red patches.
Foliage	Dull green or grey-green. Juvenile leaf is arrow shaped.
Flowers	White flowers in Winter to Summer, more profusely every 2 to 3 years.
Buds	5-10 per cluster, caps conical and elongated.
Habitat	North-eastern part of catchment. Prefers compact loams. Often associated with box trees. Tolerates water logging.
Special Notes	Different to River Red Gum in juvenile leaf shape and bud shape.
Value to Wildlife	Flowers are important nectar source for birds, gliders, moths, butterflies and insects. Attracts seed and insect-eating birds.

River Red Gum

Eucalyptus camaldulensis

Photos: Robert Hall, Wendy D'Amore and NVGBRP

Description	Distinctive, medium to very tall tree to 45m. Thick trunk with spreading open crown. Dull grey bark with cream, reddish or grey patches.
Foliage	Pale or grey-green, narrow, tapering leaves with obvious veins, 9-20cm long.
Flowers	White flowers at various times.
Buds	5-10 per cluster, caps with accentuated spikes or 'nipples'.
Habitat	Found along inland rivers, ephemeral watercourses, and floodplains. Prefers clay soil with deep moist subsoils.
Special Notes	Aboriginal people use large sheets of bark to make canoes, and large burls are cut off and hollowed out to make water containers.
Value to Wildlife	Flowers are an important nectar source for birds, gliders, moths, butterflies and insects. Attracts seed and insect eating birds. Hollows provided nesting and denning sites for birds and mammals. A preferred feed tree for Koalas. Predominance in riparian situations, forms critical basis of habitat for Squirrel Gliders and Sugar Gliders.

Long-leaved Box

Eucalyptus goniocalyx

Photos: Ron Litjens and Robert Hall

Also known as	Bundy
Description	Medium tree with short trunk and spreading canopy to 15m. Rough, fibrous, greyish bark becoming coarse and thick with age.
Foliage	Narrow, dark green and long leaves, 10-24cm long. Juvenile leaf is broad and round, and occurs in pairs.
Flowers	White-cream, Autumn to Winter.
Buds	Up to 7 per cluster
Fruit	Cup-shaped and packed in a cluster.
Habitat	Low hills and slopes in north-eastern part of catchment on dry, shallow soil or rocky areas. Often with Red Stringybark and boxes.
Value to Wildlife	Occasional feed tree for Koalas. Flowers are important nectar source for birds, gliders, moths, butterflies and insects. Attracts seed and insect eating birds.

Yellow Gum

Eucalpytus leucoxylon

Photos: Wendy D'Amore and Robert Hall

Description	Medium tree to 25m. Coarse, loose fibrous bark at base, upper trunk and branches, smooth and cream to grey.
Foliage	Leaves grey-green, 7-14cm, with distinct veins, and marginal vein some way from the leaf edge. Juvenile leaves are glaucous, occur in pairs and opposite and are heart-shaped.
Flowers	White flowers in Winter to early Summer. Long flowering period. Buds have 3 per cluster on slender stalks.
Habitat	Occurs mostly on moderately fertile loamy or alluvial soils.
Special Notes	Aboriginal people used timber to make clubs and shields. Timber yellowish and strong.
Value to Wildlife	Flowers are important nectar source for birds, gliders, moths, butterflies and insects. Attracts seed and insect-eating birds.

Red Stringybark

Eucalpytus macrorhyncha

Photos: Geoff Boyes and Robert Hall

Description	Medium tree, 7-30m. Grey to red brown roughly fissured fibrous bark to the small branches. Dense compact canopy.
Foliage	Dark green, sub-glossy leaves, 10-16cm long. Leaf veins obvious. Juvenile leaves opposite and rounded, then alternate in the adult leaves.
Flowers	White – cream; profusely in mid Summer to early Winter. Buds have 6-12 per cluster.
Fruits	Large, with domed top, usually with 3 projecting sharp valves.
Habitat	Hills and slopes on poor shallow soils.
Special Notes	Often occurs with box and peppermint. Timber is pale red-brown and strong.
Value to Wildlife	Bark used for nesting material for birds and mammals. Flowers are important nectar source for birds, gliders, moths, butterflies and insects. Attracts seed and insect eating birds. Occasional feed-tree for Koalas.

Yellow Box

Eucalyptus melliodora

Photos: Wendy D'Amore and NVGBRP

Description	Medium to tall tree to 30m. Yellow bark becoming increasingly smooth from trunk to branches. Scaly grey-brown box-like bark on base of trunk. Spreading dense crown.
Foliage	Leaves small, thin and tapering, 6-12cm long. Marginal vein distant from edge. Juvenile leaves are oval.
Flowers	Creamy-white flowers in Spring to Summer. Strong honey scent. Buds have 3-7 per cluster.
Habitat	Situated elevated above River Red Gums on alluvial soils. Prefers sandy and loam soils, although able to grow on a wide variety of soil types.
Special Notes	Bright-yellow inner bark. Timber pale yellow-brown. Good nectar producer. Leaves can produce a range of different coloured dyes.
Value to Wildlife	Flowers are an important nectar source for birds, gliders, moths, butterflies and insects. Attracts seed and insect-eating birds.

Grey Box

Eucalyptus microcarpa

Photos: Wendy D'Amore, Roisin Powles and Lance Williams

Description	Tall tree to 25m. In mature trees trunk often single and long and with canopy-forming an overall 'Y shape' is typical. Scaly, grey bark on trunk and large branches, smooth and ribbony on smaller branches.
Foliage	Leaves thin and tapering, 9-15cm long. Juvenile leaves are oval or narrow.
Flowers	White flowers in Summer to Winter. Buds have 4-8 per cluster. Caps conical, often with bent tips.
Habitat	On relative fertile plains in low rainfall areas and lower elevations. Prefers heavy loams but adaptable. Tolerates moderately alkaline soil and short-term flooding.
Special Notes	Found with other boxes, Bulokes and cypress-pines. Appearance is broadly similar to White Box, but canopy in Grey Box is glossier and greener, and fruits are smaller and non-glaucous. Timber pale, strong and heavy.
Value to Wildlife	Flowers are important nectar source for birds, gliders, moths, butterflies and insects. Roadsides, remnant and regenerating stands and other, eucalypt species form essential habitat for the Grey-crowned Babbler, Bush Stone-curlew and Tree Goannas.

Red Box

Eucalyptus polyanthemos

Photos: Geoff Boyes, Janet Hagen and Wendy D'Amore

Description	Medium to large tree to 20m high. Short trunk with dense crown. Rough, scaly, grey, fibrous bark.
Foliage	Rounded, grey-green or blue-green leaves on long slender leaf stalk, 5-10cm long. Juvenile leaves very broad-rounded with a distinct heart shape
Flowers	Small white flowers in clusters of 7 in Spring to mid Summer followed by pear-shaped fruits. Buds are short conical caps.
Habitat	Usually found on light, shallow soils on slopes and rises.
Special Notes	Timber is red, hard and fine-textured.
Value to Wildlife	Occasional feed-tree for Koalas. Flowers are important nectar source for birds, moths, butterflies and insects. Attracts seed and insect eating birds. Hollows provided nesting and refuge sites for birds and mammals.

Cherry Ballart

Exocarpos cupressiformis

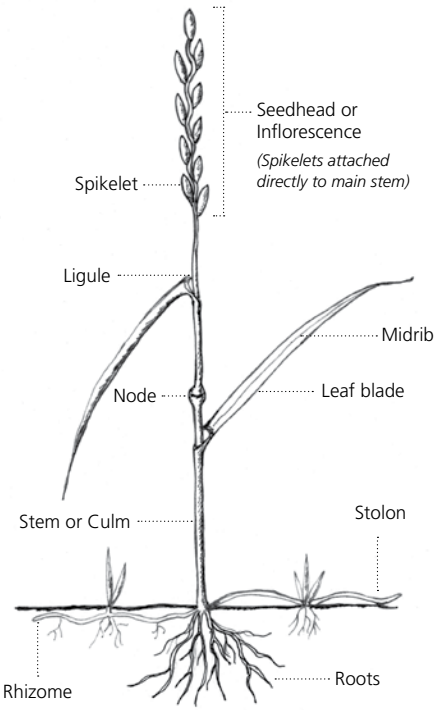
Photos: Ron Litjens and Wendy D'Amore

Also known as	Native Cherry or Wild Cherry.
Description	Dense, cypress-like shrub or small tree to 8m high. Bark finely fissured.
Foliage	Branchlets becoming pendulous, yellowish-green or bright green. Fine and flexible.
Flowers	Inconspicuous cream flower spike, mostly in mid Spring to Autumn.
Fruit	Hard green nut on top of a fleshy swollen stalk, which is orange-red, and edible when ripe. Winter to Spring.
Habitat	Occurs in the ranges, on foothills and low rises, in poor shallow soils and granite outcrops. Parasitises roots of nearby plants, particularly when young. As the plant matures it relies more on photosynthesis for its energy intake.
Special Notes	Wood used for Aboriginal tools, and juicy part of fruit eaten. A favoured tree for deer to rub against to remove velvet from antlers, often causing ringbarking.
Value to Wildlife	Fruit are a food source for native birds. Foliage is a food plant for caterpillars.

APPENDICES

Basic Diagram of a Grass Plant

Illustrations by Wendy D'Amore



Panicle
with branches

Raceme
Spikelets or stalks (pedicels)

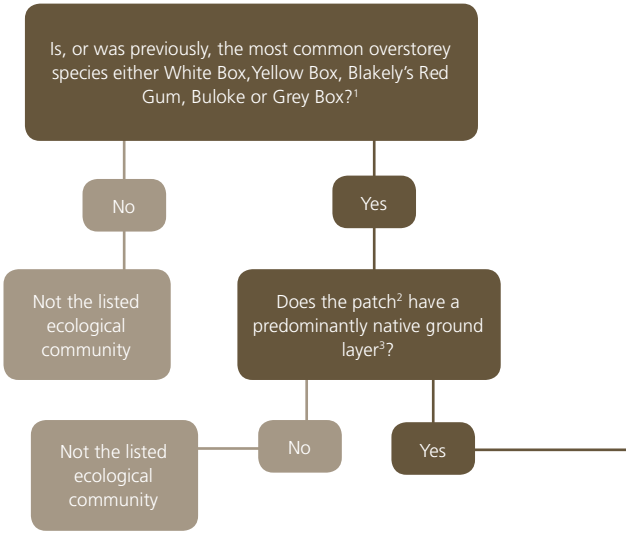
Simple Seed

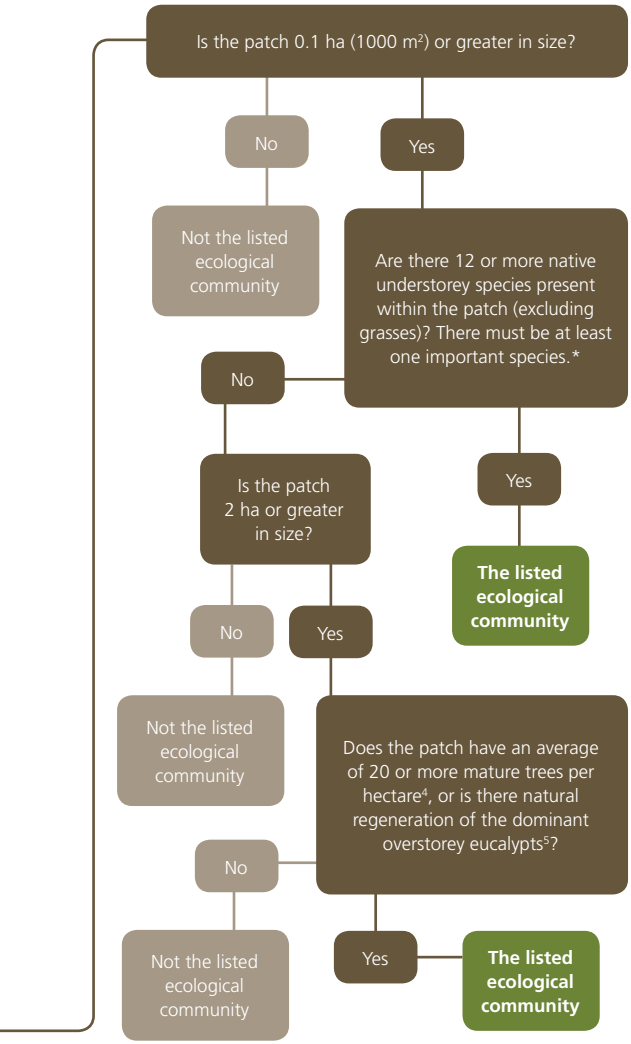
Box-Gum Grassy Woodland Identification Flowchart

Updated from: DEH (2006) White Box-Yellow Box-Blakely's Red Gum grassy woodlands and derived grasslands. EPBC Act Policy Statement. Department of the Environment and Heritage.

The flowchart below represents the lowest condition at which patches are included in the listed ecological community. This is not the ideal state of the ecological community. Large patches, those that link remnants in the landscape, those that occur in highly cleared areas, those that contain rare, declining or threatened species, and those that represent the entire range of species, are important for the long-term future of the ecological community.

Determining if your land has an area of the listed ecological community




Is the patch 0.1 ha (1000 m²) or greater in size?
No
Yes
Not the listed ecological community
Are there 12 or more native understorey species present within the patch (excluding grasses)? There must be at least one important species.*
No
Yes
Is the patch 2 ha or greater in size?
The listed ecological community
No
Yes
Not the listed ecological community
Does the patch have an average of 20 or more mature trees per hectare[4], or is there natural regeneration of the dominant overstorey eucalypts[5]?
No
Yes
Not the listed ecological community
The listed ecological community

Please note: To begin the assessment of criteria relating to the understorey, apply this flowchart to areas of your patch that contain the previous most native species in the ground layer.

[1] These dominant species may include hybrids with any other Eucalyptus species.

[2] Patch – a patch is a continuous area containing the ecological community (areas of other ecological communities such as woodlands dominated by other species are not included in a patch). In determining patch size it is important to know what is, and is not, included within any individual patch. The patch is the larger of:

- an area that contains five or more trees in which no tree is greater than 75 m from another tree, or
- the area over which the understorey is predominantly native.

[3] A predominantly native ground layer is one where at least 50 per cent of the perennial vegetation cover in the ground layer is made up of native species. The best time of the year to determine this is late autumn when the annual species have died back and have not yet started to regrow.

[4] Mature trees are trees with a circumference of at least 125 cm at 130 cm above the ground.

[5] Natural regeneration of the dominant overstorey eucalypts occurs when there are mature trees plus regenerating trees of at least 15 cm circumference at 130 cm above the ground.

Glossary

Annual	A plant that completes its lifecycle in one year.
Anther	The pollen bearing part of the stamen/plant.
Awn	A bristle like appendage eg. On the seeds of many grasses.
Axil	The upper angle between one part of a plant and another part.
Bipinnate	Of a leaf, twice divided into numerous segments.
Bract	A modified leaf, different in shape, size or colour to other leaves. Associated with the flower or inflorescence.
Branchlet	A small branch.
Ephemeral	A plant that has a short lifecycle i.e. within 3-6 months.
Glabrous	Smooth, without hairs.
Glaucous	Covered with a powdery waxy secretion, giving a bluish-white lustre.
Herbaceous	A perennial plant which dies down each year after flowering.
Inflorescence	A distinct group or arrangement of flowers on a plant.
Lanceolate	Lance shaped (leaf: long, broadest before the middle and tapering to the tip.)
Ligule	An appendage facing towards the base of a leaf - especially in grasses. It varies in shape and hairiness.
Node	The portion of the stem, often a 'joint' from which a leaf, or whorl of leaves, or bract arises.
Panicle	An inflorescence which is branched, often with loose clusters of flowers.
Pedicel	The stalk of an individual flower.
Peduncle	The stalk of an inflorescence.

Perennial	Living for at least several years and usually flowering each year.
Phyllode	The leaf-stalk enlarged and commonly flattened, and performing the functions of a leaf, as in many wattle species.
Pinna	Pinnae (plural). The primary division or segment of a pinnate leaf.
Pinnate	A leaf divided into several similar parts or segments.
Prostrate	Lying flat on the ground.
Raceme	A long unbranched inflorescence and in which the flowers are stalked.
Recurved	Curved backwards (and hence usually downwards).
Rhizome	An underground stem.
Riparian	Growing on a river bank or stream bank.
Spike	A simple inflorescence, unbranched, having one main axis and the flowers are stalkless.
Spikelet	A small spike, associated with grasses and sedges, mostly consisting of one or more floret (reduced flower).
Stolon	A prostrate or trailing stem, usually slender and producing roots, or sometimes shoots, at the nodes.
Subshrub	A small shrub with stems that may be partly herbaceous.

Flora Species Index

References

Costermans, L. 2009. *Native trees and shrubs of south-eastern Australia.* Reed New Holland, Sydney.

Earl G., Stelling F., Titcumb and Berwick S. (eds.) 2001. *Revegetation guide for the Goulburn Broken Catchment*. Department of Natural Resources and Environment. Victoria, Australia.

Gibbs J. and Gibbs R. 2005. *Grass Identification Manual - for Everyone.* Native Grass Resources Group Inc. Printed by Document Services, University of SA, Underdale.

Marilyn Bull. 2014. *Flora of Melbourne: A Guide to the Indigenous Plants of the Greater Melbourne Area.* Hyland House Publishing Pty Ltd. Flemington, Victoria.

Marriot N. and Marriot J. 1998. *Grassland plants of south-eastern Australia.* Bloomings Books. Hawthorn, Australia.

McIntyre, S, McIvor, J.G., and Heard, K.M. (eds) (2002) *Managing & Conserving Grassy Woodlands.* CSIRO Publishing, Collingwood.

Mitchell M. 2002. *Native Grasses. An Identification Handbook for Temperate Australia.* 3rd ed. Landlinks Press. Collingwood, Victoria.

Native Vegetation of the Goulburn Broken Riverine Plains, 2012. Goulburn BrokenCatchment Management Authority.

PlantNET (The NSW Plant Infromation Network System). Royal Botanic Gardens and Domain Trust, Sydney. http://plantnet.rbgsyd.nsw.gov.au/ Retrieved September – December 2015.

VicFlora. The Royal Botanic Gardens Victoria 2015, http://data.rbg.vic.gov.au Retrieved September – December 2015

Walsh, N.G. and Entwisle, T.J. 1999. *Flora of Victoria,* vols 3 -4. Inkata Press, Melbourne.

Yarra Ranges Local Plant Directory, Yarra Ranges Shire Council 2009, http://fe.yarraranges.vic.gov.au Retrieved September-December 2015

Further Reading

http://www.environment.gov.au/biodiversity/threatened/communities/vic

http://www.necma.vic.gov.au/Solutions/Sustainable-Agriculture/Advice-for-Grazing-Grassy-Woodlands

Project partners:

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