



Vegetation Communities - EVCs of the Darebin Creek Catchment

Stretching from Woodstock to Alphington, the Darebin Creek winds its way through volcanic and sedimentary soils to the Yarra River. These soils, along with other landscape and climate attributes, once influenced the distribution of a range of native plant species that formed eight major communities within the catchment. With the arrival of Europeans came the introduction of a range of agricultural, settlement and commercial practices that threatened the native flora and fauna of the Darebin Creek Catchment. Today, as a result, few areas of native vegetation or plant communities remain these are grouped into Ecological Vegetation Classes (EVC).

Ecological Vegetation Classes

The EVC system is used to describe vegetation patterns. EVCs are recognisable vegetation types. Here we include the EVCs that are found along the Darebin Creek. For full descriptions refer to Flora of Melbourne.

OPEN GRASSLAND

Plains Grassland (EVC 132)

One of the rarest EVCs in Victoria, it was once the home of the flightless bird, the Plains Wanderer. Plains Grasslands stretched through the north-west of the catchment to Victoria's Western District. The diverse range of herbs, daisies, lilies and grasses were noticeably colourful in the early years of European colonisation, which provided a plentiful range of foods for the Kooris living here.

The hard soils of these areas have a high proportion of basalt rock and as a result, trees and shrubs have difficulty growing here. Plains Grassland plant communities are virtually devoid of trees and shrubs. Native grasses make up the canopy of this community, much as trees would in a forest, the difference being that whilst trees tower overhead, this canopy is sometimes only knee high. The main grassland community found in the Darebin Creek region was dominated by Kangaroo and Wallaby Grasses. Other plants included the prickly Blue Devil –*Eryngium ovinum*, and Clustered Everlasting –*Chrysocephalum semipapposum*. Many grassland species can also be found in other communities such as Plains Grassy Woodland.

EUCALYPT WOODLANDS

Plains Grassy Woodland (EVC 55)

Plains Grassy Woodland was once found on the basalt floodplains in the north-west of the catchment. The soil associated with these woodlands was generally alluvial or volcanic in origin. River Red Gums –*Eucalyptus camaldulensis* were the dominant tree species and made up around 30% of the canopy. Other trees included the Silver Wattle –*Acacia dealbata*, Lightwood –*Acacia implexa* and Black Sheoke –*Allocasuarina littoralis*. Plains Grassy Woodland understorey was predominantly grassy with scrambling herbs. Such plants included Kangaroo Grass –*Themeda triandra*, Loose-flower Rush –*Juncus pauciflorus*, and attractive native Bluebells –*Wahlenbergia* spp.. Many River Red Gums have survived rural and urban development throughout the catchment, some of them being several hundred years old.

Grassy Woodland (EVC 175)

Similar to the Plains Grassy Woodland, this EVC has a diverse ground storey of grasses, sedges, lilies and herbs. The canopy includes a variety of Eucalypts, Shrubs including Blackwood –*Acacia melanoxylon*, and She-oaks, with Kangaroo Grass –*Themeda triandra* as the predominant understorey.

Plains Swampy Woodland (EVC 651)

This plant community is almost extinct but can be found in South Morang and Mernda. Characterised by poorly drained soils and often closely integrated with Plains Grassy Woodlands, the canopy is dominated by River Red Gum –*Eucalyptus camaldulensis* and/or Swamp Gum –*Eucalyptus ovata*. Low growing

species include Common Tussock-grass -*Poa labillardierei* and *Eleocharis* spp..

Scoria Cone Woodland (EVC 894)

Limited to one location above Donnybrook Road, this plant community occurs on volcanic cones. A, sparsely wooded grassy woodland dominated by non-eucalypt trees to 10m. Species include Drooping She-oak - *Allocasuarina verticillata* with Silver Banksia - *Banksia marginata* and Blackwood - *Acacia melanoxylon*.

DRY FORESTS & WOODLANDS

Grassy Dry Forest (EVC 22)

Found in one location in Bundoora, the characteristics of this EVC include low to medium open forest or woodland, medium shrubs forming a sparse mid storey and a high diversity of drought tolerant grasses and herbs.

ESCARPMENTS & ROCKY OUTCROPS

Stony Knoll Grassland and Cliff / Escarpment Shrubland (EVC 895)

In some rocky and elevated areas, Stony Knoll Grassland still remains. Stony Knoll Grassland would have once included a range of shrubs leading to the community developing into a shrubland rather than a grassland. The rocky nature of the soil protects some plants from grazing. This has allowed the community to develop a greater level of species richness and to survive to the present day. Plants include Drooping She-oak - *Allocasuarina verticillata*, Rock Correa - *Correa glabra* and Wedge-leaf Hop-bush - *Dodonaea viscosa*. In basalt areas, Escarpment Shrubland was dominated by Lightwood - *Acacia implexa* and Tree Violet - *Melicytis dentatus*, and in sedimentary soils Burgan - *Kunzea ericoides* spp. and Sweet Bursaria - *Bursaria spinosa* were more prominent. Escarpment Shrubland formed narrow strips along protected creek escarpments and can be found in the lower reaches of the Darebin Creek in the Darebin Parklands.

Floodplain Riparian (EVC 641)

Floodplain Riparian Woodland and Scrub occurred on the banks of the Darebin Creek as well as throughout low-lying areas where these water-bodies were prone to flooding. Streamside plants are called riparian plants, which is where these plant communities derive their name.

Currently this EVC exists in limited locations in the Darebin Parklands. The woodland community was dominated by River Red Gum - *Eucalyptus camaldulensis* and occasionally interspersed Silver Wattle - *Acacia dealbata*. The transition from Floodplain Riparian Woodland to Scrub was influenced by landform with scrub forming close to the water's edge. A range of understorey species was present in both these communities and as the woodland community moved toward the creek, plants adapted to wetter soils became more prolific. River Bottlebrush - *Callistemon sieberi* and Woolly Tea-tree - *Leptospermum lanigerum* with Muttonwood - *Myrsine howittiana* made up the canopy of Floodplain Riparian Scrub, developing into a dense riverside thicket. Terrestrial and semi aquatic plants such as sedges and rushes persisted to the creek's edge.

WATERCOURSES & SWAMPY FLATS

Creepline Grassy Woodland (EVC 68)

Similar to Plains Grassy Woodland, this community had many plants in common yet occupied a different part of the landscape with River Red Gum, *Eucalyptus camaldulensis* becoming the dominant tree species. Creepline Grassy Woodland lined the banks of non-permanent waterways within the basalt plains and can now be found mainly in the upper reaches of the Darebin Creek and the Darebin Parklands in Alphington.

Grey Clay Drainage-line Aggregate (EVC 124)

Occurring along Findon Creek north of Epping this EVC occurs along ephemeral drainage lines and swampy basins on heavy clay soils. Salt and swamp tolerant plants including Tussock Grass - *Poa labillardierei* and Milky Beauty-head - *Calocephalus lacteus* are typical. This is a rare EVC found on the Volcanic Plains close to Melbourne.

Stream Bank Shrubland (EVC 851)

Scattered remnants of this community can be still found along Darebin Creek. Banks tend to be dry but subject to flooding. This EVC is characterised by open shrubland to 8 metres high, with a ground storey of sedges and herbs. Common shrubs include River Bottlebrush - *Callistemon sieberi*, Sweet Bursaria - *Bursaria spinosa* and Hop Goodenia - *Goodenia ovata*.

REEDBEDS, CUMBUNGI & SWAMPS

Wet Verge Sedgeland (EVC 932)

Wet verge sedgelands are shallow, seasonal, freshwater wetlands. Found in one isolated location in Thomastown, this community is dominated by Sedges -*Carex spp.*.

SEASONAL GRASSY/SEDGY WETLANDS ON PLAINS

Plains Grassy Wetland (EVC 125)

The group of plants that make up this community is often called an aquatic herbfield. A herbfield is a plant community that is generally dominated by herbs rather than trees or shrubs. Herbs are different from trees and shrubs in that they do not have woody tissue. Aquatic plants rarely need woody tissue as they float in order to reach the sunlight. As a result, many aquatic communities are herbfields. Herb species found in the permanent wetlands of the Darebin Creek Catchment include the Water Plantain –*Alisma plantago-aquatica*, Common Reed – *Phragmites australis*, *Persicaria spp.* and Water-ribbons - *Triglochin procera*, could also be found in these wetlands and were important as their height determined the structure of the canopy along the banks of the waterbody.

Floodplain Riparian Woodland (EVC 56)

Only very small remnants of this EVC remain along Darebin Creek. The structure is open Eucalypt woodland to 20 Metres high, with a medium to tall shrub layer over a ground storey of monocots, aquatic and semi-aquatic herbs.

References and further reading

Banyule's Indigenous Plants, (Brochure)
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