

(DRAFT ONLY) Surf Coast Shire Bio-mapping

Flora and Fauna of Nine Priority Reserves, 2006-07

A Report for Surf Coast Shire

Phoebe Macak, Arn Tolsma, Geoff Brown, Greg Horrocks,
Ryan Chick & David Cheal



Arthur Rylah Institute for Environmental Research

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COOGOORAH PARK

Location	River Reserve Road, Anglesea
Centre Point MGA	254200 easting, 5746000 northing
Surf Coast Shire Priority	High
Area	17.3ha

Reserve Description

A variety of habitats are represented at Coogoorah Park including Estuarine Wetland, Heathy Woodland, Riparian Scrub and a small area of Lowland Forest. Wetlands are a major feature and the Reserve is intersected with many paths seemingly designed for human recreation. Consequently, the area experiences a high rate of visitation.

Vegetation

Careful site inspection revealed that the existing EVC mapping was appropriate (i.e. at a scale and accuracy suitable for the current study).

Damp Sands Herbrich Woodland was the major vegetation type (A & B, Figure 5), with a canopy of *Eucalyptus ovata* (Swamp Gum) to around 15m in height, occasional *Eucalyptus viminalis* (Manna Gum) and a dense shrub layer to around 7m in height. Shrub species included *Melaleuca lanceolata*, *Acacia longifolia* sensu lato (Sallow Wattle), *Acacia verticillata* (Prickly Moses), *Ozothamnus ferrugineus*, *Goodenia ovata* (Hop Goodenia), *Acacia paradoxa* (Hedge Wattle), *Cassinia aculeata* (Common Cassinia) and *Leptospermum continentale*. The ground layer was dominated by monocots, notably *Gahnia radula*, *Lomandra longifolia* (Spiny-headed Mat-rush), *Poa labillardierei* (Common Tussock-grass) and *Dianella revoluta* sensu lato (Black-anther Flax-lily). Within the body of the Reserve (A), the vegetation was generally in a good condition, and weeds such as *Briza maxima*, *Holcus lanatus* (Yorkshire Fog) and *Plantago lanceolata* were confined mostly to track sides. However, some weeds of concern were noted in this vegetation type, including *Asparagus asparagoides* (Bridal Creeper), *Rubus fruticosus* spp. agg. (Blackberry), *Coprosma repens* (Mirror Bush) and *Chrysanthemoides monilifera* (Boneseed). Control measures should be taken while infestations remain small.

The narrow linear section of the park on the east side of the river (B) was assessed separately, as its disturbance history and small size adversely affected the site and landscape component scores respectively. Whilst sharing many native shrub species with the main areas on the west side of the river, the ground layer comprised a high cover of introduced species, including *Briza maxima*, *Plantago lanceolata*, *Plantago coronopus* (Buck's Horn Plantain), *Dactylis glomerata*, *Sollya heterophylla* (Bluebell Creeper), *Holcus lanatus* (Yorkshire Fog) and *Watsonia meriana* (Bugle Lily).

Estuarine Wetland covered a substantial portion of the Reserve. This was characterised by high cover of monocots, such as *Phragmites australis* (Common Reed), *Poa poiformis* (Coast Tussock-grass) and *Juncus* spp. (Rushes). This vegetation was inundated at the time of the assessment, and was assessed as 'good condition'.



Small remnant pockets of Lowland Forest and Heathy Woodland were noted on the west edge of the Reserve, both characterised by *Eucalyptus obliqua* to around 20m in height and a high cover of *Pteridium esculentum* (Austral Bracken). Few weeds were noted in the Heathy Woodland, due to its higher shrub cover, but relatively high weed cover was noted in the Lowland Forest, especially of *Briza maxima*, *Aira elegantissima* (Delicate Hair-grass) and *Vulpia muralis* (Wall Fescue).

Two small areas of Riparian Scrub Complex were assessed separately. The first (see C, Figure 5) was an 'island' of vegetation dominated by *Leptospermum continentale*, *Melaleuca lanceolata*, *Goodenia ovata* and *Acacia longifolia*. Inundation hampered inspection of the ground layer, but this vegetation was assessed as 'good condition'. Towards the southern end of the Reserve (D), the dominant *Leptospermum continentale* and *Melaleuca lanceolata* were dying, and the vegetation was in poor condition. Again, inundation hampered on-site inspection.

Overall, the site condition scores varied substantially, with the larger, less disturbed patches obtaining the highest scores (Table 10). Landscape scores, with the exception of that for the disturbed roadside remnant, were reasonably consistent, and enhanced by the large patch size and high cover of native vegetation in the surrounding landscape.

Table 10. Habitat hectare scores for individual Ecological Vegetation Classes in Coogoorah Park, November 2006.

EVC	Area (ha)	Site score (max 75)	Landscape score (max 25)	Total score	Bioregional Conservation Status and Conservation Significance
Damp Sands Herbrich Woodland (A)	10.9	66	15	81	Status – Vulnerable Significance – Very High
Damp Sands Herbrich Woodland (B)	1.2	35	8	43	Status – Vulnerable Significance – High
Heathy Woodland	0.9	57	14	71	Status – Least Concern Significance – Medium
Estuarine Wetland	7.6	72	15	87	Status – Endangered Significance – Very High
Riparian Scrub Complex (C)	0.4	65	14	79	Status – Endangered Significance – Very High
Riparian Scrub Complex (D)	0.4	29	14	43	Status – Endangered Significance – Very High
Lowland Forest	0.9	47	14	61	Status – Depleted Significance – Medium



Figure 5. EVC mapping of Coogoorah Park, ARI 2006

Fauna

A total of 84 vertebrate species was recorded from Coogoorah Park, comprising 11 mammals, 69 birds and four reptiles (Table 11). Surveys were concentrated in the northern part of the Park.

Mammals

Coogoorah Park returned a relatively diverse assemblage of mammal species. Dusky Antechinus and Bush Rat were recorded from woodland both on the west and east side of the Park. Swamp Rat was less widespread, recorded from woodland on the east only.

Two types of possum were recorded during the survey, Sugar Glider and Common Ringtail Possum, and it is expected that Common Brushtail Possums would survive here also. The Short-beaked Echidna and Eastern Grey Kangaroo were also observed. No introduced mammal species were recorded. Harp traps were not employed here as there was concern that the high volume of human traffic may result in the traps being disturbed. Four bat species were recorded by bat detectors: White-striped Freetail Bat, Gould's Wattled Bat, Chocolate Wattled Bat and Little Forest Bat. In addition, a number of calls were recorded that could not be distinguished between Gould's Long-eared Bat and the Lesser Long-eared Bat.

Birds

During the formal bird counts of Coogoorah Park, 69 species and over 300 individuals were recorded, a substantially higher number than recorded for any other Reserve during the survey. Containing both woodland and wetland areas the diverse nature of the Reserve provided suitable habitat for a wide range of differing species. The predominant Herbrich Woodlands were characterised by birds commonly found in coastal areas of south-eastern Australia. Some of the more numerous species were New Holland Honeyeater, Grey Fantail, Brown Thornbill, White-browed Scrubwren and Silveryeye.

Several wading birds were recorded in Estuarine Wetland, located in the central part of the Reserve, and these included Black-fronted Dotterel, Masked Lapwing and Purple Swamphen. The inundated areas of the wetland were also used as a feeding site by a number of transient species, such as Little Pied Cormorant and Pacific Black Duck.

Six introduced species were recorded in Coogoorah Park, viz. Spotted Turtle-dove, House Sparrow, Mallard, European Goldfinch, Common Blackbird, Common Myna and Common Starling. These non-endemic birds appear not to have excluded any native bird residents, although they may have some negative impact, particularly the latter two hollow-nesting species.

Two species recorded in the Reserve, Nankeen Night Heron and Rufous Bristlebird, are listed as being Near Threatened in Victoria; the Rufous Bristlebird has also been listed under the Flora and Fauna Guarantee Act 1988 (Department of Sustainability and Environment, 2003). The Great Egret, which was also recorded in the Reserve, is listed as Vulnerable.

Four other species, Collared Sparrow, Australian King Parrot, Little Grassbird and Spotless Crake, are considered notable records even though they are not regarded as under threat. There are no official records of the Spotless Crake from the survey area; however, there is a 1983 record for an extended region covering the survey area (AVW).

Herpetofauna

Four reptile species were recorded during the survey: Southern Water Skink, Garden Skink, Blotched Blue-tongued Lizard and White-lipped Snake. While generally not common, several AVW records exist for the White-lipped Snake in the Surf Coast Shire, mostly from the area around Anglesea.

Coogoorah Park supported five major EVCs, including wetland, woodland and scrub communities, and thus provides a variety of habitats for reptiles and frogs. Many typical temperate zone reptiles are likely to occur in or adjacent to Coogoorah Park. The extensive wetlands are likely to support a suite of common frogs, including Common Froglet, Southern Bullfrog, Striped Marsh Frog, Spotted Marsh Frog and Southern Brown Tree Frog, and potentially the Common Spadefoot Toad in the Damp Sands Herbrich Woodland.

Key management recommendations

- Weed control, particularly of invasive species such as Boneseed
- Development of park management plan
- Predator control

Table 11. Fauna species recorded at Coogoorah Park by ARI, October 2006- March 2007.

Common Name	Species
Short-beaked Echidna	<i>Tachyglossus aculeatus</i>
Dusky Antechinus	<i>Antechinus swainsonii</i>
Sugar Glider	<i>Petaurus breviceps</i>
Common Ringtail Possum	<i>Pseudocheirus peregrinus</i>
Eastern Grey Kangaroo	<i>Macropus giganteus</i>
White-striped Freetail Bat	<i>Tadarida australis</i>
Gould's Wattled Bat	<i>Chalinolobus gouldii</i>
Chocolate Wattled Bat	<i>Chalinolobus morio</i>
Gould's/Lesser Long-eared Bat	<i>Nyctophilus gouldi/geoffroyi</i>
Little Forest Bat	<i>Vespadelus vulturnus</i>
Bush Rat	<i>Rattus fuscipes</i>
Swamp Rat	<i>Rattus lutreolus</i>
Australian Shelduck	<i>Tadorna tadornoides</i>
Australian Wood Duck	<i>Chenonetta jubata</i>
Mallard	<i>Anas platyrhynchos</i>
Pacific Black Duck	<i>Anas superciliosa</i>
Little Pied Cormorant	<i>Phalacrocorax melanoleucos</i>
Pied Cormorant	<i>Phalacrocorax varius</i>
Little Black Cormorant	<i>Phalacrocorax sulcirostris</i>
Great Cormorant	<i>Phalacrocorax carbo</i>
White-faced Heron	<i>Egretta novaehollandiae</i>
Great Egret	<i>Ardea alba</i>
Nankeen Night Heron	<i>Nycticorax caledonicus</i>
Australian White Ibis	<i>Threskiornis molucca</i>
Collared Sparrowhawk	<i>Accipiter cirrhocephalus</i>
Spotless Crane	<i>Porzana tabuensis</i>
Purple Swamphe	<i>Porphyrio porphyrio</i>
Dusky Moorhen	<i>Gallinula tenebrosa</i>
Eurasian Coot	<i>Fulica atra</i>
Black-fronted Dotterel	<i>Euseyonis melanops</i>
Masked Lapwing	<i>Vanellus miles</i>
Silver Gull	<i>Larus novaehollandiae</i>
Spotted Turtle-Dove	<i>Streptopelia chinensis</i>
Brush Bronzewing	<i>Phaps elegans</i>
Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>
Australian King-Parrot	<i>Alisterus scapularis</i>
Crimson Rosella	<i>Platycercus elegans</i>
Eastern Rosella	<i>Platycercus eximius</i>
Blue-winged Parrot	<i>Neophema chrysostoma</i>
Fan-tailed Cuckoo	<i>Cacomantis flabelliformis</i>
Shining Bronze-Cuckoo	<i>Chrysococcyx lucidus</i>
Southern Boobook	<i>Ninox novaeseelandiae</i>
Tawny Frogmouth	<i>Podargus strigoides</i>
Laughing Kookaburra	<i>Dacelo novaeguineae</i>
Superb Fairy-wren	<i>Malurus cyaneus</i>
Spotted Pardalote	<i>Pardalotus punctatus</i>
Striated Pardalote	<i>Pardalotus striatus</i>
Rufous Bristlebird	<i>Dasyornis broadbenti</i>
White-browed Scrubwren	<i>Sericornis frontalis</i>

Common Name

Brown Thornbill
Striated Thornbill
Red Wattlebird
White-eared Honeyeater
Brown-headed Honeyeater
New Holland Honeyeater
Scarlet Robin
Eastern Yellow Robin
Golden Whistler
Rufous Whistler
Grey Shrike-thrush
Magpie-lark
Grey Fantail
Willie Wagtail
Olive-backed Oriole
Dusky Woodswallow
Australian Magpie
Pied Currawong
Grey Currawong
Australian Raven
Little Raven
House Sparrow
Red-browed Finch
Beautiful Firetail
European Goldfinch
Welcome Swallow
Little Grassbird
Silvereye
Common Blackbird
Common Starling

Southern Water Skink
Garden Skink
Blotched Blue-tongued Lizard
White-lipped Snake

Species

Acanthiza pusilla
Acanthiza lineata
Anthochaera carunculata
Lichenostomus leucotis
Melithreptus brevirostris
Phylidonyris novaehollandiae
Petroica multicolor
Eopsaltria australis
Pachycephala pectoralis
Pachycephala rufiventris
Colluricincla harmonica
Grallina cyanoleuca
Rhipidura fuliginosa
Rhipidura leucophrys
Oriolus sagittatus
Artamus cyanopterus
Gymnorhina tibicen
Strepera graculina
Strepera versicolor
Corvus coronoides
Corvus mellori
Passer domesticus
Neochmia temporalis
Stagonopleura bella
Carduelis carduelis
Hirundo neoxena
Megalurus gramineus
Zosterops lateralis
Turdus merula
Sturnus vulgaris

Eulamprus tympanum tympanum
Lampropholis guichenoti
Tiliqua nigrolutea
Drysdalia coronoides