

RIDGES AND ADJACENT BUSHLAND, YANCHEP/NOWERGUP

Boundary Definition: protected area/bushland (part taken to cadastre) boundary

SECTION 1: LOCATION INFORMATION

Bush Forever Site no. 381 **Area (ha):** bushland 3004.9

Map no. 8, 9, 13, 14

Map sheet series ref. no. 2034-I NW, 2034-IV NE, 2035-III SE

Other Names: part of proposed Gnangara Park, Ridges Management Priority Area

Local Authorities (Suburb): Shire of Wanneroo (Yanchep, Nowergup)

Includes CALM Managed Land: State Forest 65, Reserve 9868 (National Park)

System 6 (1983): part M3, M4 area of bushland goes beyond System area boundaries, all bushland described

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Bassendean Dunes

Bassendean Sands (Qpb: S8)

Spearwood Dunes

Sands derived from Tamala Limestone (Qts: S7)

Tamala Limestone (Qtl: LS1)

Wetlands (within the Spearwood/Bassendean Dunes)

Holocene Swamp Deposits (Qhw: Cps)

VEGETATION AND FLORA

Vegetation Complexes

Spearwood Dunes

Karrakatta Complex — North

Cottesloe Complex — North (one of two most northern occurrences)

Cottesloe Complex — Central and South (most northern occurrence)

Floristic Community Types

Supergroup 2: Seasonal Wetlands

14 Deeper wetlands on sandy soils

Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau

22 *Banksia ilicifolia* woodlands

23b Northern *Banksia attenuata* — *Banksia menziesii* woodlands

Supergroup 4: Uplands centred on Spearwood and Quindalup Dunes

26a *Melaleuca huegelii* — *M. acerosa* shrublands on limestone ridges

26b Woodlands and mallees on limestone

27 Species-poor mallees and shrublands on limestone

28 Spearwood *Banksia attenuata* or *B. attenuata* — *Eucalyptus* woodlands

WETLANDS

Wetland Types: creek; sumpland and dampland (includes wetlands not previously described, CALM 1989, Gibson *et al.* 1994)

Natural Wetland Groups: not defined

Wetland Management Objectives: not defined; Conservation (area not determined, these wetlands not previously described)

Swan Coastal Plain Lakes EPP: none identified

THREATENED ECOLOGICAL COMMUNITIES

Not assessed; Endangered (floristic community type 26a)

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: limestone ridge, vegetated wetland, vegetated uplands

Vegetation and Flora: limited survey (CALM 1989, Gibson *et al.* 1994 (Yan 4–6, 8–22), Griffin 1994 (Par 01)); detailed survey (Keighery, GJ, 1993b)

Structural Units: mapping (CALM 1989)

Bassendean Dunes

Uplands: *Banksia attenuata* and *Nuytsia floribunda* Low Open Woodland

Spearwood Dunes

Uplands — Sands derived from Tamala Limestone: *Eucalyptus gomphocephala* Woodland; *Eucalyptus marginata* Open Forest to Open Woodland; Low Open Woodlands to Low Woodlands dominated by *Banksia attenuata*,

B. menziesii, *B. ilicifolia*, *B. grandis*, *Allocasuarina fraseriana* and *Nuytsia floribunda* and combinations of these; *Conospermum stoehadis* Open Heath; mixed Open Heath
Uplands — Tamala Limestone: Closed to Open Heath dominated by *Melaleuca huegelii*, *Melaleuca* sp. Yanchep (GJK 11242), *Thomasia cognata*, *Dryandra sessilis* var. *cygnorum* and *Hakea trifurcata*; *Eucalyptus petrensis* Shrub Mallee; *Eucalyptus foecunda* Shrub Mallee; *Eucalyptus decipiens* Tree Mallee
Wetlands: *Eucalyptus rudis* Woodland; *Melaleuca preissiana* Low Open Forest

Vegetation Condition: >90% Excellent to Pristine, <10% Very Good

Total Flora: 294 native taxa, 32 weed taxa (plot-generated list only, Gibson *et al.* 1994 and Griffin 1994; see Site 288 for total for Site 288 and part Site 381)

Significant Flora: *Eucalyptus argutifolia* (R), *Melaleuca* sp. Yanchep (GJK 11242) (2), *Sarcozona bicarinata* (3), *Conostylis pauciflora* subsp. *euryrhipis* (3), *Stylidium maritimum* (3), *Conostephium minus* (4); *Diplolaena angustifolia*, *Verticordia nitens*, *Stylidium crossocephalum*, *Eucalyptus foecunda*; species typical of Tamala Limestones — *Grevillea preissii*, *Eucalyptus argutifolia*, *E. petrensis*, *E. foecunda*, *Diplopeltis huegelii* var. *huegelii*, *Trymalium ledifolium* var. *ledifolium*, *Stylidium maritimum*, *S. junceum* (limestone variant), *Astroloma microcalyx*

Fauna: (area described also includes Site 288) multiple surveys for birds (134 species) (Storr and Johnstone 1978; RAOU 1996 D, 8 visits), structured survey for native mammals (15 species) (Burbidge *et al.* in prep.) and reptiles (47 species) (How and Dell 1994). Significant populations of Splendid Fairy-wren, Southern Emu-wren, Broad-tailed, Western and Yellow-rumped Thornbills, Weebill, White-browed Scrubwren, Scarlet Robin, Golden Whistler, Grey Shrike-thrush and several honeyeater species. Significant bird species: category 1 (1), category 3 (13) and category 4 (8). Significant mammal species: Quenda (Friend, 1996 D) and Western Brush Wallaby

Linkage: adjacent bushland to the south and west (Sites 288 and 396); part of Greenway 36 (Tingay, Alan & Associates 1998a); part of a regionally significant contiguous bushland/wetland linkage (Part A, Map 7)

Other Special Attributes: transition area between vegetation of Spearwood and Bassendean Dunes systems; majority of Site included in boundaries considered in the Yanchep National Park Management Plan (CALM 1989); proposed to become National Park in Forest Management Plan 1994–2003 (CALM 1994); recommended for protection in the study of City of Wanneroo bushland (Trudgen 1996); part Site recommended to be declared as an A-class Nature Reserve for the protection of flora and fauna in Gibson *et al.* 1994; contains seven regional floristic groups; included in Gngangara Park proposal (Bailey 1997)

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Indicative place (AHC 2000 D); subject to protection under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities, Diversity, Rarity, Maintaining ecological processes or natural systems, Scientific or evolutionary importance, General criteria for the protection of wetland, streamline and estuarine fringing and coastal vegetation

Recommendation: Site with Some Existing Protection; the existing care, control and management of this Site is endorsed (proposed 'Gngangara Park' – Cabinet 1996; see Table 3, Volume 1).