



density and pressure that determine some problems with presence of mud flats.

- Degraded
- Estuarine? Sumpines
- Mud
- Estuarine? (Cassidapa? Helicostichus?)

Lead not in boundary

Mandurch Estuary bridge Res

Channel Island

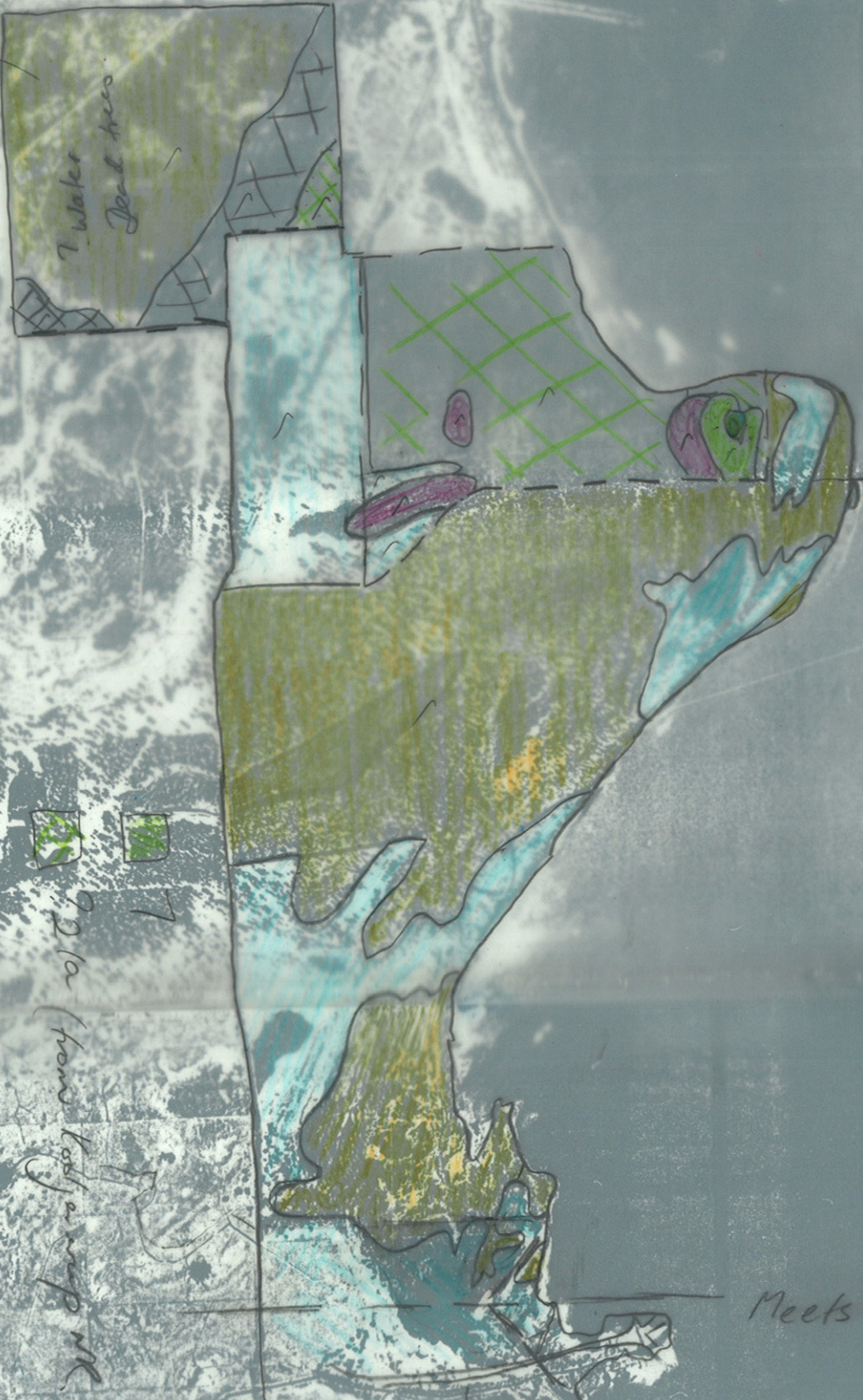
Creery Island

Note Boodalan IS 433769
Vested NPNCA to SE A for
recreation & cons flora & fauna
Copp Landings Delta

P

Map 2

CSO



No shrubs, bushes

3 days 1 OK 1/02/06

15

in drawing away ~ 20' from following W'

7

Meets Map 1

Meets Map 1

157
Caddis
road Co. by 751
ground

grated and
sand mixed
area

7 on

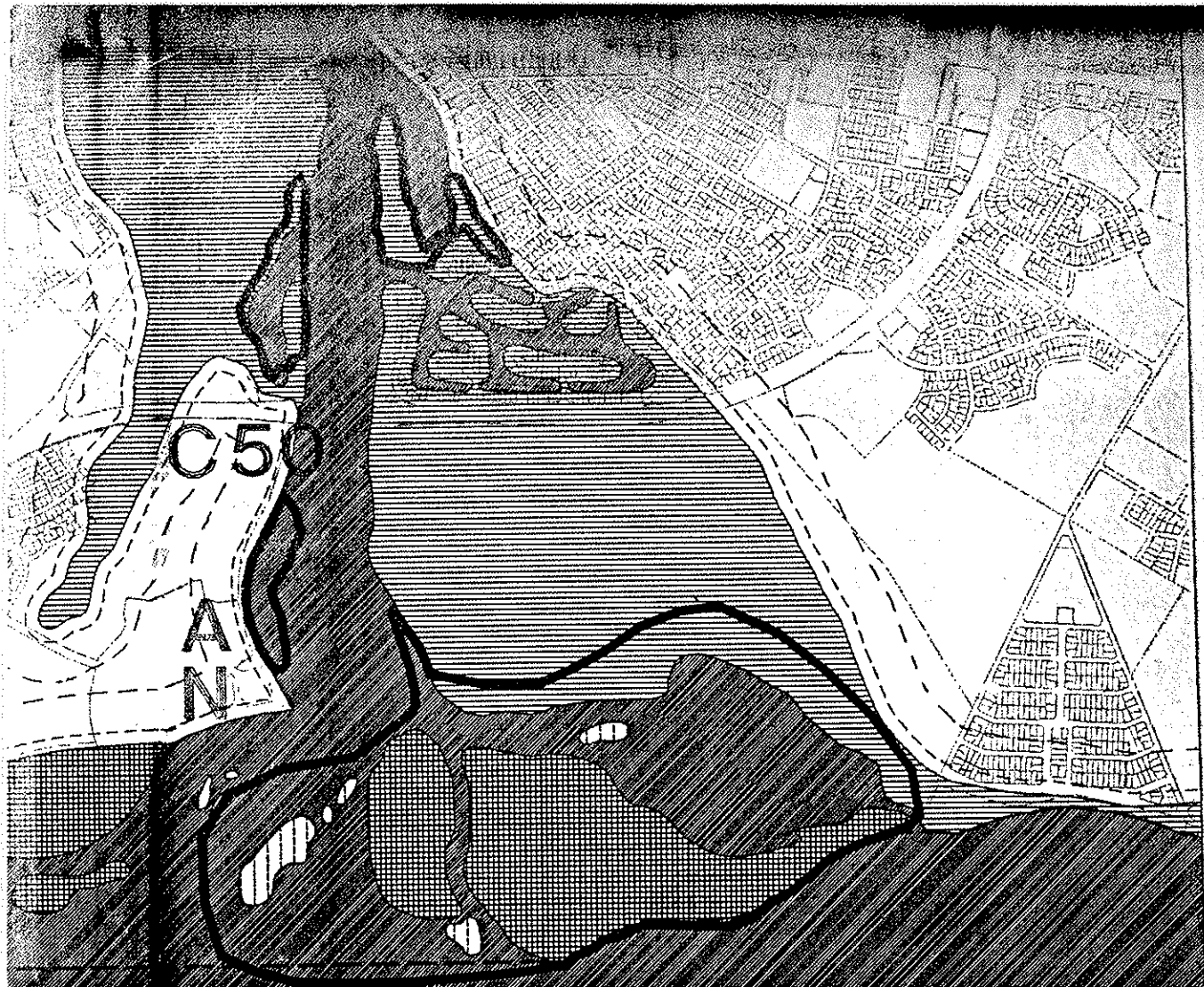
system of
fct. boundary

Ashton by
NR boundary

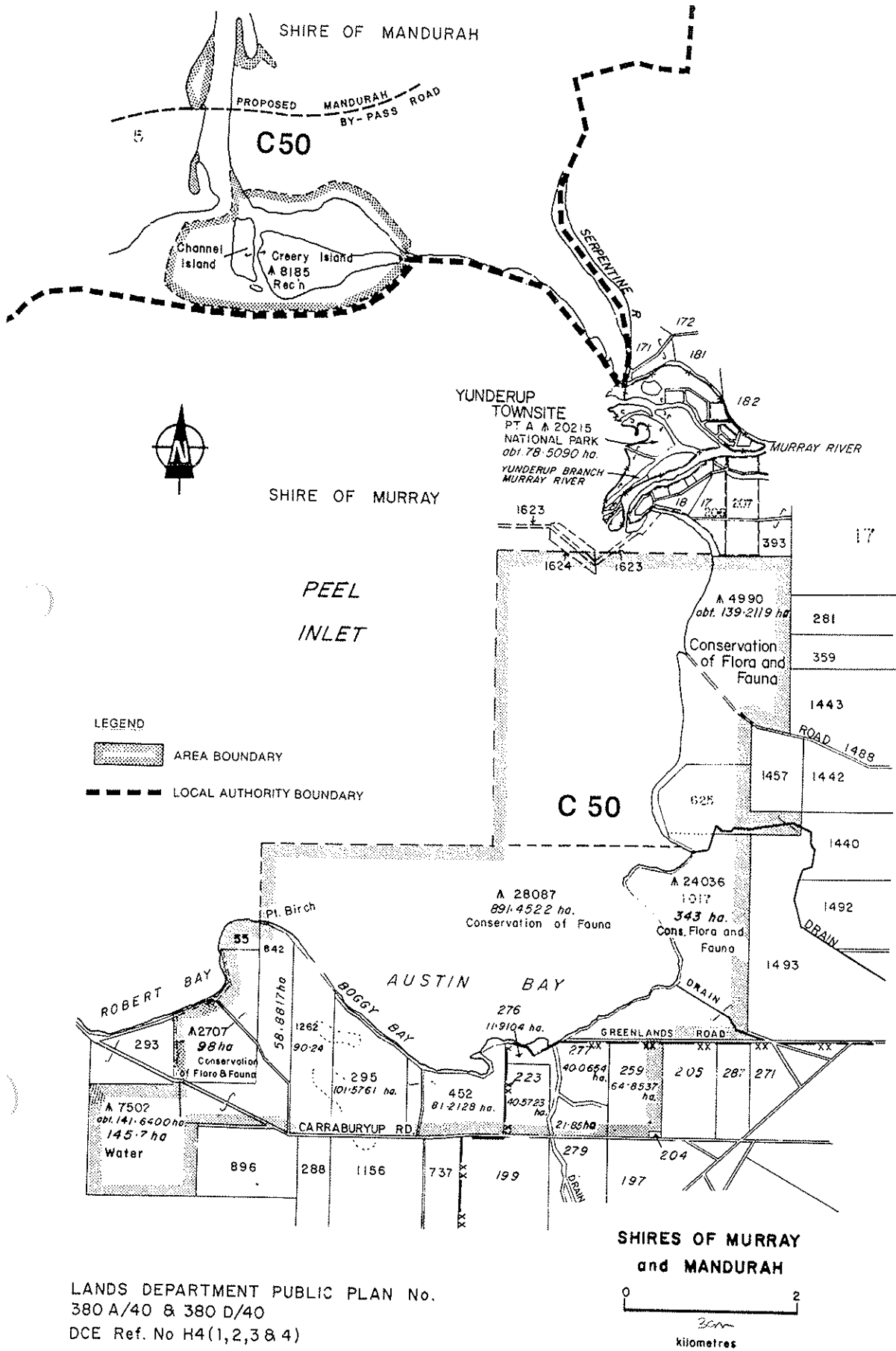
C50-

Map 1





E.3



LANDS DEPARTMENT PUBLIC PLAN No.
380 A/40 & 380 D/40
DCE Ref. No H4(1,2,3 & 4)

Figure 37

1cm = 0.6666 km
= 666.66 m
= 66666.66 cm

C50

The coastal landforms and peripheral wetlands of the Peel-Harvey estuarine system

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21 Glenmere Road, Warwick, WA 6024

Manuscript received November 1988; accepted August 1989

Abstract

Numerous, varied physical (hydrodynamic, sedimentologic and geomorphic) processes interact to determine the type, location, configuration, extent and evolution of the shore and the peripheral wetlands of the Peel-Harvey system. Twelve types of shore are identified in the estuarine system: tidal shoals, active tidal delta, stranded channel shoal complex, relict tidal delta, stranded estuarine embayment, spit-lagoon complexes, beachridge complexes, marginal platforms, erosional sandy shore, limestone cliff—pocket beach shore, lobate fluvial delta complex, and elongate fluvial delta complex. Ten of these shore types wholly or partly contain wetlands.

Introduction

The Peel-Harvey estuarine system has been studied from physical, chemical, biological and geological viewpoints, as summarised by Hodgkin *et al* (1980). This estuarine system is now regarded to be of undoubted regional to national significance because of its natural history features, the wealth of avifauna that utilize the area, and the case study of eutrophication that it presents. Significantly, also, large tracts of estuarine shores have been reserved for flora and fauna in recognition of the role of foreshores in fauna conservation.

Most of the work on the Peel-Harvey estuarine system to date has concentrated on subdivision of the sublittoral zone. For instance, Brown *et al* (1980) subdivide the system into formal geographic nomenclature) into components of basins, shelves, sills and deltas. However, the shore types of the estuarine system, encompassing the supralittoral and littoral zones, to date have not been extensively described and classified, particularly from the point of view of development of peripheral wetlands. The objective of this paper is to provide such a description: so that the physical basis for development of peripheral wetland habitats and their flora can be appreciated; so that representative but as yet unsecured tracts of shoreline can be highlighted for potential conservation; and so that the information may provide a framework for later more detailed studies. The approach adopted here in subdividing a large estuary into various shore types can be applied to other estuaries in Western Australia and elsewhere in Australia to provide a basis for differentiating types of peripheral wetlands, and for determining whether there is adequate variety of shore and wetland types secured in reserves.

Materials & methods

This study is based on ground surveys to map the terrain and vegetation units, transects through representative areas (Fig. 1), and interpretation of aerial photographs. The entire shoreline of the Peel-Harvey estuary was surveyed and classified either by boat or by land access. Detailed transect surveys involved: topographic levelling relative to AHD; soil sampling; augering and trenching to 1 to 4m to determine stratigraphy; groundwater sampling; and describing floristics and structure of the vegetation. Selected localities also were cored to 30m using a reverse air circulation corer (Fig. 1). The structure, fabric, texture and composition of soil and stratigraphic samples were described in the laboratory to define the lithologic suites.

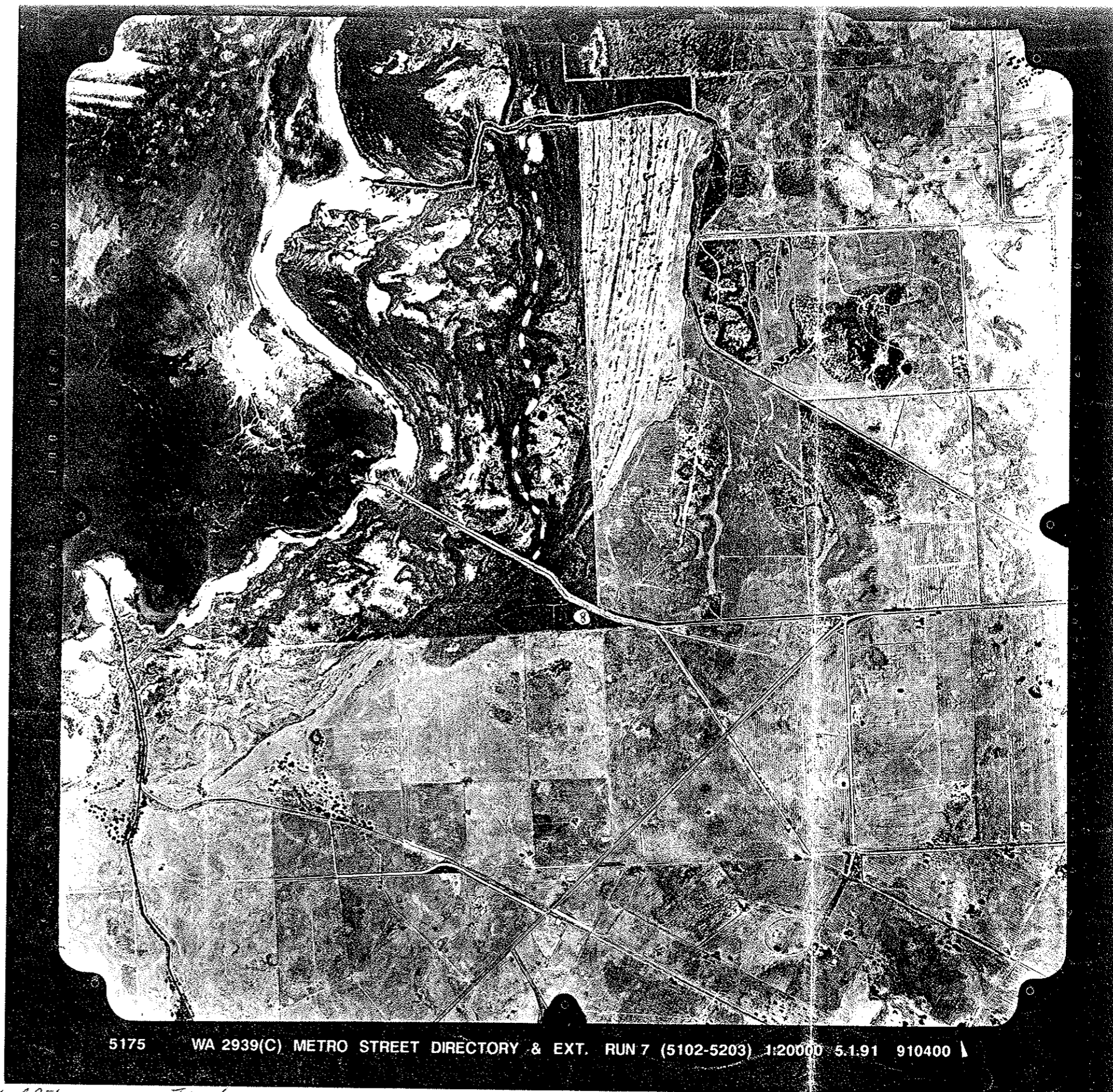
Regional setting

The geomorphology and sediment dynamics and sea level system are described in this paper. More detailed physical features are described by Brown *et al* (1980). Black & Semeniuk (1980) describe the sedimentological system are large

Geomorphic setting

The Peel-Harvey estuary is a compound type barred by a Pleistocene barrier, and essentially is three coalesced estuary systems; its connexion with the sea is mostly choked by an emergent (stranded) tidal delta and channel

Full document available on request



5175 WA 2939(C) METRO STREET DIRECTORY & EXT. RUN 7 (5102-5203) 1:20000 5.1.91 910400

Shed

Melaleuca *krumboltziana* / *platytricha*
Swamp

29/10/93

Note the

P1 Swamp has
herbfield of
Ping Plain species
or drying out

VSP - *Schoenus* sp
- *Agrostis* *canadensis*

Others *Cotula* etc.
Recently burnt no sites.
(1992/93)

MUSTEN 6A7
29/10/93

Note: Track
(Road) in sector between two drains as
shown with dashed line. Cuts across sandy
ridges, occasional damp patch. Along roadside
mainly *Viminaria* scattered shrubs over
Actinostrobus / *Regelia* / *Pericalymna* Shrubland
(\approx 1m). To W patches *Las. ob.* (not visited) P10
Mel. patches to E. *Haloragis* from track.



5173

WA 2939(C) METRO STREET DIRECTORY & EXT. RUN 7 (5102-5203) 1:20000 5.1.91 910400

AUSTEN BAY

29/10/93

Extensive area of mud flats around 1 & 2 and to
south. Mostly Cas. ob. patches and Mel. (various)
Marsilea at (a)



Shirley
FRESH

Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

BUSHLAND AREA: Carriabungle

QUADRAT No. SARAP 02 VEGETATION TYPE Mixed scrubland

DATE TRIP 1/10/93 BOTANIST ML

VOLUNTEERS _____

DATE TRIP 22/10/93 BOTANIST KJH/ML/NG

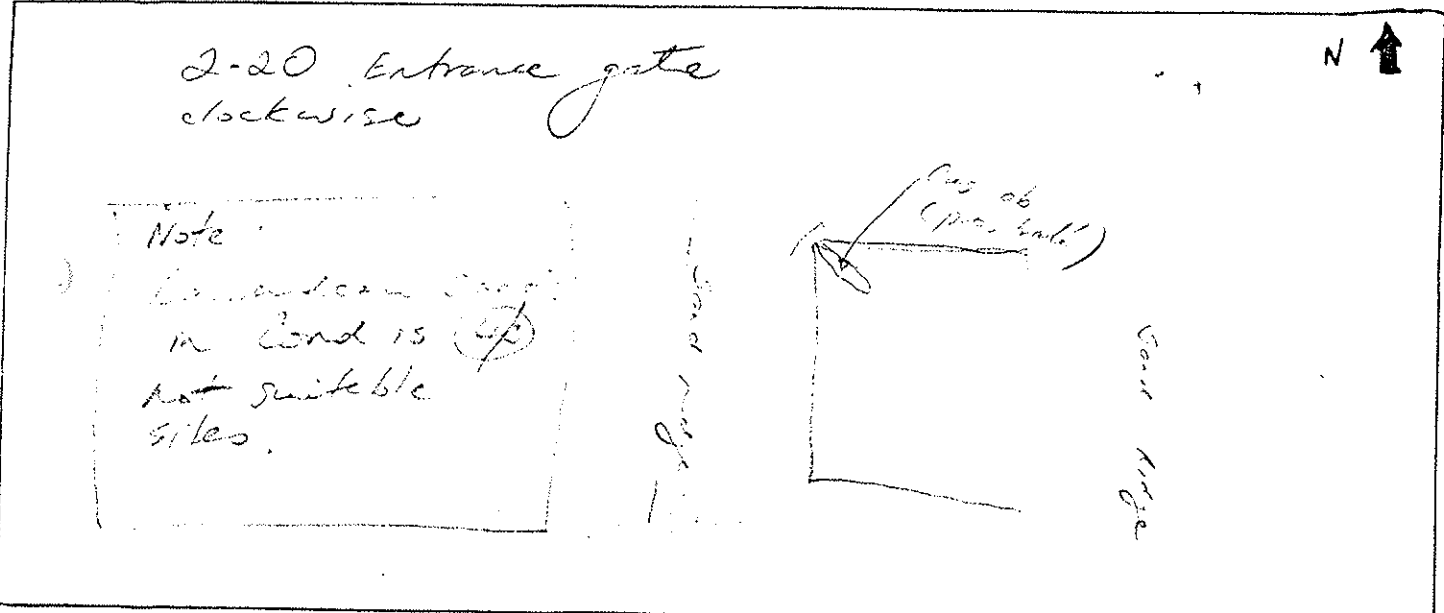
VOLUNTEERS _____

L. LOCATION of the QUADRAT

ADJ Mel vach over
Gehonsteri over

a. Mud Map Draw a sketch of the location of the quadrat

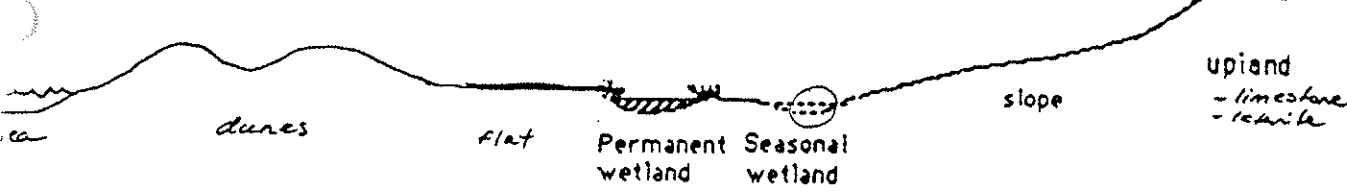
Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURRIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA



b Road Location	c. Latitude	Longitude
	32° 38' 14.6"	115° 43' 08.4"
	Altitude 5m ± 100m	

d. Photograph Photographer's name NG Photo No 35

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope flat gentle steep

Aspect

N	NE	E	SE	S	SW	W	NW
---	----	---	----	---	----	---	----

Surface soil dark brown clay (odoriferous)

Sub-surface soil ? clay Wells a resp = V3
Environ Geol = Qhg

Drainage well mod poor Wet All year winter/spring





Litter (% cover) 80% (Dead algae) % Bare ground 0%





CARRIABUNGLE NATURE RESERVE

3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class


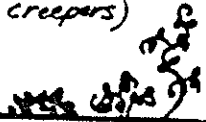


Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

LIFE FORM	TREES		MALLEES	
	> 15m or 5-15m 	Under 5m 	MALLEE SHRUB less than 8m 	MALLEE TREE 8m or more 
COVER CLASS (%)	> 15m	5-15m	10-20%	
Dominant Species		Mel euc Cas ob		

LIFE FORM	SHRUBS					SHRUBS		
	use the height classes indicated over 2m 					2.0-1.5m 	1.5-1.0m 	1.0m - .5m 
COVER CLASS (%)						50-70%		
Dominant Species						Samphires		

Height (metres)

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES	
	under .5m 	under .5m (except creepers) 	over .5m 	under .5m 
COVER CLASS (%)				
Dominant Species				

Height (metres)

4. VEGETATION CONDITION

PRISTINE		Comments ? Evidence eutrophication = algae (?Chora) Herbs absent
EXCELLENT	g	
VERY GOOD	✓	
GOOD		
DEGRADED		

Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

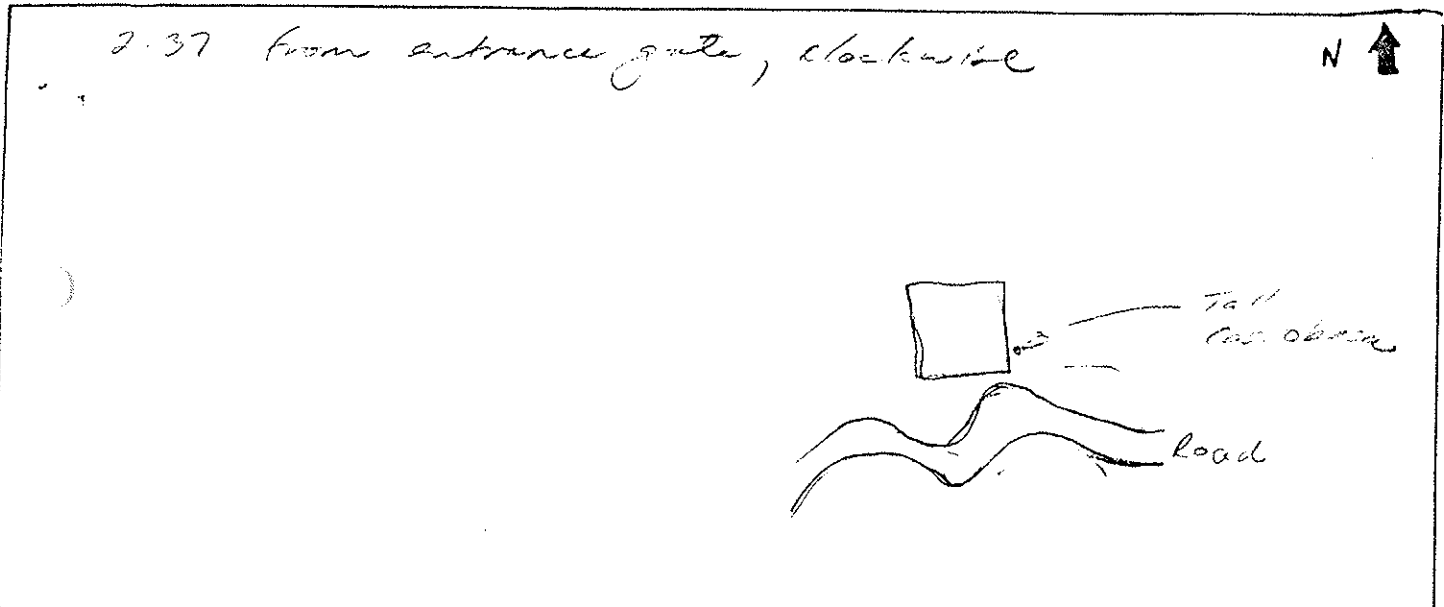
BUSHLAND AREA: _____

QUADRAT No. CA002 02 VEGETATION TYPE _____
 DATE TRIP 4/10/93 BOTANIST NG/BSM/ML
 VOLUNTEERS _____
 DATE TRIP _____ BOTANIST _____
 VOLUNTEERS _____

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURIE SANDPLAIN
 SURVEY. WILDFLOWER SOCIETY OF WA

1. LOCATION of the QUADRAT

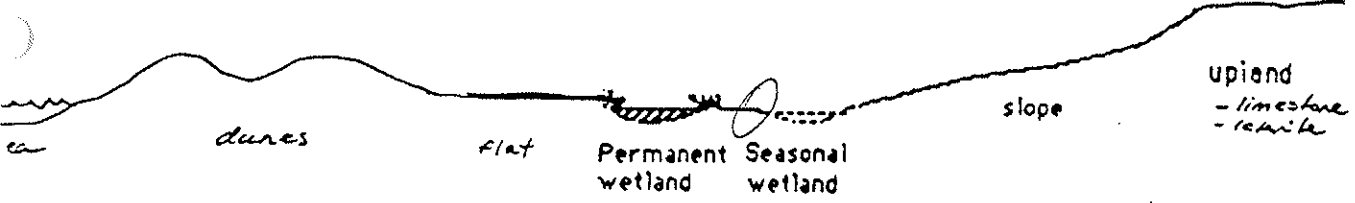
a. Mud Map Draw a sketch of the location of the quadrat



b Road Location <u>Central track</u>	c. Latitude <u>32° 38' 19.6"</u>	Longitude <u>115° 43' 14.1"</u>
		Altitude <u>5m = 100m</u>

d. Photograph Photographer's name NG Photo No 36

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope flat gentle steep

Aspect

N	NE	E	SE	S	SW	W	NW
---	----	---	----	---	----	---	----

Surface soil brown sandy clay with patches brown clay

Sub-surface soil ? clay Wells & Resp = V3
 ES = OK

Drainage well mod poor

Wet All year winter/spring






Litter (% cover) 30%









% Bare ground 20%

3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class


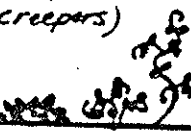


Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

LIFE FORM	TREES <i>Scattered patches low ob patch adjacent</i>	MALLEES		
	<p>under 1.5m 5-15m</p>  	under 5m 	MALLEE SHRUB less than 8m 	MALLEE TREE 8m or more 
COVER CLASS (%)	2-15m 5-15m			
Dominant Species				

LIFE FORM	SHRUBS	<i>use the height classes indicated</i>				SHRUBS
	<p>over 2m</p>    	2.0-1.5m 	1.5-1.0m 	1.0m - .5m 	under 5m 	
COVER CLASS (%)		20-30%				
Dominant Species		Mel. Vin.			Witt. bark.	

Height (metres)

LIFE FORM	BUNCH GRASSES under .5m 	HERBS under .5m (except creepers) 	SEDGES over .5m 		under .5m 
	COVER CLASS (%)		30-50%	Cakama tri 30-50%	10-20%
Dominant Species		Wil back Hydro		Junus Kraus.	Schwarz sp

4. VEGETATION CONDITION

PRISTINE		<p>Comments</p> <p>Fire ~ 5 years previously (small Mel cut ~ 15m)</p>
EXCELLENT	✓	
VERY GOOD		
GOOD		
DEGRADED		

1. SPECIES PRESENCE

QUADRAT No.

10810 42

- work systematically through the vegetation, start with the lowest stratum, i.e. trees
- within each stratum try to record the most common species first and the most uncommon last.
- as each species is collected label it with a numbered tag and use this number on your recording sheet
- indicate if the species is in flower

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIE SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

Trees	No	ID	SHRUBS	No	ID	Herbs	No	ID
<i>Cas obesa</i> (fruiting)			29/10/92			29/10/93		
			<i>Casodanus</i> (terrace) ✓	X		<i>Pogonochloa</i> ? <i>Spicata</i> ✓		
			<i>Ischaemum</i> ✓	(VSP)		<i>Arctostaphylos</i> ✓		
			<i>Myrica</i> spp			<i>Pelargonium</i> seedling ✓		
Mallees			<i>Acacia</i> spp ✓	(VSP)		<i>Scleranthus</i> ✓		
			(Coast) <i>Sporop.</i> ✓	X		<i>Centrolepis</i> (off drum) ✓		
			<i>Sarcocolla</i> ✓	X				
			<i>Phoradendron</i> ✓	X				
			<i>Hemal. Homal.</i>					
			<i>Mitrasia</i>			29/10/93 (ADDITIONS BAC)		
			<i>Centrolepis angulata</i> ✓			<i>Ischaemum cernuum</i> ✓		(VSP)
			<i>Ischaemum glabrum</i> ✓			<i>Ischaemum sidioides</i> ✓		
			<i>Triglochin</i> ✓	(VSP)		<i>Silene humifusa</i> ✓		
			<i>Salix butleri</i> ✓			<i>Centrolepis polygama</i> ✓		(VSP)
SHRUBS			Bunch Grasses					
<i>Mel. rubra</i>			+ bare mud					
<i>Mel. alba</i>								
<i>Mel. viminea</i>								
<i>Mel. uncinata</i> (fruiting)								
<i>Mel. leptocoma</i>								
<i>Mel. formosa</i>								
<i>Mel. aurea</i> ✓								
<i>Mel. melanocoma</i> ✓								
<i>Sarcocolla repens</i> ✓								
<i>S. quinqueflora</i> ✓								
			Herbs					
			<i>Wilsonia</i> ✓			<i>Triglochin mucronata</i> ✓		(VSP)
			<i>Hydrocotyle diandra</i> ✓	X	(VSP)	<i>Ischaemum cernuum</i> ✓		(VSP)
			<i>Conularia latifolia</i> ✓	X	(VSP)	<i>Scleranthus</i> (fruit) ✓		(VSP)
			<i>Brachycome peltata</i> ✓			<i>Laurea juncea</i> ✓		
			<i>Lobelia clata</i> ✓			<i>Juncus kraussii</i> ✓		X
			<i>Stenactis</i> ✓			<i>Schoenus</i> sp off odont ✓		(VSP)
			<i>Polypodium paradoxum</i> ✓			<i>Canna</i> ✓		
			<i>Stenactis</i> ✓			<i>Triglochin mucronata</i> ✓		(VSP)
			<i>Cyperus filiformis</i> ✓	X		<i>Aptelia</i> spp. ✓		X
			<i>Sarcocolla niger</i> ✓			<i>Juncus capitatus</i> ✓		(VSP)
			<i>Drosera gland.</i> ✓			<i>Centrolepis polygama</i> ✓		(VSP)
			<i>Triglochin mucronata</i> ✓	X	(VSP)	<i>Triglochin</i> ✓		(VSP)
						<i>Triglochin wislizenii</i> ✓		(VSP)
						ADD		
						<i>Triglochin</i> ✓		(VSP)
						<i>Schoenus nitens</i> ✓		(VSP)

Wetland Reserve adjacent to

V7 area

Mari Woodland

Kani Flats

Mel. in flats over sedges & herb.
Mn. strabus patches, Mel. unc.

Lake bed salt affected,

Large Melaleuca raphis over estuary

Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

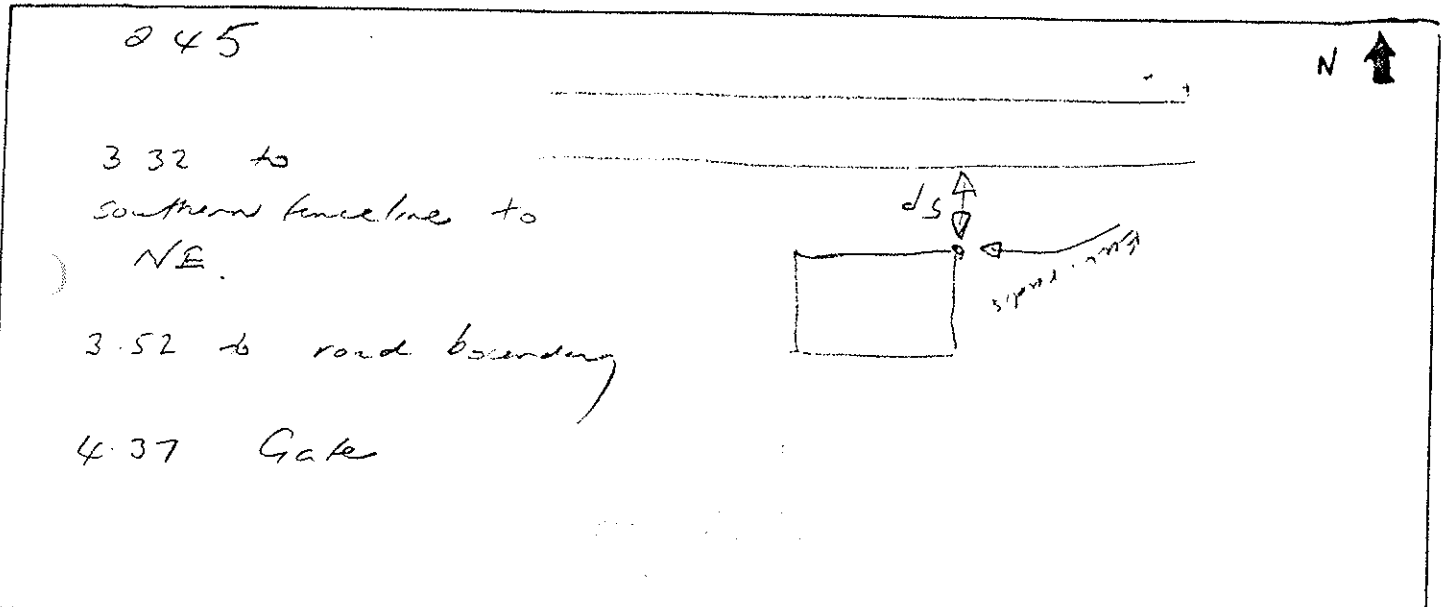
CUSHLAND AREA:

QUADRAT No. CARAB 03 VEGETATION TYPE low mtd.
 DATE TRIP 11/12/93 BOTANIST BJK/NG/ML
 VOLUNTEERS 1
 DATE TRIP 27/10/93 BOTANIST BJK/NG/ML
 VOLUNTEERS _____

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURIE SANDPLAIN
 SURVEY. WILDFLOWER SOCIETY of WA

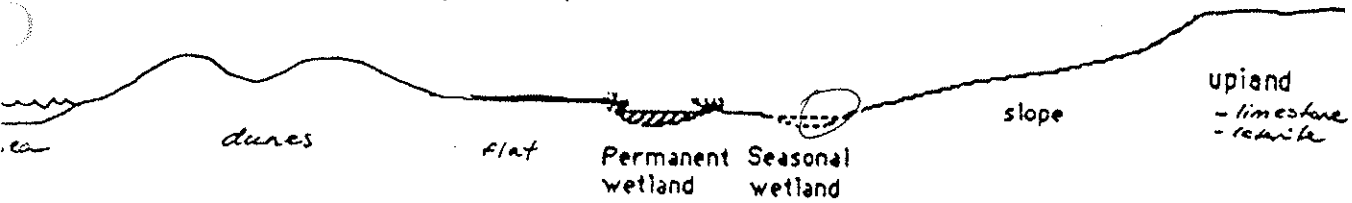
1. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat:



b Road Location	c. Latitude	Longitude
	32° 38' 21.7"	115° 43' 09.7'
d. Photograph Photographer's name <u>NG</u> Photo No <u>2</u>	Altitude 5m ± 100m	

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope flat gentle steep

Aspect

N	NE	E	SE	S	SW	W	NW
---	----	---	----	---	----	---	----

Surface soil dark brown Humus rich sandy loam Environ Code = 04g

Sub-surface soil clay wells = deep B4
 (mapped B2 but B4 veg & soil B4)

Drainage well mod poor

Wet All year winter/spring

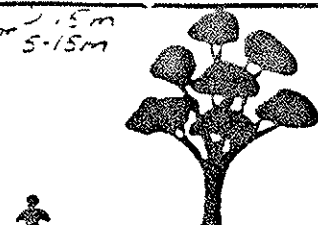


Litter (% cover) 95%



% Bare ground 0%

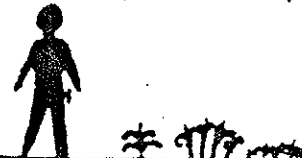
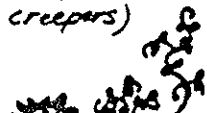


3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class

Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

LIFE FORM	TREES		MALLEES	
	<p>2-15m or 5-15m</p> 	Under 5m	<p>MALLEE SHRUB less than 8m</p> 	<p>MALLEE TREE 8m or more</p> 
COVER CLASS (%)	<p>2-15m</p> <p>5-15m 10-20%</p>	50-70%		
Dominant Species	Euc. rudis	Acacia. salig		

LIFE FORM	SHRUBS	use the height classes indicated				SHRUBS
	<p>over 2m</p> 	2.0-1.5m	1.5-1.0m	1.0m-.5m	under 5m	
COVER CLASS (%)			2-10%			
Dominant Species			Mac. ried.			

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES	
	<p>under .5m</p> 	<p>under .5m (except creepers)</p> 	<p>over .5m</p> 	<p>under .5m</p> 
COVER CLASS (%)		10-20%	2-10%	770%
Dominant Species		Sow. jun Caesia	Gahwa tri	Lopid long Bours. Jun.

4. VEGETATION CONDITION

PRISTINE		<p>Comments</p> <p>Herb/weeds substantial</p> <p>Annual grass weeds</p> <p>? past grazing, frequent fire</p>
EXCELLENT		
VERY GOOD		
GOOD		
DEGRADED		



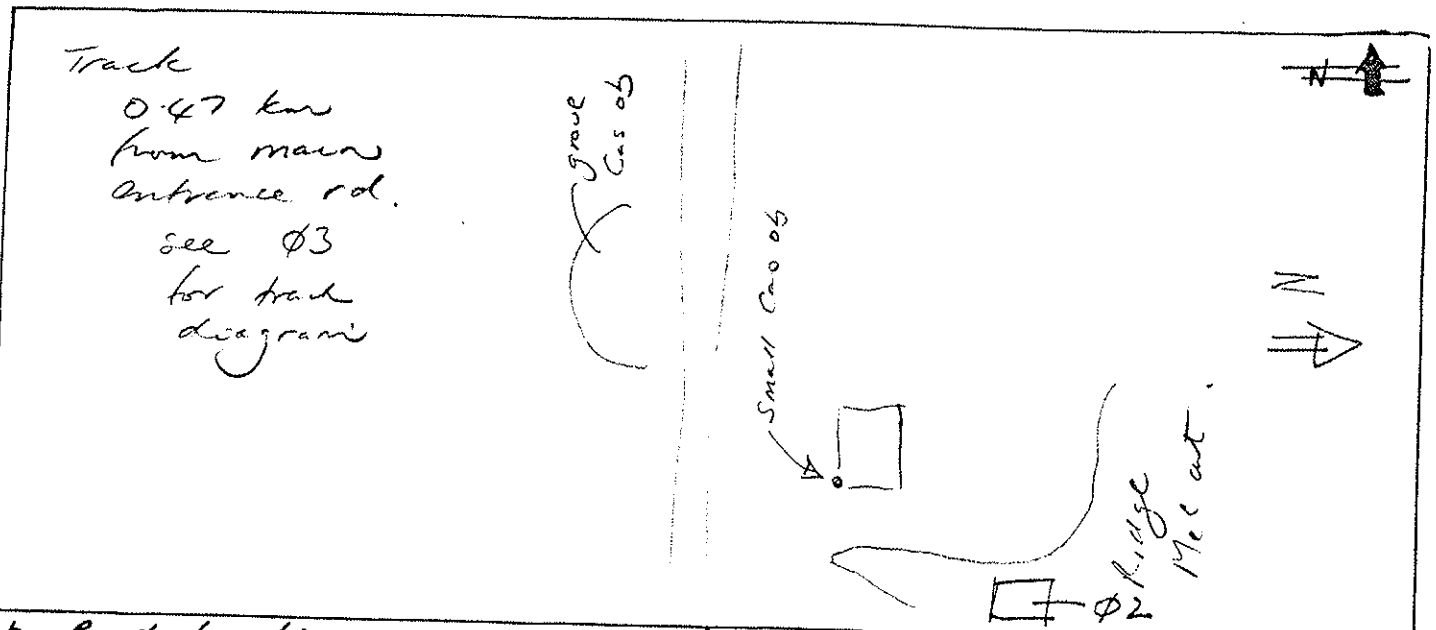
Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

BUSHLAND AREA: AUSTEN BAY NR
 QUADRAT No. AUSTB 01 VEGETATION TYPE Lepturus Sedgeland
 DATE TRIP 9/9/93 BOTANIST NG, ML, BJK
 VOLUNTEERS _____
 DATE TRIP 29/10/93 BOTANIST NG, BJK, ML
 VOLUNTEERS _____

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURIE SANDPLAIN
 SURVEY. WILDFLOWER SOCIETY of WA

1. LOCATION of the QUADRAT

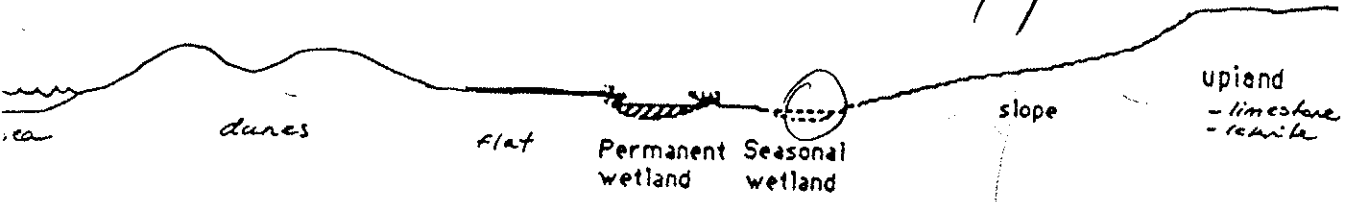
a. Mud Map Draw a sketch of the location of the quadrat



b Road Location	c. Latitude	Longitude
	32° 36' 56.3"	115° 46' 38.7"
		Altitude
		5m ± 100m

d. Photograph Photographer's name NG Photo No 27
NG 10 (29/10)

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response
 Slope flat gentle steep

Aspect	N	NE	E	SE	S	SW	W	NW
--------	---	----	---	----	---	----	---	----

Surface soil sandy clay

Sub-surface soil clay

Drainage well mod poor

Wet All year winter/spring

Litter (% cover) NA

% Bare ground NA

P.T.O.

1. SPECIES PRESENCE

- work systematically through the vegetation, starting with the tallest stratum, i.e. trees
- within each stratum try to record the most common species first and the most uncommon last.
- as each species is collected label it with a numbered tag and use this number on your recording sheet
- indicate if the species is in flower

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURIE SANDPLAIN
 SURVEY. WILDFLOWER SOCIETY of WA

7/9/93
 QUADRAT No.
 AUSTB 01

Trees	No	ID	SHRUBS	No	ID	Herbs	No	ID
Cas	obesa (small sapling)		29/10/93			Calandrinia gracilifera		
			roseo- praeuna			Myriophyllum helichry.		
			Stylid (long long VSP)		(VSP)	Polygonum mult.		
			Glossostigma diandrum			check GREG.		
			Triglochin			single taxa		
			Triglochin			Calitropa		
Mallees			Pezomalepis stricta					
			Pezomalepis (? alep) glabra					
			Utricularia (small purple spread)			= violacea		
			Schoenus sp. FURRY					
			Phyllidictya pygmaea					
			Stylid			= poriscetianthum		
SHRUBS			Tibonanthus ? violacea					
			* Vulpia = NO = Poly sen					
			Bunch Grasses					
			Grass (indet)					
						ADDITION		
						Polygonum tenellum		
						Hordium leporinum		
						Sedges		
						Leptocarpus canes		
						Leptocarpus cristatus		
						Schoenus		
						= nectans		
			Herbs					
			Villarsia submersa		(VSA)			
			Triglochin sp					
			Triglochin procerum					
			Sonchus oleraceus					
			Cotula conyza					
			Villarsia papillata					

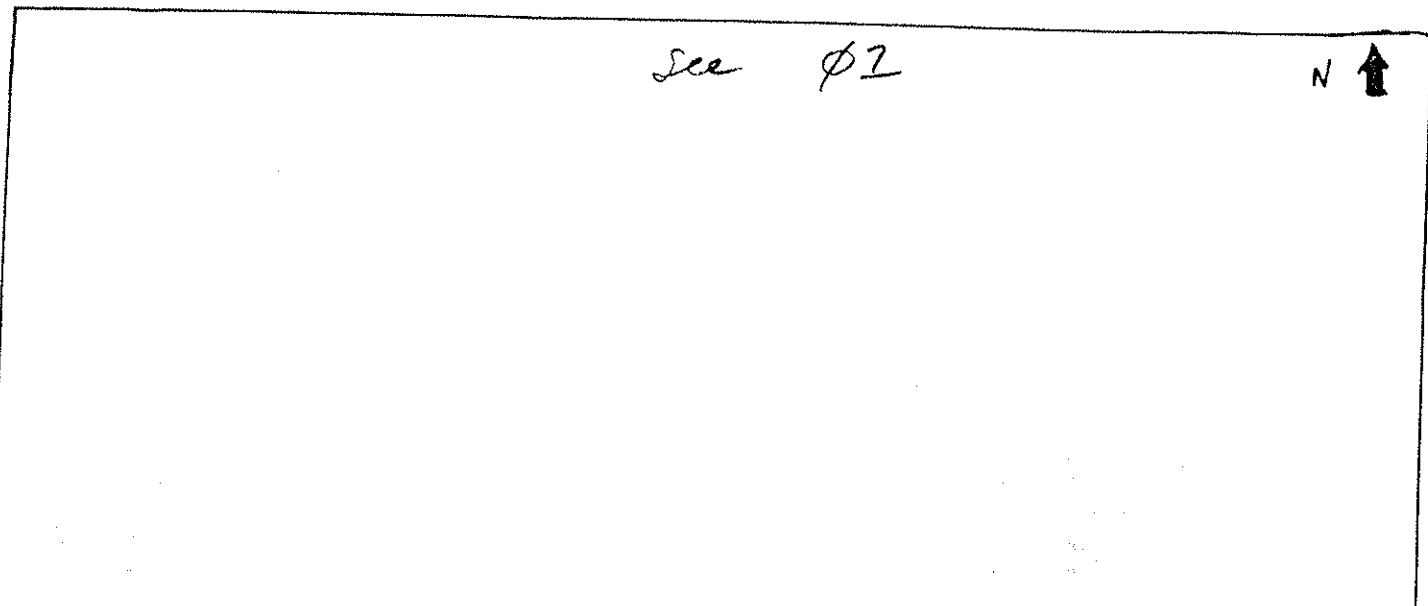
Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

BUSHLAND AREA: WUSTEN CAY NATURE RES
 QUADRAT No. W57B 02 VEGETATION TYPE Mel at Low Op. Wood.
 DATE TRIP 9/2/93 BOTANIST NG/BJK/ML
 VOLUNTEERS _____
 DATE TRIP 29/10/93 BOTANIST NG BJK ML
 VOLUNTEERS _____

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURIE SANDPLAIN
 SURVEY. WILDFLOWER SOCIETY of WA

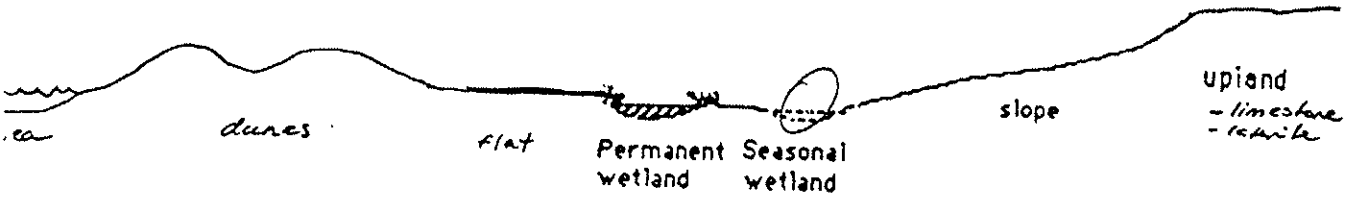
1. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat



b Road Location	c. Latitude	Longitude
	32° 36' 53.1"	115° 46' 40.2"
d. Photograph Photographer's name <u>NG</u> Photo No <u>31</u>	Altitude 5m ± 100m	

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope flat gentle steep

Aspect

N	NE	E	SE	S	SW	W	NW
---	----	---	----	---	----	---	----

Surface soil Sandy clay

Sub-surface soil clay

Drainage well mod poor

Wet All year winter/spring

Litter (% cover) 20%

% Bare ground 10%

EG = Phg
 Wells & keep #8 v2/3
 species of Pin flav.
 ? v8

1. SPECIES PRESENCE

7/9/93

QUADRAT No.
AUST6 02

- work systematically through the vegetation, starting with the tallest stratum, i.e. trees
- within each stratum try to record the most common species first and the most uncommon last.
- as each species is collected label it with a numbered tag and use this number on your recording sheet
- indicate if the species is in flower





Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIE SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

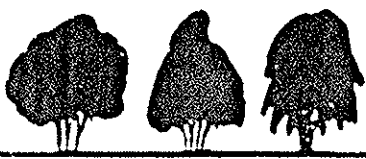




Trees	No	ID	SHRUBS	No	ID	Herbs	No	ID
Mel. eucalyptus	✓		29/10/93			? aleppoides ✓		
			X Calandrinia (upright) ^(VSP) ×			Centrolepis ^(VSP) ×		
			X Phyllocladus (small) pygmaea ✓			Isoplepis old. ✓		X (VSP)
			X Stylidium (tiny pink) longilobose ✓			Trichochloa calcitrapum (VSP) ✓		
			X Stylidium = weed grass ✓			Apollonia cyp. ✓		
Mallees			X Centrolepis (off anist) polygynum ✓			Isoplepis man. ✓		X
? Angianthus preissianus (upright green = FISH 02, see RH) ✓			X Cyperus (tenuis) tenuellus (VSP) ×			Stylidium = off periscelanthem. ✓		
			X Pogonolepis ? stricta NO R41 ✓			Centrolepis aristata ✓		X
			X Schoenus (FURK) sp. ✓			Goodenia foliolosa microantha ✓		
			X ? Blanospora ✓			Muzera stolon ✓		
			X Gnaphosia (Mentha) tenuis (VSP) ✓			Weed grass ✓		
SHRUBS			X Cicindra filiformis ✓			burnsham malle ✓		
Actinocycas calendula (long pos) ✓			X Mitrasacme paradoxa ✓			Siloxera humi ✓		
			X Hydrocotyle parviflora alata ✓			* Ranunculus rosea ✓		
			Bunch Grasses			Utricularia (tiny purple spots) violacea ✓		
			ADDITION (29/10/93)			* Lotus (in pos) suberosus ✓		X
			X Schoenus off/odontocarpus ✓			* Grass - Polypogon tenellus ✓		
			X Juncus capitatus ✓			* Briza minor ✓		X
						Sedges		
						Leptocarpus vestitus ✓		
29/10/93			Herbs			X Centrolepis aristata ✓		X
Glossostigma diandrum			Utricularia menz. ✓					
			Juncus gland. ✓					
			Somolus juncea ✓					
			Hydrocotyle parviflora alata ✓			ADDITION		
			Tribolium violaceum ✓			* Hecus setigera ✓		
			Polypogon multifidus ✓					
			Ranunculus sp ✓					
			Thelypodium sp ✓					
			Gladiolus sp ✓					
			Brachycome brachycomoides ✓					
			Stylidium ✓					

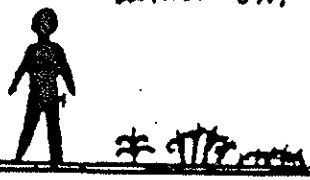
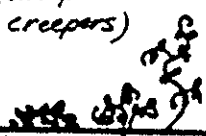


3. VEGETATION STRUCTURE AND COVER Record appropriate cover class

Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

LIFE FORM	TREES	MALLEES		
	> 15m or 5-15m 	Under 5m 	MALLEE SHRUB less than 8m 	MALLEE TREE 8m or more 
COVER CLASS (%)	> 15m 5-15m			
Dominant Species	<i>Cas. obesa</i> scattered <i>aren. site</i>			

LIFE FORM	SHRUBS	use the height classes indicated				SHRUBS
	over 2m 	2.0-1.5m 	1.5-1.0m 	1.0m - .5m 	under 5m 	3m 2m 1m
COVER CLASS (%)						
Dominant Species						

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES		
	under .5m 	wider .5m (except creepers) 	over .5m 	under .5m 	
COVER CLASS (%)		NA 50-70% (25%) 10-20%		10-20%	
Dominant Species		<i>Vill. Sicks</i> <i>Trochloclon sp</i> <i>antholopis 1 sp</i>		<i>Leptocarpus</i>	

4. VEGETATION CONDITION *Asker = Myriosephalus*

PRISTINE	✓	Comments NA
EXCELLENT		
VERY GOOD		
GOOD		
DEGRADED		

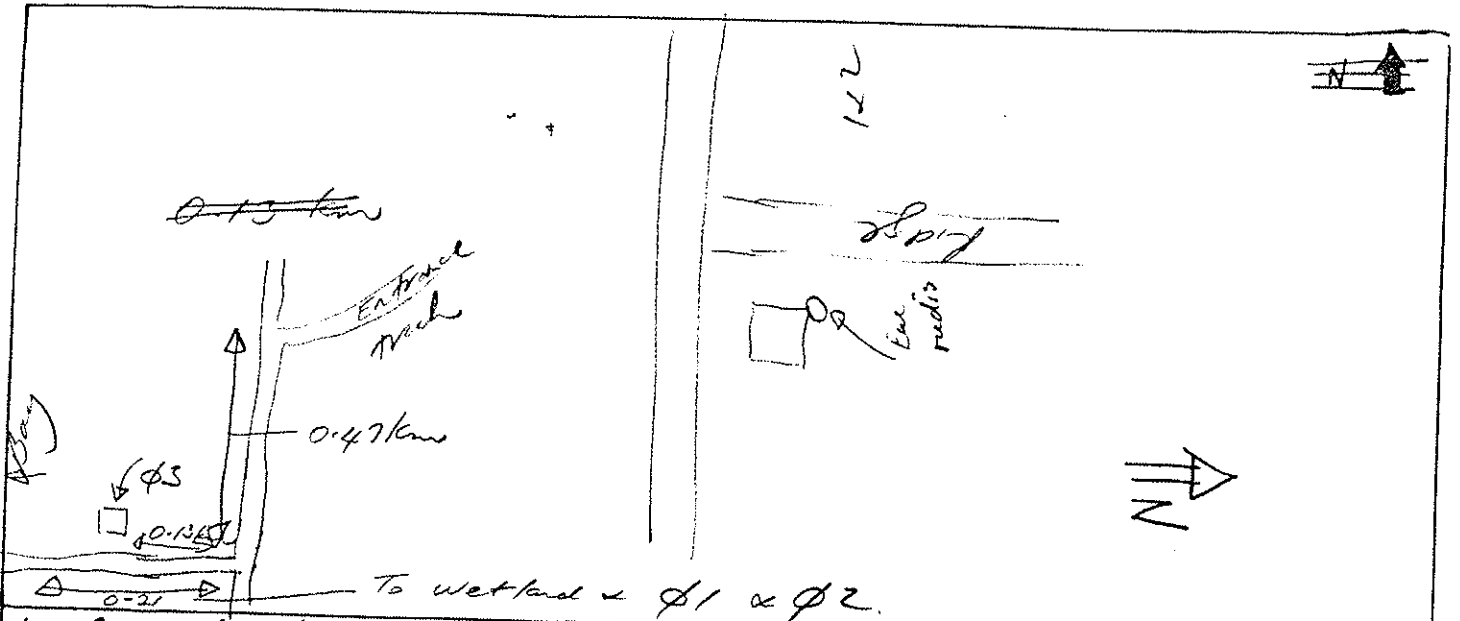
Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

BUSHLAND AREA: MUSTEN BAY NR
 QUADRAT No. AVSTB 03 VEGETATION TYPE Mixed Shrubland
 DATE TRIP 7/9/93 BOTANIST BJK/ML/NG
 VOLUNTEERS _____
 DATE TRIP 29/10/93 BOTANIST BJK/ML/NG
 VOLUNTEERS _____

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURIEAN SANDPLAIN
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1. LOCATION of the QUADRAT

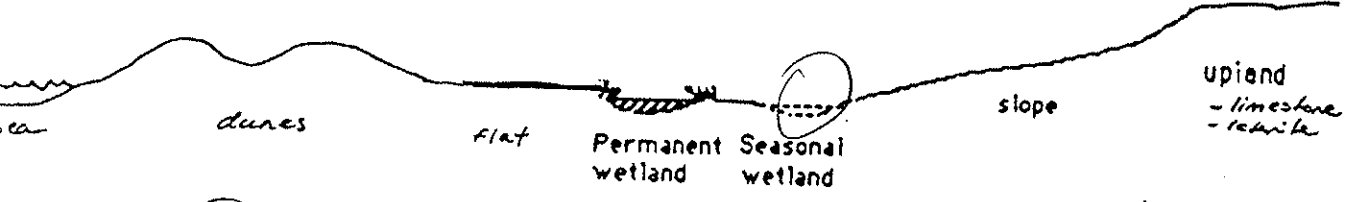
a. Mud Map Draw a sketch of the location of the quadrat



b Road Location	c. Latitude	Longitude
	32° 36' 56.7"	115° 46' 45.2"
	Altitude 5m ± 100m	

d. Photograph Photographer's name NG Photo No 32

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope flat gentle steep

Aspect

N	NE	E	SE	S	SW	W	NW
---	----	---	----	---	----	---	----

Surface soil sandy clay

Sub-surface soil clay

Drainage well mod poor

Wet All year winter/spring

Litter (% cover) 50%

% Bare ground 0%

EG = 0kg
 Wells 2 kop
~~V6a~~ = V6a
 (napped but close to V2/V3)

3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class

Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

LIFE FORM	TREES		MALLEES	
	<p>> 15m or 5-15m</p>	<p>Under 5m</p>	<p>MALLEE SHRUB less than 8m</p>	<p>MALLEE TREE 8m or more</p>
COVER CLASS (%)	> 15m	5-15m	10-20%	
Dominant Species			Mel. euc	

LIFE FORM	SHRUBS					SHRUBS	
	<p>use the height classes indicated</p>						
	over 2m	2.0-1.5m	1.5-1.0m	1.0m - .5m	under 5m		
COVER CLASS (%)							
Dominant Species							

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES	
	<p>under .5m</p>	<p>under .5m (except creepers)</p>	over .5m	under .5m
COVER CLASS (%)		(≈ 30-50%)		20-30%
Dominant Species		> 70% misc Athyridella		Lepto anst

4. VEGETATION CONDITION

PRISTINE	}	Comments No. occ scattered weed
EXCELLENT		
VERY GOOD		
GOOD		
DEGRADED		

Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

BUSHLAND AREA: AVST

QUADRAT No. AVST6 P4 VEGETATION TYPE bank at open road.

DATE TRIP 9/9/93 BOTANIST MG/NG/BJK

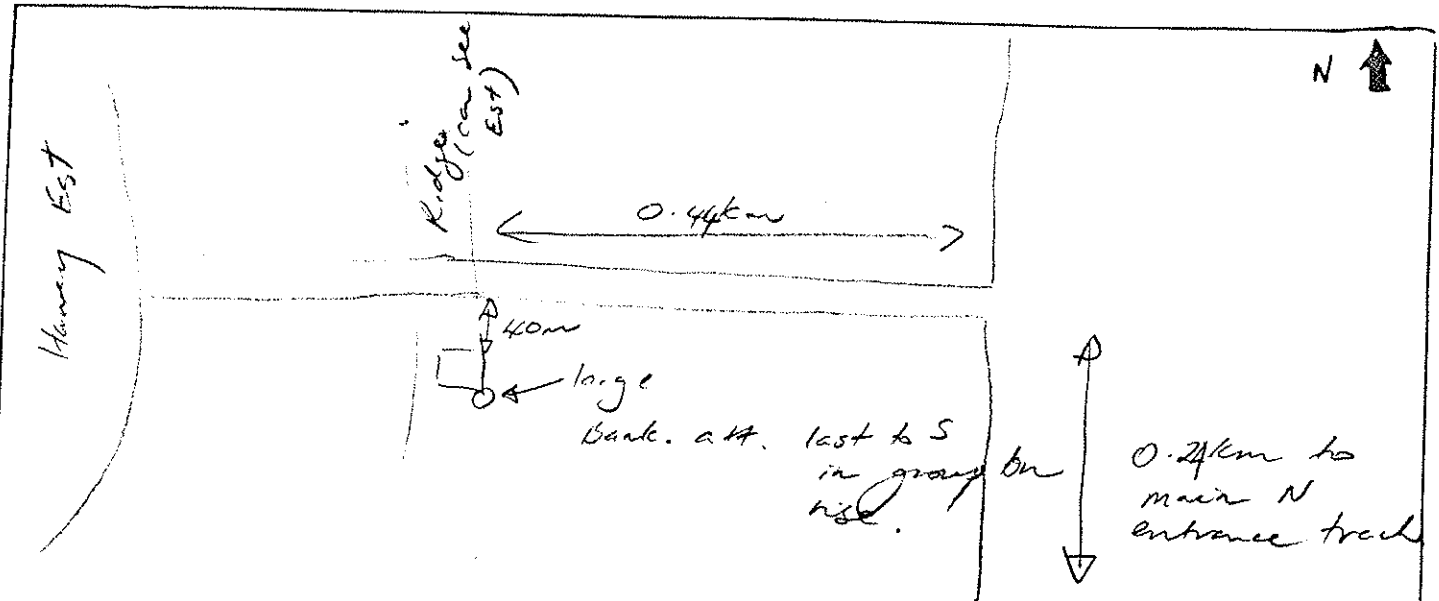
VOLUNTEERS _____

DATE TRIP 29/10/93 BOTANIST NG, JJK/BJK

VOLUNTEERS _____

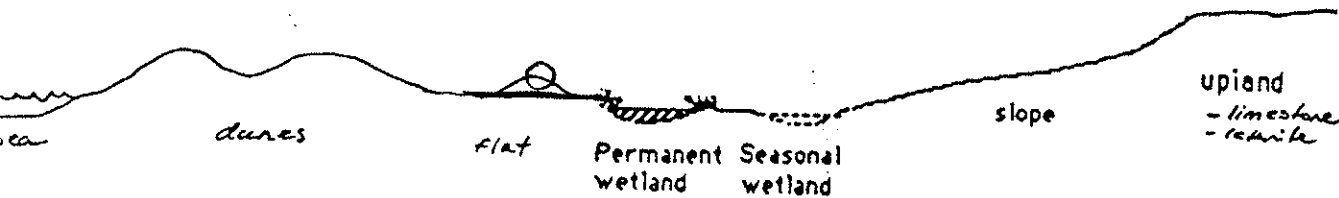
1. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat



b Road Location	c. Latitude	Longitude
0.41 km N/S Track	32° 36' 39.8"	115° 46' 32.8"
d. Photograph Photographer's name <u>NG</u> Photo No <u>33</u>	Altitude 5m ± 100m	

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope flat gentle steep

Aspect	N	NE	E	SE	S	SW	W	NW
--------	---	----	---	----	---	----	---	----

Surface soil gray sand over

EG = Phgb

Sub-surface soil ?

Wellsat = V6

Drainage well mod poor

Wet All year winter/spring

Litter (% cover) 80%

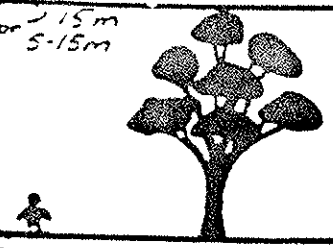



% Bare ground 5%









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MOORE RIVER to JURIE SANDPLAIN
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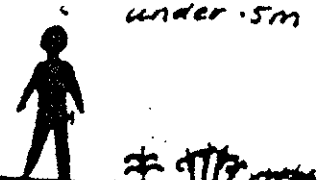
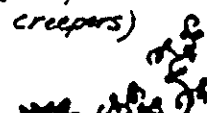


3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class

Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

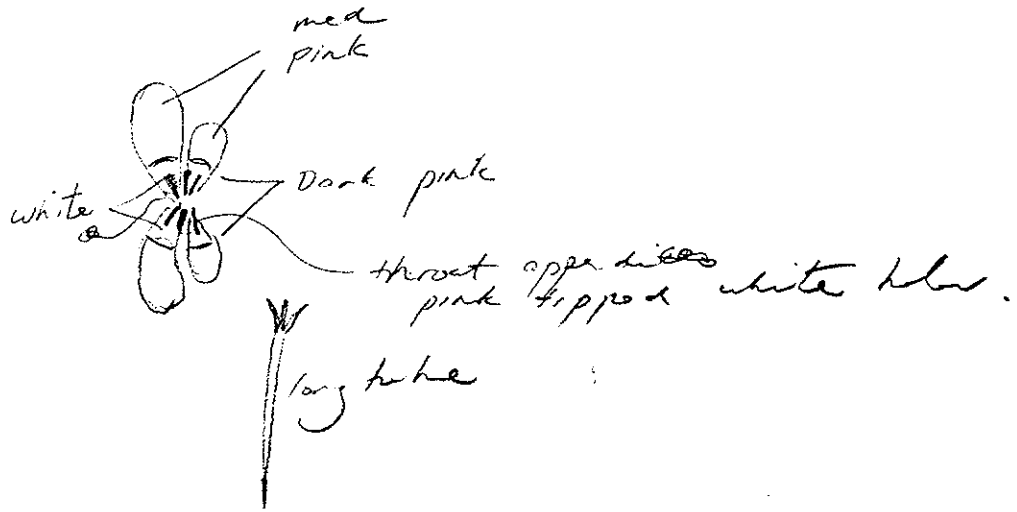
LIFE FORM	TREES	MALLEES					
	<p>15m 10m 5m</p> <p>> 15m 5-15m</p>  <p>under 5m</p>  <p>MALLEE SHRUB less than 8m</p>  <p>MALLEE TREE 8m or more</p> 						
COVER CLASS (%)	> 15m 5-15m						
Dominant Species							

LIFE FORM	SHRUBS	use the height classes indicated				SHRUBS
	<p>3m 2m 1m</p> <p>over 2m</p>     <p>2.0-1.5m</p>  <p>1.5-1.0m</p>  <p>1.0m - .5m</p>  <p>under 5m</p> 					
COVER CLASS (%)				> 70%		
Dominant Species				Mel lat Mel poly Dill. Dill Red. lat.		

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES	
	<p>2.0m 1.5m 1.0m .5m</p> <p>under .5m</p>  <p>under .5m (except creepers)</p>  <p>over .5m</p>  <p>under .5m</p> 			
COVER CLASS (%)		20-30%	20-30%	
Dominant Species		Stylid long * Beet. per! (not basal but)	Lept canus	

4. VEGETATION CONDITION on most of plot

1	PRISTINE		Comments <i>Guticola peruviana</i> 50% late layer
2	EXCELLENT	✓	
3	VERY GOOD		
4	GOOD		
5	DEGRADED		



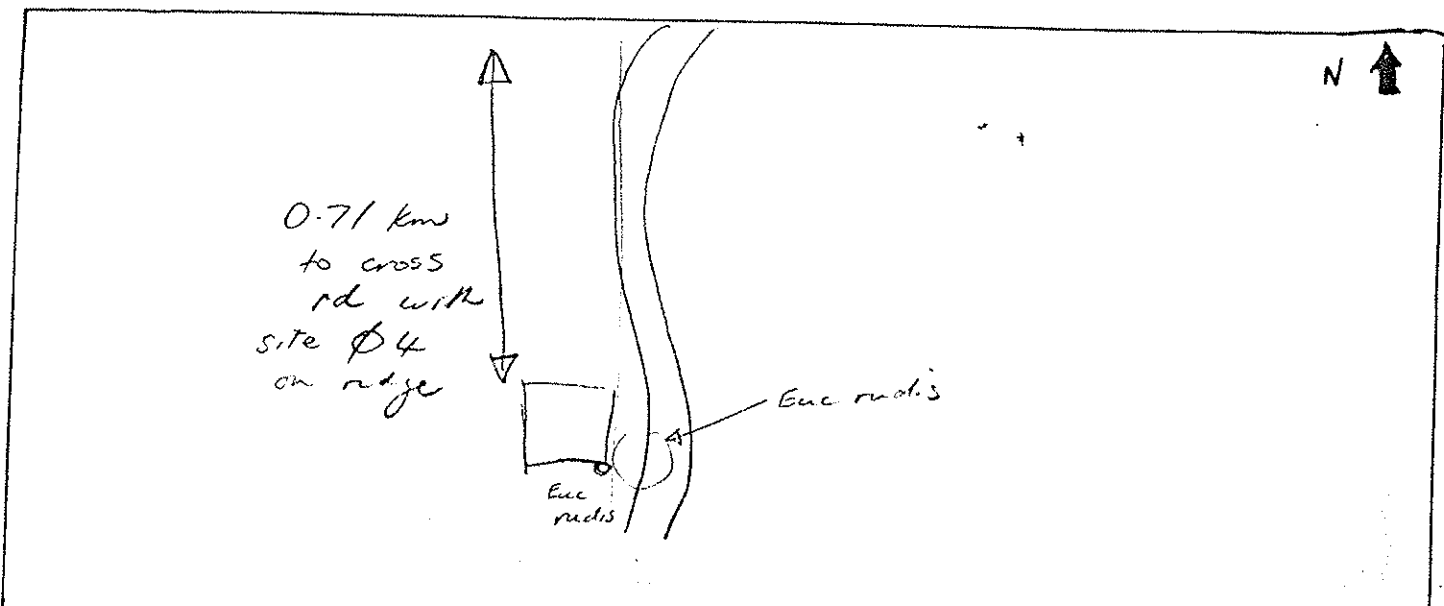
Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

BUSHLAND AREA: WETEN CAY NATSRE PES
 QUADRAT NO. AVTA 05 VEGETATION TYPE _____
 DATE TRIP 9/8/93 BOTANIST NG/BJK/ML
 VOLUNTEERS _____
 DATE TRIP 29/10/93 BOTANIST BJK/NG/ML
 VOLUNTEERS _____

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURIE SANDPLAIN
 SURVEY. WILDFLOWER SOCIETY of WA

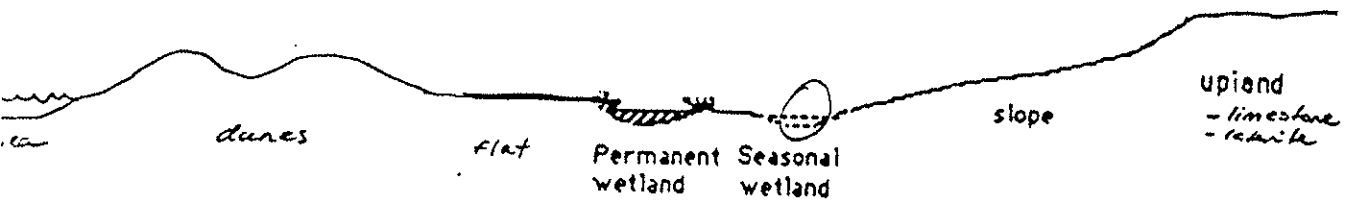
1. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat



b. Road Location	c. Latitude	Longitude
	32° 36' 12.5"	115° 46' 48.0" 50.0"
d. Photograph Photographer's name <u>NG</u> Photo No <u>7 (29/10)</u>	Altitude <u>5m ± 100m</u>	

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope flat gentle steep

Aspect

N	NE	E	SE	S	SW	<u>W</u>	NW
---	----	---	----	---	----	----------	----

Surface soil humus rich sand

Sub-surface soil clay

Drainage well mod poor

Wet All year winter/spring

Litter (% cover) 98%

% Bare ground 0%

EG = 01gb
 Wells resp = ~~10/13~~
 V6a

1. SPECIES PRESENCE

7/9/95

QUADRAT/No.
AUSTO 05

- work systematically through the vegetation, start with the tallest stratum, i.e. trees
- within each stratum try to record the most common species first and the most uncommon last.
- as each species is collected label it with a numbered tag and use this number on your recording sheet
- indicate if the species is in flower





Keighery and Keighery, 1990
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MOORE RIVER to JURIE SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA







Trees	No	ID	SHRUBS	No	ID	Herbs	No	ID
Euc. redis			27/10/93			<i>Goodenia? pulchella</i>		
Ac. saligna (shrub-tree)			<i>Stylidium calcareatum</i>			(no fls hairy lvs)		
Ac. saligna			<i>Levanthoaria pusilla</i>			= <i>Vellia tinctoria</i>		
			<i>Silvanus huius</i>			27/10/93		
			<i>Anthelia cyp.</i>			<i>Stylidium dichot.</i>		
			<i>Cartholapis anstata</i>			<i>Hydrocotyle callitragpa</i>		
Mallees			<i>Loxocarya pubescens</i>			<i>Dillwynia dillwynoides</i>		
			<i>Schoenus niger</i>			<i>Xanthoxea prostrata</i>		
			* <i>Braea minor</i>			<i>Phytolacca esculenta</i>		
			* <i>Valpa</i>					
			* <i>Braea maxima</i>			Other fls prob = <i>Lappula</i>		
			<i>Selasinella</i>			<i>Bonania</i>		
			<i>Aster gracillima</i>			<i>Brasera neesii</i> SSP		
SHRUBS			* <i>Lepidrodia = Restio leptos</i>			<i>Cartholapis aff. densa</i> (not seen)		
<i>Mel. uncinata</i>			<i>Tetrasarus niger</i>			<i>Mitrasacme parviflora</i>		
<i>Tack. curcellata</i>			Bunch Grasses					
<i>Panicum ellis</i>								
<i>Cal. tetralix</i>								
<i>Hakea varia</i>								
<i>Mela. polyg.</i>								
<i>Gomph. glauca</i>								
<i>Aster fascic.</i>								
			Herbs			Sedges		
			<i>Pterostylis vittata</i>			<i>Lepid. long</i>		
			<i>Homalo. homalo.</i>			<i>Hydrocotyle pusilliflora</i> (VSP)		
			* <i>Lappula</i>			<i>Baumea juncea</i> (Schroeder)		
			<i>Micropis</i> sp. 29/10			<i>Schoenus brom.</i>		
			<i>Chaenoscilla conyza</i>			= <i>Trigens</i>		
			* <i>Podocera (weedy)</i>			<i>Pectis leptocarpoides</i>		
			<i>Stylidium brom.</i>			<i>Hylo. esculenta</i>		
			<i>Pterostylis aculeata</i>			ADJ in packet 1/10		
			* <i>Hypochaeris glabra</i>			<i>Mel. vim.</i>		
			<i>Macrostyle</i> sp.			not seen		
			<i>Dactyloctenium lineare</i>			prob not		
			<i>Colobanthus flava</i>					
			<i>Thys. pat.</i>					
						Note: On consideration there appear to be <i>Schoenus subfasciculatus</i> (VSP)		

3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class

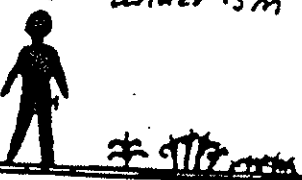
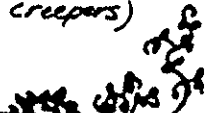


Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

LIFE FORM	TREES		MALLEES	
	> 15m or 5-15m 	Under 5m 	MALLEE SHRUB less than 8m 	MALLEE TREE 8m or more 
COVER CLASS (%)	> 15m 5-15m	2-10%		
Dominant Species	Bank ett			

LIFE FORM	SHRUBS					SHRUBS
	use the height classes indicated					
	over 2m	2.0-1.5m	1.5-1.0m	1.0m - .5m	under 5m	
						
COVER CLASS (%)		10-30%				
Dominant Species		Kunzea Macreid Tahk fure				

Height (metres)

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES	
	under .5m 	wider .5m (except creepers) 	over .5m 	under .5m 
COVER CLASS (%)				30-70%
Dominant Species				Baume's junc Hyp. ensul.

4. VEGETATION CONDITION

PRISTINE		comments appears to have been disturbed ? grazing Kunzea & Tahk too thick.
EXCELLENT	✓	
VERY GOOD	✓	
GOOD		
DEGRADED		

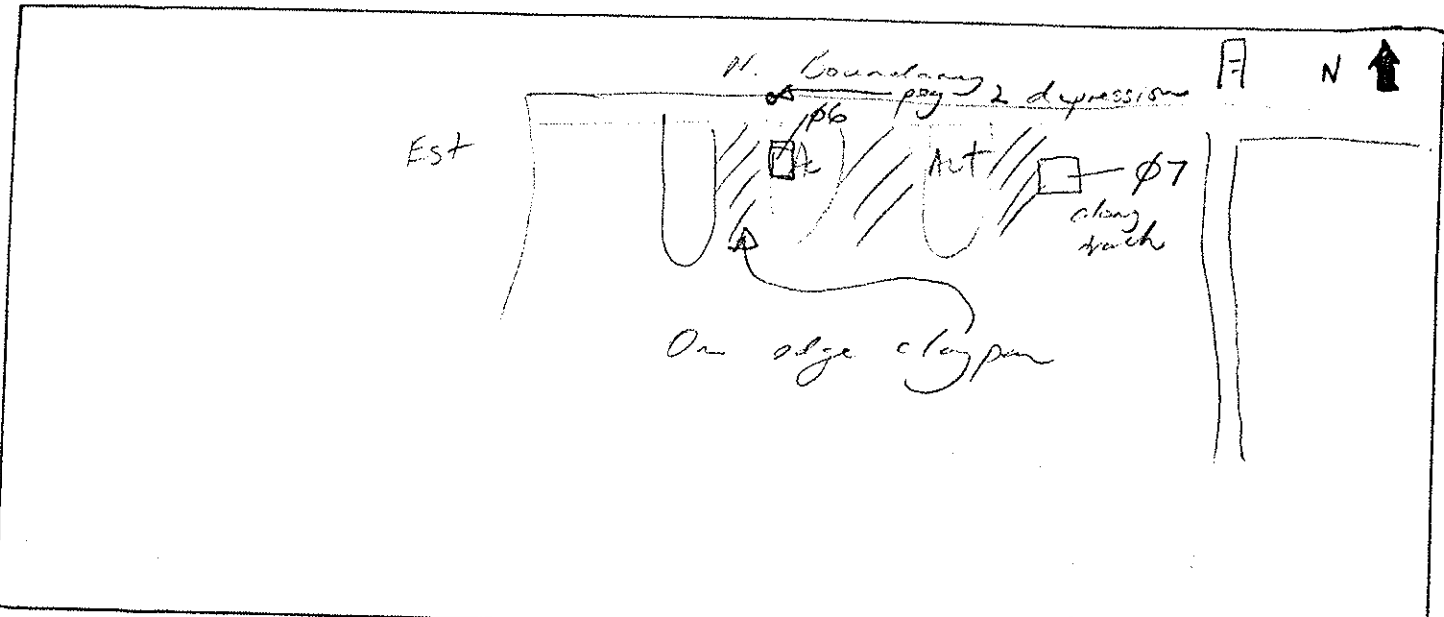
Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

BUSHLAND AREA: MURRAY CAY NAT RES.
 QUADRAT No. AVSTB 06 VEGETATION TYPE Actinotrochilus Shrub.
 DATE TRIP 9/9/93 BOTANIST ML/BSC/NG
 VOLUNTEERS _____
 DATE TRIP 19/10/93 BOTANIST BJK/ML/NG
 VOLUNTEERS _____

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURRIEN SANDPLAIN
 SURVEY. WILDFLOWER SOCIETY OF WA

I. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat:



b Road Location	c. Latitude	Longitude
	32° 36' 06.5"	115° 46' 40.2"
		Altitude
		5m ± 100m

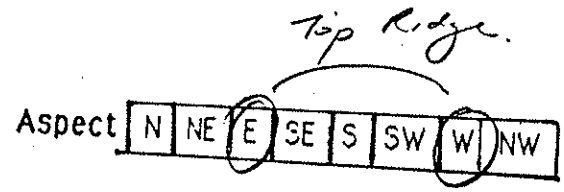
d. Photograph Photographer's name NG Photo No 35

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope flat gentle steep



Surface soil grey sand

Sub-surface soil clay

Drainage well mod poor

Wet All year winter/spring

Litter (% cover) 98%

% Bare ground 0%

EG = Qh96
 Wells & Dep = V6

1. SPECIES PRESENCE

7/7/93

QUADRAT No.
AVSTB 06

- work systematically through the vegetation, start with the tallest stratum, i.e. trees
- within each stratum try to record the **most common species first** and the most uncommon last.
- as each species is collected **label** it with a numbered tag and use this number on your recording sheet
- indicate if the species is in flower




Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIE SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA



Trees	No	ID	SHRUBS	No	ID	Herbs	No	ID
			29/10/93			Hydrocotyle sp FRUIT ✓		
			Grass					
			Silene					
			Fumaria capitata					
			Stylidium pulchellum } = 07			29/10/93		
			Grass			Centropogon pilosa ✓		
Mallees			* Grass			Centropogon drum. ✓		
			Phragmites			Crassula colorata ✓		
			Wahlb. preissi ✓			Sida compressa ✓		
			Waitia citrina ✓			* Ranunculus roseus ✓		
			* Mya cany.			Podolobos angust. ✓		
			Mitrasacme parviflora ✓			* Carex acuta ✓		
			Quineta uvulata ✓			* Sagina apetala ✓		
			Poa micro.					
SHRUBS			Bunch Grasses			29/10/93 ADDITION		
Achras perim. *			* Briza maxima ✓			Hydrocotyle callicarpa ✓		
Mauortomia riedlii (seedling)			* Vulpia					
Kanraa eria								
Mel uncinata								
Gomph. tomentosa								
Acacia saligna								
Phragmites preissi (ISP)								
						Sedges		
						Baumea juncea ✓		
			Herbs					
			* Ursinia antiana ✓					
			* Hyp. glabra ✓					
			Adiantum punctatum					
			Peristylis sanguinea ✓			ADJ		
			Leucosiphon pusilla ✓			Tack stem ✓		
			Caladenia flava ✓					
			* Miltha tenuis ✓					
			Calandrinia ✓			ADJ Claypan		
			* Veronica ✓			Mel. sp.		
			* Pomatoceros			* Cotula cotuloides ✓		
* Many seedlings too			Trinervia sp ✓					
			Quineta uvulata ✓					
			Leucosiphon pilosa ✓					
			Phragmites					
			* Podolobos angust ✓					


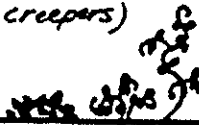

3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class

Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
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LIFE FORM	TREES		MALLEES	
	<p>> 15m 5-15m</p> 	Under 5m	<p>MALLEE SHRUB less than 8m</p> 	<p>MALLEE TREE 8m or more</p> 
COVER CLASS (%)	<p>> 15m 5-15m</p>	2-10%	10-20%	
Dominant Species	Euc. redis	Ac. saligna Euc. red		

LIFE FORM	SHRUBS	use the height classes indicated				SHRUBS
	<p>over 2m</p> 	2.0-1.5m	1.5-1.0m	1.0m-.5m	under 5m	
COVER CLASS (%)	10-20%					70%
Dominant Species	Vim. junce. Ac. saligna Ac. saligna			Mel. unc. Cil lat Paw ellip		

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES
	<p>under .5m</p> 	<p>under .5m (except creepers)</p> 	<p>over .5m</p> 
COVER CLASS (%)			30-50%
Dominant Species			? Hyp. oxs. Loxo pub. Bauhinia juncea

4. VEGETATION CONDITION

PRISTINE) Comments Very few weeds, all scattered.
EXCELLENT	
VERY GOOD	
GOOD	
DEGRADED	

3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class

Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

LIFE FORM	TREES	MALLEES		
	<p>15m 10m 5m</p> <p>under 1.5m or 5-15m</p>	Under 5m	MALLEE SHRUB less than 8m	MALLEE TREE 8m or more
COVER CLASS (%)	2-15m 5-15m			
Dominant Species				

LIFE FORM	SHRUBS	use the height classes indicated				SHRUBS
	<p>3m 2m 1m</p> <p>over 2m</p> <p>2.0-1.5m</p> <p>1.5-1.0m</p> <p>1.0m - .5m</p> <p>under 5m</p>					
COVER CLASS (%)						
Dominant Species	Act pyr 30-70% Acl Ac. satyrus					

Height (metres)

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES	
	<p>2.0m 1.5m 1.0m .5m</p> <p>under .5m</p> <p>under .5m (except creepers)</p> <p>over .5m</p> <p>under 5m</p>			
COVER CLASS (%)				
Dominant Species				

4. VEGETATION CONDITION

PRISTINE		<p>Comments</p> <p>Hot fire, even age in general.</p> <p>Lichen cover ~ 50% site</p>
EXCELLENT	} ✓	
VERY GOOD		
GOOD		
DEGRADED		

Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

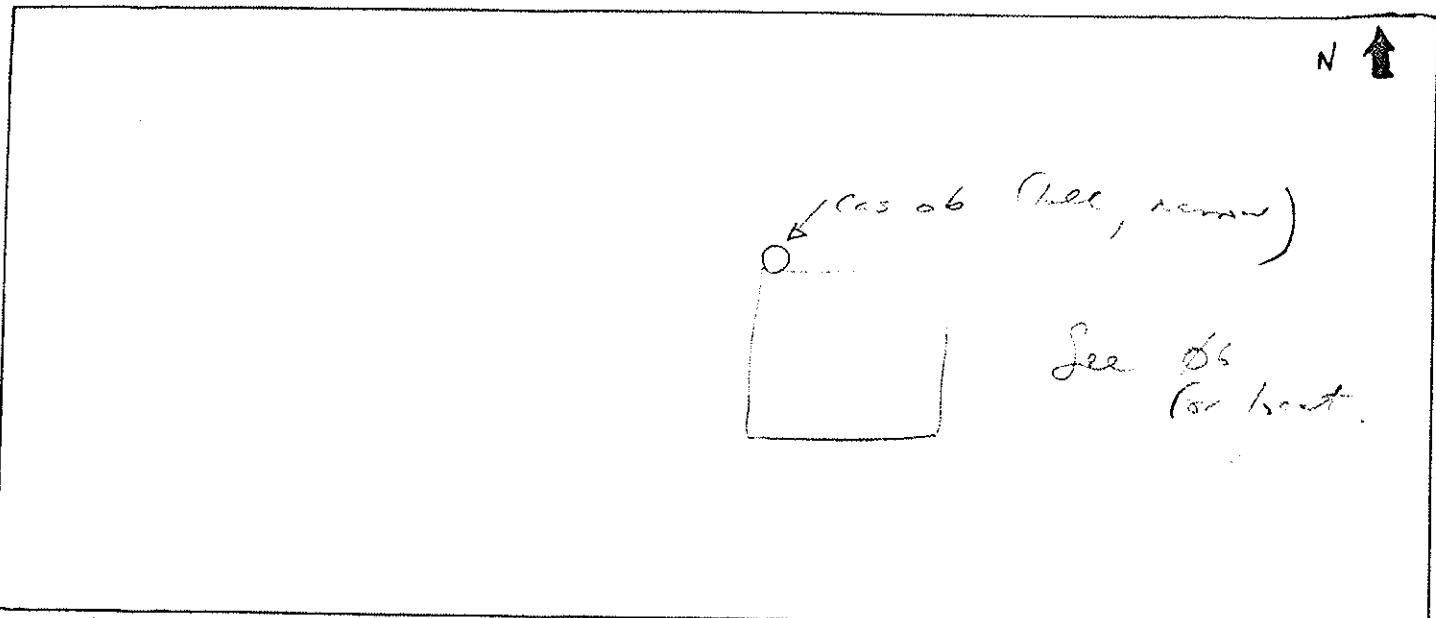
BUSHLAND AREA: MUSTEK BAY

QUADRAT No. MSTK 07 VEGETATION TYPE Melaleuca / vine Shrub
 DATE TRIP 9/9/93 BOTANIST ML / NK / BTK
 VOLUNTEERS 1/1
 DATE TRIP 20/01/93 BOTANIST NG, ML, BTK
 VOLUNTEERS _____

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURRIEN SANDPLAIN
 SURVEY. WILDFLOWER SOCIETY of WA

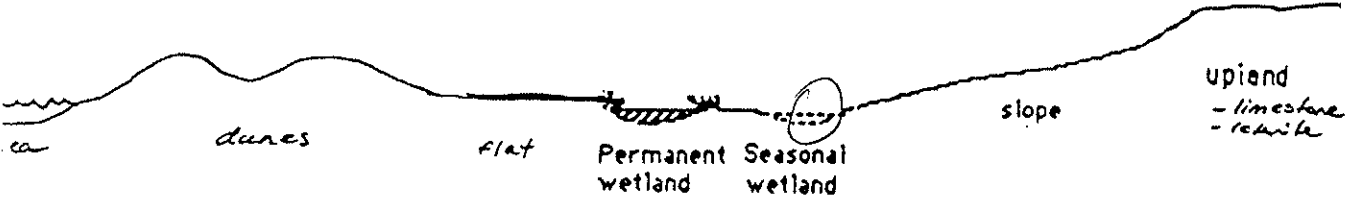
1. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat



b Road Location	c. Latitude	Longitude
	32 36 06.7	115 46 47.2
d. Photograph Photographer's name <u>NG</u> Photo No _____	Altitude 5m ± 100m	

e. Topographic position - Circle position of quadrat FLAT site



2. SITE DATA - Circle the correct response

Slope flat gentle steep

Aspect

N	NE	E	SE	S	SW	W	NW
---	----	---	----	---	----	---	----

Surface soil brown sandy clay

EG = Phg

Sub-surface soil clay

Wells & Resp = V2/V3

Drainage well mod poor

Wet All year winter/spring

Litter (% cover) 50%

% Bare ground 0%

3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class

Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

LIFE FORM	TREES	MALLEES		
	<p>15m 10m 5m</p> <p>> 15m 5-15m</p>	Under 5m	MALLEE SHRUB less than 8m	MALLEE TREE 8m or more
COVER CLASS (%)	2-15m 5-15m			
Dominant Species				

LIFE FORM	SHRUBS	use the height classes indicated				SHRUBS
	<p>3m 2m 1m</p> <p>over 2m</p> <p>2.0-1.5m</p> <p>1.5-1.0m</p> <p>1.0m - .5m</p> <p>under 5m</p>					
COVER CLASS (%)		50-70%				
Dominant Species		Mel unc. Not unc.				

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES	
	<p>2.0m 1.5m 1.0m .5m</p> <p>under .5m</p> <p>under .5m (except creepers)</p> <p>over .5m</p> <p>under .5m</p>			
COVER CLASS (%)	? 20-30%	Moss 60% Herbs 50%		
Dominant Species	Briza max	77% 29/10		

4. VEGETATION CONDITION

1	PRISTINE		<p>Comments</p> <p>Weeds on mounds most predom native herbs very much intact all over, esp in wetter patches.</p> <p>* Briza max * Hyp glabra</p>
2	EXCELLENT	8/1	
3	VERY GOOD		
4	GOOD		
5	DEGRADED		

1. SPECIES PRESENCE

- work systematically through the vegetation, starting with the tallest stratum, i.e. trees
- within each stratum try to record the most common species first and the most uncommon last.
- as each species is collected label it with a numbered tag and use this number on your recording sheet
- indicate if the species is in flower

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURIE SANDPLAIN
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7/17/93
 QUADRAT No.
 N25TB 57

Trees	No	ID	SHRUBS	No	ID	Herbs	No	ID
<i>Cas. obesa</i>	✓		29/10/93			<i>Brachycome</i> sp. <i>bet. doides</i>	✓	
			<i>Siloxenus humil</i>	✓		<i>Phyllobella pygmaea</i>	✓	
			<i>Juncus</i> sp.	✓		<i>Polypompholyx multist.</i>	✓	
			<i>Spald. pulchellum</i>	✓		<i>Scleranthus</i>	✓	
			<i>Stizula nutans</i>	✓		<i>Gnaphosia tenuis</i> 29/10	✓	
Mallees	✓		<i>Stydia</i> sp. <i>large white</i>	✓		<i>Hydrocotyle alata</i> 29/10	✓	Fruit
			<i>Guerdon Hilli</i>	✓		<i>Pericallis</i>	✓	
			<i>Braea nina</i>	✓		29/10/93		
			<i>Condonia (Chilomenis) micrantha</i>	✓		<i>Anagalis anensis</i>	✓	
			<i>Stydia</i> sp. <i>triglypta</i> <i>innund.</i>	✓		<i>Podanthus micr</i>	✓	
			<i>Centropus arist.</i>	✓		<i>Mitrasacme paradoxa</i>	✓	
SHRUBS	✓		<i>Isotopis</i> <i>marq</i>	✓		<i>Calandrinia granulifera</i>	✓	
<i>Mel. duc.</i>	✓		<i>Calandrinia spides</i>	✓		<i>Centropus [alt. drum]</i> = <i>mutica</i>	✓	
<i>Isot. vim</i>	✓		<i>Trachymene pilosa</i>	✓		<i>Blennospora</i>	✓	
<i>Mel. sp.</i>	✓		Bunch Grasses	✓		<i>Schoenus</i> sp. <i>odont</i>	✓	
			<i>Braea maxima</i>	✓		<i>Triglochin (spurred) calcitrapum</i>	✓	(VSP)
			<i>Vulpia myuros</i>	✓		<i>Schoenus</i> <i>discifol</i>	✓	
						<i>Centropus arist.</i>	✓	
						Sedges	✓	
			Herbs	✓		<i>Leptocarpus canus</i>	✓	
			<i>Siloxenus violaceus</i>	✓		<i>Bumelia juncea</i>	✓	
			<i>Braea</i> <i>sp.</i> 29/10 VSP = supported	✓		<i>Lepid. long.</i>	✓	
			<i>Chamaecilla corymb.</i> / pale blue	✓				
			<i>Thysanot</i> <i>sp.</i> = <i>sp.</i> (Mutica)	✓		29/10/93		
			<i>Chamaecilla</i> <i>umbellata</i>	✓		<i>Stydia</i> <i>innund.</i>	✓	
29/10/93 conditions			<i>Thysanot</i> <i>sp.</i>	✓		<i>Myriophyllum echinatum</i>	✓	
<i>Hydrocotyle alata</i>	✓		<i>Chamaecilla</i> <i>umbellata</i>	✓		<i>Thysanot</i> <i>cory</i>	✓	
<i>Schoenus</i> <i>sp.</i> L (FURRY)	✓		<i>Thysanot</i> <i>sp.</i>	✓		<i>Phrygilus</i> <i>alt. name</i>	✓	
<i>Centropus strata</i>	✓		<i>Chamaecilla</i> <i>umbellata</i>	✓		<i>Centropus (small name)</i>	✓	polydip
<i>Stydia</i> <i>sp.</i> <i>triglypta</i>	✓		<i>Thysanot</i> <i>sp.</i>	✓		<i>Pericallis</i>	✓	
<i>Polygonum fenestellat</i>	✓		<i>Chamaecilla</i> <i>umbellata</i>	✓		<i>Lotus</i> <i>angust</i> (sterile)	✓	
<i>Phyllipogon debilis</i>	✓		<i>Thysanot</i> <i>sp.</i>	✓				
			<i>Chamaecilla</i> <i>umbellata</i>	✓				
			<i>Thysanot</i> <i>sp.</i>	✓				
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			<i>Chamaecilla</i> <i>umbellata</i>	✓				

Swan Coastal Plain Survey - SURVEY RECORDING SHEET Please use pencil

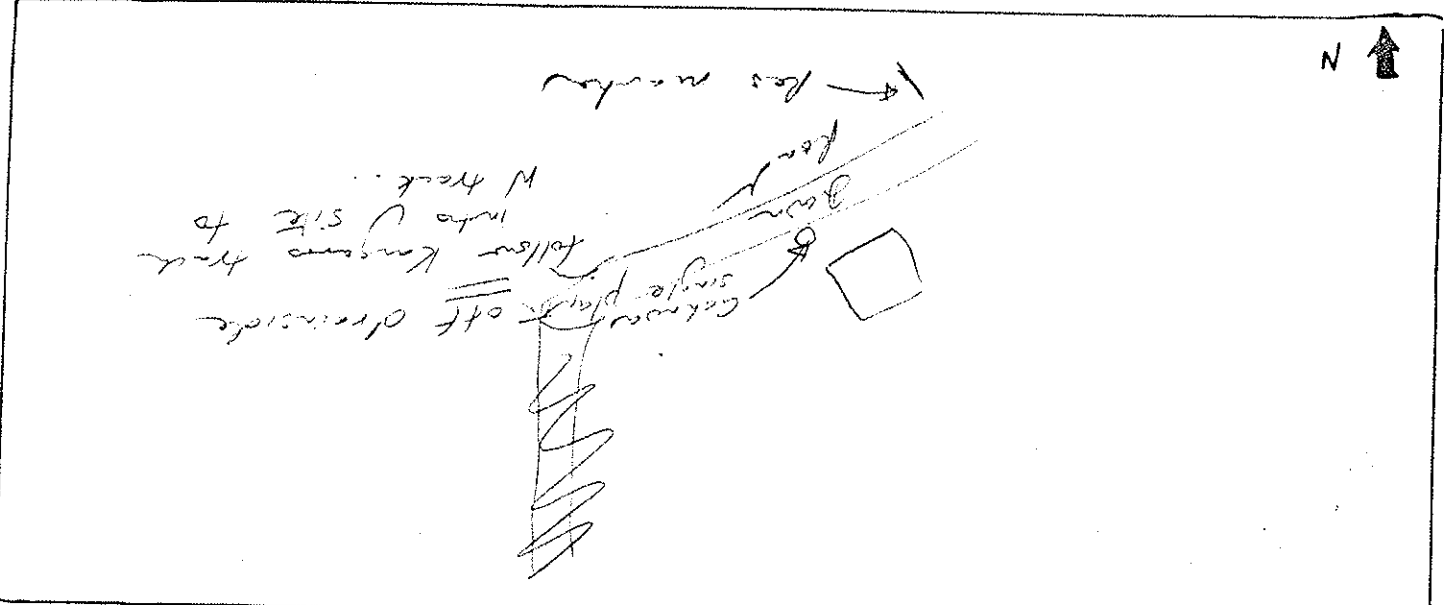
BUSHLAND AREA:

QUADRAT No. A157D 08 VEGETATION TYPE Mel vine Shrubland
 DATE TRIP 7/7/93 BOTANIST BGR/NS/ML
 VOLUNTEERS 1/1
 DATE TRIP 20/10/93 BOTANIST BGR/NS/ML
 VOLUNTEERS 1/1

Keighery and Keighery, 1990
 Adapted from Griffin and Keighery, 1989
 MOORE RIVER to JURIEAN SANDPLAIN
 SURVEY. WILDFLOWER SOCIETY of WA

1. LOCATION of the QUADRAT

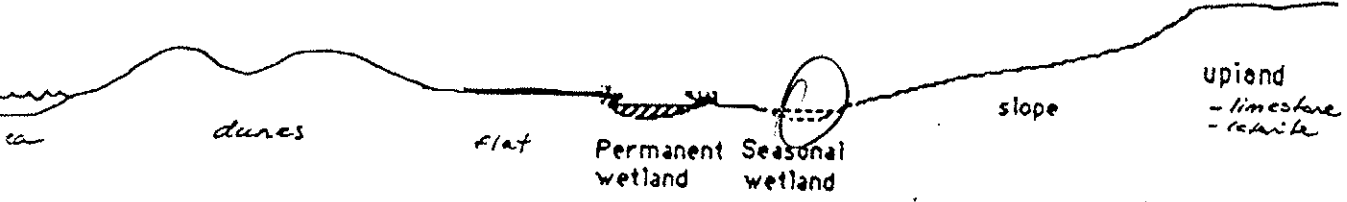
a. Mud Map Draw a sketch of the location of the quadrat



b Road Location	c. Latitude	Longitude
	32° 38' 37.6"	115° 46' 52.1"
		Altitude 5m ± 100m

d. Photograph Photographer's name NG Photo No 017
 (29/10)

e. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope flat gentle steep

Aspect

N	NE	E	SE	S	SW	W	NW
---	----	---	----	---	----	---	----

Surface soil brown clay

Sub-surface soil ii

Drainage well mod poor

Wet All year winter/spring

Litter (% cover) 10%

% Bare ground 0%

ES = 0.9g.
 Wells & Resp = V8/P2
 in joining area.

3. VEGETATION STRUCTURE AND COVER. Record appropriate cover class

Cover Class - percentage classes

0%	under 2%	2-10%	10-20%	20-30%	30-50%	50-70%	over 70%
----	----------	-------	--------	--------	--------	--------	----------

LIFE FORM	TREES	MALLEES		
	<p>15m</p> <p>10m</p> <p>5m</p>	Under 5m	MALLEE SHRUB less than 8m	MALLEE TREE 8m or more
COVER CLASS (%)	> 15m 5-15m			
Dominant Species				

LIFE FORM	SHRUBS	use the height classes indicated				SHRUBS
	<p>3m</p> <p>2m</p> <p>1m</p> <p>Height (metres)</p>	over 2m	2.0-1.5m	1.5-1.0m	1.0m-.5m	under 5m
COVER CLASS (%)		> 70%				
Dominant Species		Mel vim Mel unc				

LIFE FORM	BUNCH GRASSES	HERBS	SEDGES	
	<p>1.0m</p> <p>1.5m</p> <p>1.0m</p> <p>.5m</p>	<p>under .5m (except creepers)</p>	over .5m	under .5m
COVER CLASS (%)		2-10%	10-20%	
Dominant Species		mixed	Lep 7 Voy sei	

4. VEGETATION CONDITION

PRISTINE)	Comments Weeds associated with soil mound
EXCELLENT		
VERY GOOD		
GOOD		
DEGRADED		

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C50 (extracted from Swan Coastal Plain database, Aust sites 1-8, Carab sites 1-3 2/1995).

Department of Environmental Protection System 6 Update: Site Based Flora List C50 Peel Inlet

(extracted from the CALM Swan Coastal Plain database, Aust sites 1-8, Carab sites 1-3, 2/95)

Anthericaceae

Borya scirpoidea
Caesia micrantha "large swamp form" scps (BJK&NG 094)
Caesia occidentalis
Chamaescilla corymbosa
Sowerbaea laxiflora
Thysanotus arbuscula
Thysanotus manglesianus
Thysanotus multiflorus
Thysanotus patersonii
Thysanotus sp. manglesianus/patersonii scps
Thysanotus sp. scps
Thysanotus thyrsoides
Tricoryne elatior

Apiaceae

Apium annuum
Daucus glochidiatus
Eryngium pinnatifidum subsp. "palustre" scps map
Homalosciadium homalocarpum
Hydrocotyle alata
Hydrocotyle callicarpa
Hydrocotyle diantha
Hydrocotyle sp. scps
Trachymene pilosa
Xanthosia huegelii

Asphodelaceae

Bulbine semibarbata

Asteraceae

Angianthus preissianus
* Arctotheca calendula
Blennospora aff. drummondii (golden bracts) scps bjk&ng 20
Brachyscome bellidioides
* Conyza albida
Cotula coronopifolia
Cotula cotuloides
Gnephosis tenuissima - drummondii complex
* Hypochaeris glabra
Millotia tenuifolia
Myriocephalus helichrysoides
Podotheca angustifolia
Podotheca sp. scps
Pogonolepis stricta
Quinetia urvillei
Siloxerus humifusus
* Sonchus oleraceus
* Urospermum picroides
* Ursinia anthemoides
Waitzia citrina

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C50 (extracted from Swan Coastal Plain database, Aust sites 1-8, Carab sites 1-3 2/1995).

Campanulaceae

Wahlenbergia preissii

Caryophyllaceae

* Sagina apetala

Casuarinaceae

Casuarina obesa

Centrolepidaceae

Aphelia cyperoides

Centrolepidaceae

Brizula nutans

Centrolepis alepyroides

Centrolepis aristata

Centrolepis drummondiana

Centrolepis glabra

Centrolepis mutica

Centrolepis pilosa

Centrolepis polygyna

Chenopodiaceae

Atriplex hypoleuca

Halosarcia lepidosperma

Sarcocornia quinqueflora

Colchicaceae

Burchardia umbellata

Convolvulaceae

Wilsonia backhousei

Crassulaceae

Crassula colorata

* Crassula natans

Cupressaceae

Actinostrobus pyramidalis

Cyperaceae

Baumea juncea

* Cyperus tenellus

Gahnia trifida

Isolepis cernua

* Isolepis marginata

Isolepis oldfieldiana

Isolepis stellata

Lepidosperma "coastal terete" scps (BJK&NG 231)

Lepidosperma eastern terete scps (BJK&NG 232)

Lepidosperma longitudinale

Lepidosperma squamatum

Schoenus discifer

Schoenus natans

Schoenus nitens

Schoenus odontocarpus

Schoenus rigens

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C50 (extracted from Swan Coastal Plain database, Aust sites 1-8, Carab sites 1-3 2/1995).

Schoenus sculptus
Schoenus sp. 2 (GJK 5739) scps
Schoenus subfascicularis

Dasypogonaceae

Dasypogon bromeliifolius
Lomandra caespitosa
Lomandra hermaphrodita
Lomandra nigricans
Lomandra preissii
Lomandra suaveolens

Dilleniaceae

Hibbertia hypericoides
Hibbertia racemosa

Droseraceae

Drosera erythrorhiza
Drosera gigantea
Drosera glanduligera
Drosera macrantha
Drosera menziesii subsp. menziesii
Drosera menziesii subsp. penicillaris
Drosera neesii "pink southern form" scps (BJK&NG 096)
Drosera rosulata
Drosera stolonifera

Epacridaceae

Astroloma pallidum
Astroloma sp. scps
Brachyloma preissii

Euphorbiaceae

Poranthera microphylla

Gentianaceae

* Cicendia filiformis

Geraniaceae

Pelargonium sp. scps

Goodeniaceae

Dampiera linearis
Goodenia micrantha
Velleia trinervis

Haemodoraceae

Conostylis aculeata
Conostylis juncea
Haemodorum spicatum
Phlebocarya ciliata
Tribonanthes violacea

Haloragaceae

Myriophyllum echinatum
Myriophyllum sp. scps

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C50 (extracted from Swan Coastal Plain database, Aust sites 1-8, Carab sites 1-3 2/1995).

Hydatellaceae

- Hydatella dioica
- Trithuria bibracteata

Hypoxidaceae

- Hypoxis glabella

Iridaceae

- * Gladiolus caryophyllaceus
- * Gladiolus sp. scps
- Patersonia occidentalis
- * Romulea flava
- * Romulea rosea

Juncaceae

- * Juncus bufonius
- * Juncus capitatus
- Juncus kraussii

Juncaginaceae

- Triglochin calcitrapum
- Triglochin centrocarpum
- Triglochin minutissimum
- Triglochin mucronatum
- Triglochin procerum
- Triglochin sp. scps

Lamiaceae

- Hemiandra pungens
- Hemigenia microphylla

Lauraceae

- Cassytha racemosa

Lentibulariaceae

- Polypompholyx multifida
- Utricularia menziesii
- Utricularia violacea

Lobeliaceae

- Lobelia alata
- * Monopsis debilis

Loganiaceae

- Mitrasacme paradoxa

Lycopodiaceae

- Phylloglossum drummondii

Lythraceae

- * Lythrum hyssopifolia

Menyanthaceae

- Villarsia albiflora
- Villarsia capitata
- Villarsia submersa

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C50 (extracted from Swan Coastal Plain database, Aust sites 1-8, Carab sites 1-3 2/1995).

Mimosaceae

- Acacia lasiocarpa var. bracteolata
- Acacia saligna

Myrtaceae

- Astartea aff. fascicularis sthest
- Calothamnus lateralis
- Eucalyptus marginata
- Eucalyptus rudis
- Kunzea ericifolia
- Melaleuca cuticularis
- Melaleuca incana
- Melaleuca lateriflora var. acutifolia FPR
- Melaleuca lateritia
- Melaleuca leptoclada
- Melaleuca rhapsiophylla
- Melaleuca thymoides
- Melaleuca uncinata
- Melaleuca viminea
- Pericalymma ellipticum

Orchidaceae

- Caladenia flava
- Caladenia menziesii
- Caladenia paludosa Hopper & AP Brown scps
- Caladenia radiata
- Caladenia sp. scps
- Lyperanthus nigricans
- Microtis media warr subsp. media
- Microtis sp. scps
- * Monadenia bracteata
- Prasophyllum sp. scps
- Pterostylis aff. nana scps
- Pterostylis sanguinea
- Pterostylis vittata
- Thelymitra aff. pauciflora scps
- Thelymitra sp. scps

Oxalidaceae

- Oxalis perennans

Papilionaceae

- Bossiaea eriocarpa
- Dillwynia dillwynioides
- Eutaxia virgata
- Gompholobium tomentosum
- Jacksonia furcellata
- Jacksonia sp. Busselton (G.J. Keighery 4482) PN
- Jacksonia sternbergiana
- Kennedia prostrata
- * Lotus angustissimus
- * Lotus sp. scps
- * Lotus suaveolens
- * Trifolium dubium

Philydraceae

- Philydrella pygmaea

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C50 (extracted from Swan Coastal Plain database, Aust sites 1-8, Carab sites 1-3 2/1995).

Phormiaceae

Dianella revoluta

Pittosporaceae

Billardiera variifolia

Poaceae

- Agrostis avenacea
- * Aira caryophyllea
- Amphipogon debilis
- * Briza maxima
- * Briza minor
- * Bromus diandrus
- Cynodon dactylon
- Danthonia occidentalis
- * Ehrharta calycina
- * Ehrharta longiflora
- * Hainardia cylindrica
- * Holcus setiger
- * Hordeum leporinum
- Microlaena stipoides
- * Polypogon monspeliensis
- Polypogon tenellus
- Sporobolus virginicus
- Stipa compressa
- * Vulpia bromoides
- * Vulpia myuros
- * Vulpia sp. scps

Polygalaceae

- Comesperma calymega
- Comesperma virgatum

Polygonaceae

- * Rumex brownii

Portulacaceae

- Calandrinia granulifera
- Calandrinia sp. scps

Primulaceae

- * Anagallis arvensis
- Samolus junceus
- Samolus repens

Proteaceae

- Banksia attenuata
- Banksia ilicifolia
- Hakea varia
- Petrophile linearis
- Stirlingia latifolia

Restionaceae

- Hypolaena exsulca
- Leptocarpus aristatus
- Leptocarpus canus

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C50 (extracted from Swan Coastal Plain database, Aust sites 1-8, Carab sites 1-3 2/1995).

Leptocarpus coangustus
Leptocarpus roycei ms sthst
Lepyrodia glauca
Loxocarya fasciculata
Loxocarya pubescens
Lyginia barbata
Restio leptocarpoides

Rubiaceae

Opercularia hispidula

Santalaceae

Exocarpos sparteus

Scrophulariaceae

* Bellardia trixago
Glossostigma diandrum
Gratiola peruviana
* Veronica arvensis
Veronica sp. scps

Selaginellaceae

Selaginella gracillima

Stylidiaceae

Levenhookia pusilla
Stylidium brunonianum
Stylidium calcaratum
Stylidium dichotomum
Stylidium ecorne
Stylidium inundatum
Stylidium longitubum
Stylidium mimeticum
Stylidium periscelanthum
Stylidium pulchellum
Stylidium roseo-alatum
Stylidium roseonatum
Stylidium schoenoides
Stylidium sp. scps

Tremandraceae

Tetrateca hirsuta "glabrous" scps

Violaceae

Hybanthus floribundus

Xanthorrhoeaceae

Xanthorrhoea preissii

Zamiaceae

Macrozamia riedlei

R. A. O. U. TRACKING DATABASE

11/05/96

PARK SIGHTINGS REPORT

Page No.

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Peel Inlet (C50)

ORDER:	REF:	BIRD NAME	NO. SIGHTINGS
0007	0009	Stubble Quail	1
0022	0203	Black Swan	10
0025	0207	Australian Shelduck	13
0028	0202	Australian Wood Duck	3
0032	0208	Pacific Black Duck	13
0037	0211	Grey Teal	12
0037	0210	Chestnut Teal	1
0041	0061	Australasian Grebe	2
0042	0062	Hoary-headed Grebe	2
0092	0069	Wedge-tailed Shearwater	1
0124	0104	Australasian Gannet	1
0128	0101	Darter	12
0129	0100	Little Pied Cormorant	13
0131	0099	Pied Cormorant	7
0132	0097	Little Black Cormorant	10
0133	0096	Great Cormorant	8
0135	0106	Australian Pelican	13
0139	0188	White-faced Heron	13
0140	0185	Little Egret	12
0145	0187	Great Egret	13
0150	0192	Nankeen Night Heron	1
0157	0179	Australian White Ibis	9
0160	0182	Yellow-billed Spoonbill	6
0163	0241	Osprey	5
0165	0232	Black-shouldered Kite	4
0170	0228	Whistling Kite	4
0174	0219	Swamp Harrier	4
0187	0240	Nankeen Kestrel	7
0221	0152	Black-tailed Godwit	2
0223	0153	Bar-tailed Godwit	2
0225	0150	Whimbrel	2
0226	0149	Eastern Curlew	2
0231	0158	Common Greenshank	2
0235	0157	Common Sandpiper	2
0236	0155	Grey-tailed Tattler	2
0238	0129	Ruddy Turnstone	2
0240	0165	Great Knot	2
0241	0164	Red Knot	2
0244	0162	Red-necked Stint	2
0249	0163	Sharp-tailed Sandpiper	2
0251	0161	Curlew Sandpiper	2
0255	0934	Ruff	1
0265	0130	Pied Oystercatcher	6

0267	0146	Black-winged Stilt		10
0268	0147	Banded Stilt		4
0269	0148	Red-necked Avocet		6
0271	0136	Grey Plover	2	11
0275	0143	Red-capped Plover		8
0278	0141	Greater Sand Plover	2	4
0282	0144	Black-fronted Dotterel		1
0283	0138	Hooded Plover	2	1
0294	0126	Pacific Gull		1
0297	0125	Silver Gull		13
0302	0111	Gull-billed Tern		3
0303	0112	Caspian Tern		13
0305	0115	Crested Tern		11
0306	0113	Roseate Tern		1
0307	0953	Common Tern		2
0313	0118	Fairy Tern		6
0316	0110	Whiskered Tern		1
0324	0957	Rock Dove		5
0326	0988	Laughing Turtle-Dove		8
0330	0034	Common Bronzewing	3	2
0356A	1266	White-tailed Black-Cockatoo	1	1
0359	0273	Galah		4
0378	0278	Regent Parrot		2
0385	0289	Western Rosella	4	1
0386	0294	Australian Ringneck		10
0387	0290	Red-capped Parrot		7
0446	0322	Laughing Kookaburra		6
0451	0326	Sacred Kingfisher		3
0453	0329	Rainbow Bee-eater		3
0471	0532	Splendid Fairy-wren	3	8
0478	0526	Southern Emu-wren	3	1
0492	0976	Striated Pardalote		4
0512	0465	Weebill	3	1
0517	0463	Western Gerygone		5
0524	0476	Inland Thornbill	3	3
0531	0486	Yellow-rumped Thornbill	3	5
0537	0638	Red Wattlebird		10
0561	0608	Singing Honeyeater		9
0583	0597	Brown Honeyeater		7
0587	0631	New Holland Honeyeater	4	1
0607	0448	White-fronted Chat		4
0644	0549	Varied Sittella	3	1
0650	0398	Golden Whistler	3	1
0653	0401	Rufous Whistler		5
0671	0415	Magpie-Lark		12
0673	0361	Grey Fantail		7
0676	0364	Willie Wagtail		10
0678	0424	Black-faced Cuckoo-shrike		9
0691	0546	Black-faced Woodswallow	4	1
0695	0702	Grey Butcherbird		8
0698	0705	Australian Magpie		11

			Page No.	3
0701	0697	Grey Currawong 4	1	
0706	0930	Australian Raven	11	
0725	0647	Richard's Pipit	10	
0760	0564	Mistletoebird	1	
0763	0357	Welcome Swallow	12	
0765	0359	Tree Martin	8	
0772	0522	Little Grassbird	4	
0781	0574	Silvereye	8	

*** END OF REPORT ***

(1) 1
(2) 16
(3) 8
(4) 5

SUMMARY REPORT

TOTAL BIRDS SIGHTED : 102

TOTAL NUMBER OF CARDS : 13

*** END OF SUMMARY ***

AREA INFORMATION

System 6 Area (C or M) or Update Area (Update) *USO Creevey Islands*

Conservation Area	
Nature Reserve	<i>Creevey Island + Channel Island</i>
Reserve No	<i>8185</i>
National Park	
Reserve No	
Local Government	
Reserve No	
Other	<i>private</i>
Proposed Conservation Areas	
Local Government	
Reserve No	
Other	

Conservation Area

Nature Reserve
Reserve No
National Park
Reserve No
Local Government
Reserve No
Other

TOTAL AREA *302.188 + 9.25 + 14.25*

Bushland Area	<i>sys 6 325.688</i>	hectares	<i>CAUM 86.25</i>
Completely Degraded	<i>3.5 ha</i>		<i>1.25 ha</i>

AREA MAPPED FLORISTIC UNITS

Units	Site (Condition)	Code	Bound	boundaries	
				sys 6	CAUM
Area (ha)	Area (ha)				
	<i>NO SITES</i>				
	<i>estuarine? ? samphires</i>			<i>92.563</i>	<i>43.5</i>
	<i>mud</i>			<i>19.75</i>	<i>19.75</i>
	<i>estuarine? - Cas obesa, ? Mel cuticularis</i>			<i>19.375</i>	<i>13.5</i>
	<i>H₂O</i>			<i>19.5</i>	<i>9.5</i>

Boundaries determined by use of

aerial photograph	<i>Metro Street Directory on SS 5131, 6 5035</i>
orthophoto	<i>2032 W NE Aug 1991</i>
vegetation map	
soil map	

5/1/91

AREA INFORMATION

System 6 Area (C or M) or Update Area (Update) **C50 - South**

Conservation Area	
Nature Reserve	WA Wildlife Act
Reserve No	(7502, 2707) B4990, B24036, C28087 (estuary)
National Park	not vested
Reserve No	
Local Government	
Reserve No	
Other	Private
Proposed Conservation Areas	
Local Government	
Reserve No	
Other	

Conservation Area

Nature Reserve
Reserve No
National Park
Reserve No
Local Government
Reserve No
Other

TOTAL AREA

Syst 6 / CALM

Bushland Area	1492.5 / 817.562	hectares
Completely Degraded	375.843 / 40.218	
grazed + weed infested	446.439 / 103.063	
	eutrophication, weeds, grazing, freq. fire	

AREA MAPPED FLORISTIC UNITS

boundaries

Units	Site (Condition)	Code	h ^{AUST} + CARAB	Bound	Area (ha)	Area (ha)
5	AUST 04 (2)	05 (1.5)	06 (2.5)		292.717	297.342
7	AUST 01 (1)	02 (1.5)	07 (2)		186.563	185.88
	08 (1.5)	CARAB 02 (2)				
11	AUST 03 (2)	CARAB 03 (2.5)			100.625	100.125
15	CARAB 01 (2.5)				0.5	0.5
221a					89.813	89.813
estuary					1686.66	1686.66

Boundaries determined by use of

aerial photograph	MRA Run 6S 5760 101-127 MPA Run 6
orthophoto	2032 1 NW, SW, VSE
vegetation map	
soil map	

S185
5/1/91

Family group	Plant Taxa	Vegetation Unit					
		Bch	clyp	WM	sand	j/m	D

FLORA OF AUSTIN BAY NATURE RESERVE.

Key

Column 1 Family group (listed alphabetically)

Column 2 Plant Taxa (species, sub-species and varieties)
 (listed alphabetically in family groups which are also listed alphabetically)
 * Weed species
 ms manuscript name (shown after the name)

Column 3&4 Vegetation Unit
 Bch = beach flats and dunes
 clyp =clayflats
 WM = wetland mosaic areas dominated by Melaleuca species
 sand = Bushland upland areas dominated by Tuart, Actinostrobus, Banksia
 j/m = Bushland upland areas dominated by Tuart, Banksia and Jarrah, Marri
 D = Disturbed areas

Family group	Plant Taxon	Vegetation Unit					
		bch	clyp	WM	sand	j/m	D
Aizoaceae							
*	Carpobrotus aequilaterus	•				•	
*	Carpobrotus edulis	•					
	Carpobrotus virescens	•					
	Macarthuria australis				•		
*	Tetragonia decumbens	•			•		
Amaryllidaceae							
*	Amaryllis belladonna	•					•
*	Narcissus tazetta						•
Amaranthaceae							
	Alternanthera nodiflora			•			•
*	Amaranthus lividus						•
	Ptilotus manglesii	•					
	Ptilotus drummondii	•					
Anthericaceae							
	Arthropodium capillipes				•	•	
	Arthropodium preissii		•	•			
	Borya scirpoidea			•		•	
	Caesia micrantha			•		•	
	Caesia occidentalis			•			
	Chamaescilla corymbosa				•	•	
	Chamaescilla gibsonii		•				
	Corynotheca micrantha	•			•		
	Laxmannia squarrosa					•	
	Sowerbaea laxiflora					•	
	Caesia micrantha			•		•	
	Thysanotus arbuscular				•	•	

FLORA OF AUSTIN BAY NATURE RESERVE . GJ Keighery JULY 2003. Data derived from Keighery 1999
Conservation Status of Vascular Flora of the Southern Swan Coastal Plain

Family group	Plant Taxa	Vegetation Unit					
		Bch	clyp	WM	sand	j/m	D
	<i>Thysanotus manglesii</i>				.	.	
	<i>Thysanotus patersonii</i>				.	.	
	<i>Thysanotus multiflorus</i>	.	.		.		
	<i>Thysanotus thyrsoideus</i>				.	.	
	<i>Tricoryne elatior</i>	.			.	.	
Apiaceae							
	<i>Actinotus leucocephalus</i>				.	.	
	<i>Apium annuum</i>	.	.	.			
	<i>Apium prostratum</i>					.	
	<i>Centella cordifolia</i>			.		.	
	<i>Daucus glochidiatus</i>	.				.	
	<i>Eryngium pinnatifidum</i> subsp. <i>pinnatifidum</i>					.	
	<i>Eryngium pinnatifidum</i> subsp. <i>palustre</i> ms		.				
*	<i>Foeniculum vulgare</i>						.
	<i>Homalosciadium homalocarpum</i>					.	
	<i>Hydrocotyle alata</i>		.			.	
	<i>Hydrocotyle callicarpa</i>	.					
	<i>Hydrocotyle diantha</i>			.		.	
	<i>Hydrocotyle hispidula</i>		.			.	
	<i>Platysace compressa</i>					.	
	<i>Schoenolaena juncea</i>		.	.		.	
	<i>Trachymene coerulea</i>		.		.		
	<i>Trachymene pilosa</i>				.	.	
	<i>Xanthosia huegelii</i>					.	
Araceae							
*	<i>Zantedeschia aethiopica</i>			.			.
Asclepidaceae							
*	<i>Gomphocarpus fruticosus</i>						.
Asparagaceae							
*	<i>Asparagus asparagoides</i>	.					.
Asphodelaceae							
*	<i>Asphodelus fistulosus</i>	.					
	<i>Bulbine semibarbata</i>	.	.				
Asteraceae							
	<i>Angianthus drummondii</i>		.				
	<i>Angianthus preissianus</i>		.				
*	<i>Arctotheca calendula</i>				.	.	.
*	<i>Aster subulatus</i>			.			.
	<i>Asteridea pulverulenta</i>				.	.	
	<i>Blennoispora doliiformis</i>		.				
	<i>Brachyscome bellidioides</i>		.	.			
*	<i>Carduus pycnocephalus</i>	.			.		.
*	<i>Centaurium melitensis</i>	.				.	.
*	<i>Cirsium vulgare</i>
*	<i>Conyza albida</i>	.			.		.
	<i>Cotula coronopifolia</i>			.			.
	<i>Cotula cotuloides</i>		.	.			.

FLORA OF AUSTIN BAY NATURE RESERVE . GJ Keighery JULY 2003. Data derived from Keighery 1999
Conservation Status of Vascular Flora of the Southern Swan Coastal Plain

Family group	Plant Taxa	Vegetation Unit					
		Bch	clyp	WM	sand	j/m	D
*	<i>Cotula turbinata</i>	•					•
*	<i>Dittrichia graveolens</i>	•					•
	<i>Gnaphalium gymmocephalum</i>					•	
	<i>Gnephosis drummondii</i>		•				
	<i>Hyalosperma cotula</i>		•				
*	<i>Hypochaeris glabra</i>	•	•	•		•	•
	<i>Ixiolaena viscosa</i>			•	•	•	
	<i>Lagenifera huegelii</i>			•	•	•	
	<i>Millotia tenuifolia</i>				•	•	
	<i>Myriocephalus helichrysoides</i>		•	•			
	<i>Olearia axillaris</i>	•					
	<i>Podolepis gracilis</i> (Swamp form, GK 13126)			•		•	
	<i>Podotheca angustifolia</i>	•	•				
	<i>Podotheca gnaphaloides</i>		•			•	
	<i>Pogonolepis stricta</i>		•				
*	<i>Pseudognaphalium luteoalbum</i>	•		•			•
	<i>Quinetia urvillei</i>				•	•	
	<i>Rutidosia multiflora</i>				•		
	<i>Senecio glomeratus</i>			•		•	
	<i>Senecio quadridentatus</i>			•	•	•	
	<i>Senecio lautus</i>	•				•	
	<i>Siloxerus humifusus</i>			•			
*	<i>Sonchus asper</i>	•		•			•
	<i>Sonchus hydrophilous</i>				•		
*	<i>Sonchus oleraceus</i>	•				•	•
*	<i>Ursinia anthemoides</i>	•			•	•	•
*	<i>Urospermum picroides</i>	•					
	<i>Waitzia citrina</i>					•	
	<i>Waitzia suaveolens</i>					•	
*	<i>Vellereophyton dealbatum</i>	•					•
Brassicaceae							
*	<i>Brassica tournefortii</i>	•					•
*	<i>Cakile maritima</i>	•					•
*	<i>Heliophila pusilla</i>	•			•		•
	<i>Menkea australis</i>	•					
*	<i>Raphanus raphanistrum</i>	•					•
	<i>Stenopetalum gracile</i>					•	
Campanulaceae							
*	<i>Wahlenbergia capensis</i>				•		•
	<i>Wahlenbergia preissii</i>			•	•	•	
Callitrichaceae							
*	<i>Callitriche stagnalis</i>						•
Caryophyllaceae							
*	<i>Corrigiola littoralis</i>	•					•
*	<i>Cerastium glomeratum</i>	•					•
*	<i>Petrorhagia velutina</i>	•				•	•
	<i>Brachyscome bellidioides</i>		•	•			
*	<i>Sagina apetala</i>	•	•				•
*	<i>Spergula salina</i>		•				•
*	<i>Stellaria media</i>	•					•

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Family group	Plant Taxa	Vegetation Unit					
		Bch	clyp	WM	sand	j/m	D
Casuarinaceae							
	<i>Allocasuarina humilis</i>					•	
	<i>Casuarina obesa</i>	•	•				
Centrolepidaceae							
	<i>Aphelia brizula</i>		•				
	<i>Aphelia cyperoides</i>			•		•	
	<i>Centrolepis aleptryoides</i>		•	•			
	<i>Centrolepis aristata</i>			•	•		
	<i>Centrolepis drummondiana</i>				•	•	
	<i>Centrolepis glabra</i>		•				
	<i>Centrolepis mutica</i>		•	•			
	<i>Centrolepis pilosa</i>			•		•	
	<i>Centrolepis polygyna</i>	•	•				
	<i>Trithuria bibracteata</i>		•				
	<i>Trithuria submersa</i>		•				
	<i>Hydatella ?dioica</i>		•				
Chenopodiaceae							
	<i>Atriplex hypoleuca</i>	•					
	<i>Atriplex isatidea</i>	•					
	* <i>Atriplex prostrata</i>	•	•				
	* <i>Chenopodium ambrosioides</i>	•					•
	* <i>Chenopodium murale</i>	•					
	<i>Halosarcia indica</i>	•	•				
	<i>Halosarcia lepidosperma</i>	•	•				
	<i>Halosarcia leptoclada</i>		•				
	<i>Rhagodia baccata</i>	•	•				
	<i>Sarcocornia quinqueflora</i>	•	•				
	<i>Suaeda australis</i>	•	•				
Colchicaceae							
	<i>Burchardia multiflora</i>			•			
	<i>Burchardia congesta</i> (= <i>Burchardia umbellata</i>)		•		•	•	
	<i>Wurmbea dioica</i>		•				
Commelinaceae							
	<i>Cartonema philydroides</i>				•		
Convolvulaceae							
	<i>Wilsonia backhousei</i>		•				
Crassulaceae							
	* <i>Crassula alata</i>						•
	<i>Crassula colorata</i>				•		
	* <i>Crassula decumbens</i>	•					•
	* <i>Crassula natans</i>			•			
	<i>Crassula pedicellosa</i>			•	•		
Cupressaceae							

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		Bch	clyp	WM	sand	j/m	D
	<i>Actinostrobos pyramidalis</i>			.			
	Cyperaceae						
	<i>Baumea articulata</i>			.			
	<i>Baumea juncea</i>	.	.	.			
	<i>Baumea laxa</i>			.			
	<i>Baumea rubiginosa</i>			.			
	<i>Bolboschoenus caldwellii</i>	.					.
	<i>Carex preissii</i>					.	
	<i>Chorizandra enodis</i>		.	.			
	<i>Cyathochaeta avenacea</i>					.	
*	<i>Cyperus congestus</i>						.
*	<i>Cyperus eragrostis</i>						.
*	<i>Cyperus tenellus</i>	.		.			
	<i>Gahnia trifida</i>		.	.			
	<i>Isolepis cernua</i>	.					
	<i>Isolepis cyperoides</i>		.				
	<i>Isolepis marginata</i>			.		.	
	<i>Isolepis oldfieldiana</i>			.			
	<i>Isolepis nodosa</i>	.		.			
	<i>Isolepis producta</i>		.	.			
*	<i>Isolepis prolifera</i>						.
	<i>Isolepis stellata</i>		.	.			
	<i>Lepidosperma longitudinale</i>	.		.			
	<i>Lepidosperma squamatum</i>		.		.	.	
	<i>Lepidosperma tenue</i>					.	
	<i>Mesomelaena stygia</i>				.	.	
	<i>Mesomelaena tetragona</i>					.	
	<i>Schoenus brevifolius</i>			.			
	<i>Schoenus curvifolius</i>		.		.	.	
	<i>Schoenus efoliatus</i>			.		.	
	<i>Schoenus maschalinus</i>		.				
	<i>Schoenus natans</i>		.				
	<i>Schoenus nitens</i>		.				
	<i>Schoenus plumosus</i>		.				
	<i>Schoenus rigens</i>			.			
	<i>Schoenus sculptus</i>		.				
	<i>Schoenus subfascicularis</i>			.			
	<i>Schoenus tenellus</i>		.				
	<i>Schoenus varicellae</i>		.				
	<i>Schoenus</i> sp Waroona (GK 12235)		.				
	<i>Schoenoplectus validus</i>	.					.
	Dasypogonaceae						
	<i>Calectasia nagarra</i>					.	
	<i>Dasypogon bromeliifolius</i>		.		.	.	
	<i>Lomandra caespitosa</i>					.	
	<i>Lomandra hermaphrodita</i>				.		
	<i>Lomandra nigricans</i>				.		
	<i>Lomandra preissii</i>					.	
	<i>Lomandra purpurea</i>					.	
	<i>Lomandra suaveolens</i>				.	.	
	Dennstaedtiaceae						

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		Bch	clyp	WM	sand	j/m	D
	<i>Pteridium esculentum</i>					.	
Dilleniaceae							
	<i>Hibbertia hypericoides</i>				.	.	
	<i>Hibbertia racemosa</i>					.	
	<i>Hibbertia stellaris</i>			.			
	<i>Hibbertia vaginata</i>					.	
Droseraceae							
	<i>Drosera erythrorhiza</i>				.	.	
	<i>Drosera gigantea</i>			.			
	<i>Drosera glanduligera</i>			.	.	.	
	<i>Drosera macrantha</i>			.			
	<i>Drosera menziesii</i> subsp. <i>menziesii</i>			.		.	
	<i>Drosera menziesii</i> subsp. <i>penicillaris</i>			.		.	
	<i>Drosera neesii</i>			.			
	<i>Drosera nitidula</i>				.		
	<i>Drosera rostulata</i>			.			
	<i>Drosera stolonifera</i>			.		.	
Epacridaceae							
	<i>Astroloma ciliatum</i>				.	.	
	<i>Astroloma pallidum</i>					.	
	<i>Brachyloma preissii</i>				.	.	
	<i>Conostephium pendulum</i>				.		
	<i>Conostephium preissii</i>				.		
	<i>Leucopogon propinquus</i>				.		
Euphorbiaceae							
	* <i>Euphorbia peplus</i>	.					.
	<i>Monotaxis occidentalis</i>						.
	<i>Phyllanthus calycinus</i>			.	.	.	
	<i>Poranthera microphylla</i>				.		
Frankeniaceae							
	<i>Frankenia pauciflora</i>	.				.	.
Fumariaceae							
	* <i>Fumaria capreolata</i>	.				.	.
	* <i>Fumaria muralis</i>	.					.
Gentianaceae							
	* <i>Cicendia filiformis</i>			.			
	* <i>Centaurium erythraea</i>	.	.				
Geraniaceae							
	* <i>Erodium botrys</i>	.					.
	* <i>Erodium cicutarium</i>	.					
	* <i>Geranium molle</i>			.			
	<i>Geranium retrorsum</i>	.				.	
	* <i>Pelargonium capitatum</i>	.					.
	<i>Pelargonium littorale</i>	.				.	

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		Bch	clyp	WM	sand	j/m	D
Goodeniaceae							
	<i>Anthotium junciforme</i>		•	•			
	<i>Dampiera linearis</i>			•	•	•	
	<i>Dampiera trigona</i>			•			
	<i>Goodenia micrantha</i>		•	•			
	<i>Goodenia pulchella</i>		•	•			
	<i>Lechenaultia expansa</i>				•		
	<i>Scaevola crassifolia</i>	•					
	<i>Scaevola phlebopetala</i>			•	•	•	
	<i>Velleia trinervis</i>			•		•	
Haemodoraceae							
	<i>Anigozanthos humilis</i>					•	
	<i>Anigozanthos manglesii</i>					•	
	<i>Anigozanthos viridis</i>			•		•	
	<i>Conostylis aculeata</i>				•	•	
	<i>Conostylis juncea</i>					•	
	<i>Conostylis setigera</i>					•	
	<i>Haemodorum brevisepalum</i>			•			
	<i>Haemodorum paniculatum</i>				•		
	<i>Haemodorum sparsiflorum</i>		•	•			
	<i>Haemodorum spicatum</i>			•	•	•	
	<i>Phlebocarya ciliata</i>				•		
	<i>Tribonanthes australis</i>		•	•			
	<i>Tribonanthes uniflora</i>		•				
	<i>Tribonanthes violacea</i>		•				
Haloragaceae							
	<i>Gonocarpus nodulosus</i>			•			
	<i>Halorhagis tenuiflora</i>		•				
	<i>Myriophyllum echinatum</i>		•				
	<i>Myriophyllum limnophilum</i>		•				
Hypoxidaceae							
	<i>Hypoxis glabella</i>			•		•	
	<i>Hypoxis occidentalis</i>		•	•			
Iridaceae							
	* <i>Chasmanthe floribunda</i>						•
	* <i>Gladiolus caryophyllaceus</i>	•			•		•
	* <i>Gladiolus undulatus</i>	•					•
	<i>Orthrosanthus laxus</i>					•	
	<i>Patersonia occidentalis</i>				•		
	<i>Patersonia occidentalis</i> (Swamp Form)			•			
	* <i>Romulea flava</i>	•		•		•	
	* <i>Romulea rosea</i>	•	•	•		•	
	* <i>Sparaxis bulbifera</i>					•	•
	* <i>Watsonia bulbifera</i>	•				•	•
Isoetaceae							
	<i>Isoetes drummondii</i>		•				
Juncaceae							
	* <i>Juncus bufonius</i>	•	•	•		•	•

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		Bch	clyp	WM	sand	j/m	D
	<i>Juncus caespiticus</i>		•				•
*	<i>Juncus capitatus</i>	•	•	•			•
*	<i>Juncus kraussii</i>	•	•				
	<i>Juncus pallidus</i>			•			
	<i>Juncus pauciflorus</i>			•			
	<i>Luzula meridionalis</i>					•	
Juncaginaceae							
	<i>Triglochin lineare</i>		•	•			
	<i>Triglochin minutissima</i>	•	•			•	
	<i>Triglochin mucronata</i>	•	•			•	
	<i>Triglochin muelleri</i> subsp. <i>recurvum</i>		•				
	<i>Triglochin striata</i>	•				•	
	<i>Triglochin trichophora</i>	•	•				
Lamiaceae							
	<i>Hemiandra pungens</i>			•			
	<i>Hemigenia microphylla</i>		•				
*	<i>Stachys arvensis</i>	•					•
Lauraceae							
	<i>Cassytha racemosa</i>		•		•		
Lemnaceae							
	<i>Lemna disperma</i>			•		•	
Lentibulariaceae							
	<i>Polypompholyx multifida</i>		•	•			
	<i>Polypompholyx tenella</i>		•	•			
	<i>Utricularia inaequalis</i>		•	•			
	<i>Utricularia menziesii</i>		•	•			
	<i>Utricularia violacea</i>		•				
Linaceae							
	<i>Linum marginale</i>			•			
Lobeliaceae							
	<i>Isotoma hypocrateriformis</i>		•	•			
	<i>Lobelia alata</i>	•		•			
	<i>Lobelia tenuior</i>				•	•	
*	<i>Monopsis debilis</i>		•	•			•
Loganiaceae							
	<i>Phyllangium palustre</i>		•				
	<i>Phyllangium paradoxum</i>			•	•	•	
Loranthaceae							
	<i>Ameyema linophyllum</i>	•	•	•			
	<i>Ameyema miquellii</i>			•		•	
	<i>Lysiana casuarinae</i>	•	•	•			
	<i>Nuytsia floribunda</i>			•	•		
Lycopodiaceae							
	<i>Phylloglossum drummondii</i>		•	•			

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		Bch	clyp	WM	sand	j/m	D
Lythraceae							
	<i>Lythrum hyssopifolia</i>	•	•	•			
Malvaceae							
	<i>Lawrenzia spicata</i>		•				
Marsileaceae							
	<i>Marsilea drummondii</i>		•				
	<i>Pilularia novae-hollandiae</i>		•				
Menyanthaceae							
	<i>Villarsia albiflora</i>			•			
	<i>Villarsia capitata</i>		•	•			
	<i>Villarsia submersa</i>		•				
	<i>Villarsia violifolia</i>			•			
Mimosaceae							
	<i>Acacia cyclops</i>	•		•		•	
	<i>Acacia extensa</i>		•	•			
	<i>Acacia huegelii</i>				•		
	<i>Acacia lasiocarpa</i> var <i>bracteolata</i>		•				
	<i>Acacia pulchella</i>	•	•		•	•	
	<i>Acacia saligna</i>			•	•	•	
	<i>Acacia willdenowiana</i>					•	
Myoporaceae							
	<i>Myoporum capparoides</i>	•		•		•	
Myrtaceae							
	<i>Agonis flexuosa</i>				•		
	<i>Astartea affinis</i>	•	•	•			
	<i>Baeckea camphorosmae</i>						
	<i>Calothamnus lateralis</i>			•			
	<i>Calytrix flavescens</i>					•	
	<i>Calytrix fraseri</i>				•		
	<i>Eucalyptus calophylla</i>					•	
	<i>Eucalyptus gomphocephala</i>					•	
	<i>Eucalyptus marginata</i>					•	
	<i>Eucalyptus rudis</i> subsp. <i>rudis</i>	•		•			
	<i>Hypocalymma angustifolium</i>			•			
	<i>Kunzea glabrescens</i>				•	•	
	<i>Kunzea micrantha</i>			•			
	<i>Kunzea recurva</i>			•			
	<i>Melaleuca brevifolia</i>			•			
	<i>Melaleuca cuticularis</i>		•				
	<i>Melaleuca incana</i>			•			
	<i>Melaleuca lateriflora</i> subsp. <i>acutifolia</i>		•				
	<i>Melaleuca lateritia</i>		•				
	<i>Melaleuca leptoclada</i>		•	•			
	<i>Melaleuca preissiana</i>			•		•	
	<i>Melaleuca rhapsiophylla</i>			•			

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		Bch	clyp	WM	sand	j/m	D
	<i>Melaleuca teretifolia</i>		•	•			
	<i>Melaleuca thymoides</i>			•	•	•	
	<i>Melaleuca uncinata</i>		•				
	<i>Melaleuca viminea</i>		•				
	<i>Pericalymma ellipticum</i>			•			
	<i>Regelia ciliata</i>			•			
	<i>Verticordia densiflora</i>		•				
Onagaraceae							
	<i>Epilobium billardierianum</i>			•			
	<i>Epilobium hirtigerum</i>			•			
Orchidaceae							
	<i>Caladenia flava</i>			•	•	•	
	<i>Caladenia latifolia</i>	•			•		
	<i>Caladenia paludosa</i>			•			
	<i>Caladenia radiata</i>		•	•			
	<i>Caladenia ?longicauda</i>					•	
	<i>Caladenia huegelii ???</i>				•		
	<i>Cyrtostylis huegelii</i>			•			
	<i>Cyanicula deformis</i>				•	•	
	<i>Cyanicula gemmata</i>				•	•	
	<i>Diuris amplissima</i>					•	
	<i>Elythranthera brunonis</i>					•	
	<i>Eriochilus dilatatus</i>					•	
	<i>Eriochilus helonomos</i>			•			
	<i>Leporella fimbriata</i>					•	
	<i>Leptoceras menziesii</i>	•				•	
	<i>Lyperanthus nigricans</i>				•	•	
	<i>Microtis media</i> subsp. <i>media</i>			•		•	
	<i>Microtis orbicularis</i>		•				
	* <i>Monadenia bracteata</i>	•		•	•	•	
	<i>Prasophyllum drummondii</i>		•	•			
	<i>Prasophyllum fimbria</i>					•	
	<i>Prasophyllum hians</i>			•		•	
	<i>Prasophyllum macrostachyum</i>		•				
	<i>Prasophyllum parviflorum</i>					•	
	<i>Pterostylis nana</i>				•	•	
	<i>Pterostylis recurva</i>				•	•	
	<i>Pterostylis vittata</i>				•	•	
	<i>Thelymitra crinita</i>					•	
	<i>Thelymitra flexuosa</i>			•		•	
	<i>Thelymitra pauciflora</i>					•	
Orobanchaceae							
	<i>Orobanche australiana</i>	•		•			
Oxalidaceae							
	<i>Oxalis perennans</i>					•	
	* <i>Oxalis pes-caprae</i>	•		•		•	•
	* <i>Oxalis purpurea</i>					•	•
Papilionaceae							

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	<i>Bossiaea eriocarpa</i>					•	
	<i>Daviesia physodes</i>					•	
	<i>Daviesia preissii</i>					•	
	<i>Dillwynia dillwynioides</i>		•	•			
	<i>Eutaxia virgata</i>			•			
	<i>Euchilopsis linearis</i>			•			
	<i>Gompholobium confertum</i>					•	
	<i>Gompholobium tomentosum</i>				•		
	<i>Hardenbergia comptoniana</i>	•	•		•		
	<i>Hovea trisperma</i>					•	
	<i>Isotropis cuenifolia</i>				•	•	
	<i>Jacksonia furcellata</i>	•			•	•	
	<i>Jacksonia sternbergiana</i>			•	•	•	
	<i>Kennedia prostrata</i>				•	•	
*	<i>Lotus angustissimus</i>			•	•	•	•
*	<i>Lotus subbiflorus</i>			•			•
*	<i>Lupinus consentinii</i>				•		•
*	<i>Lupinus angustifolia</i>					•	•
*	<i>Medicago polymorpha</i>	•					•
*	<i>Melilotus indica</i>	•					•
	<i>Nemcia capitata</i>					•	
*	<i>Ornithopus pinnatus</i>			•			•
	<i>Pultenaea ochreatea</i>			•			
	<i>Pultenaea reticulata</i>			•			
*	<i>Trifolium angustifolium</i>						•
*	<i>Trifolium arvense</i>	•					•
*	<i>Trifolium campestre</i>					•	•
*	<i>Trifolium dubium</i>					•	•
*	<i>Trifolium hybridum</i>						•
*	<i>Vicia hirsuta</i>	•					•
*	<i>Vicia sativa</i> subsp. <i>nigra</i>			•			•
	<i>Viminaria juncea</i>			•			
Philydraceae							
	<i>Philydrella pygmaea</i>			•			
Phormiaceae							
	<i>Agrostocrinum hirsuta</i>					•	
	<i>Dianella revoluta</i>	•	•				
Phytolaccaceae							
*	<i>Phytolacca octandra</i>						•
Pittosporaceae							
	<i>Billardiera variifolia</i>					•	
Poaceae							
	<i>Agrostis avenacea</i>		•	•			
	<i>Agrostis plebeia</i>		•				
*	<i>Aira cupaniana</i>	•	•	•			
	<i>Amphibromus nervosus</i>		•			•	
	<i>Amphipogon debilis</i>					•	
	<i>Amphipogon turbinatus</i>				•	•	
*	<i>Anthoxanthum odoratum</i>		•	•		•	•
*	<i>Avena barbata</i>	•				•	•

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		Bch	clyp	WM	sand	j/m	D
*	<i>Avena fatua</i>		*				*
*	<i>Briza maxima</i>		*	*		*	*
*	<i>Briza minor</i>		*	*	*	*	*
*	<i>Bromus catharticus</i>						*
*	<i>Bromus diandrus</i>	*					*
*	<i>Bromus hordeaceus</i>	*				*	
*	<i>Bromus madritensis</i>		*				
*	<i>Cynodon dactylon</i>	*		*		*	*
	<i>Danthonia occidentalis</i>	*					
	<i>Danthonia setacea</i>		*	*			
	<i>Deyeuxia quadriseta</i>			*		*	
*	<i>Digitaria sanguinalis</i>						*
*	<i>Ehrharta calycina</i>		*				
*	<i>Ehrharta longiflora</i>	*			*		*
*	<i>Eragrostis curvula</i>						*
*	<i>Glyceria maxima</i>		*				
	<i>Hainardia cylindrica</i>		*				
	<i>Hemarthria uncinata</i>				*	*	
*	<i>Holcus lanatus</i>	*					*
*	<i>Holcus setiger</i>		*				
*	<i>Hordeum geniculatum</i>	*	*			*	
*	<i>Hordeum leporinum</i>	*				*	
*	<i>Lagurus ovatus</i>	*	*		*	*	*
*	<i>Lolium multiflorum</i>	*					*
*	<i>Lolium rigidum</i>	*		*			*
	<i>Microlaena stipoides</i>			*		*	
	<i>Neurachne alopecuroidea</i>					*	
*	<i>Paraphlois incurva</i>		*				
*	<i>Paspalum dilatatum</i>						*
*	<i>Phalaris minor</i>	*					*
*	<i>Poa annua</i>	*	*		*		*
	<i>Poa drummondiana</i>				*		
	<i>Poa poiformis</i>			*			
*	<i>Polypogon monspeliensis</i>	*		*			*
	<i>Polypogon tenellus</i>		*				
	<i>Spinifex longifolius</i>	*					
	<i>Sporobolus virginicus</i>	*					
*	<i>Stenotaphrum secundatum</i>	*					*
	<i>Stipa compressa</i>			*	*	*	
	<i>Stipa flavescens</i>	*					
	<i>Stipa hemipogon</i>		*			*	
*	<i>Vulpia bromoides</i>	*	*				
*	<i>Vulpia myuros</i>		*	*		*	*
Polygalaceae							
	<i>Comesperma ?calymega</i>				*		
	<i>Comesperma drummondii</i>		*				
	<i>Comesperma integerrimum</i>	*		*			
Polygonaceae							
*	<i>Acetosella vulgaris</i>					*	*
	<i>Muehlenbeckia adpressa</i>	*				*	
*	<i>Rumex brownii</i>			*			
*	<i>Rumex pulcher</i>			*			*

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Portulacaceae							
	<i>Calandrinia calyptrata</i>				.		
	<i>Calandrinia corrigioloides</i>	.			.		
	<i>Calandrinia granulifera</i>				.		
	<i>Calandrinia ?composita</i>		.				
Primulaceae							
*	<i>Anagallis arvensis</i>	.				.	.
	<i>Samolus junceus</i>		.	.			
	<i>Samolus repens</i>	.		.			
Proteaceae							
	<i>Adenanthos cygnorum</i>				.		
	<i>Banksia attenuata</i>				.		
	<i>Banksia grandis</i>					.	
	<i>Banksia ilicifolia</i>			.			
	<i>Banksia littoralis</i>			.			
	<i>Dryandra lindleyana</i> subsp. <i>lindleyana</i>					.	
	<i>Hakea marginata</i>			.			
	<i>Hakea prostrata</i>				.	.	
	<i>Hakea trifurcata</i>		.				
	<i>Hakea varia</i>			.			
	<i>Petrophile linearis</i>				.	.	
	<i>Petrophile media</i> var <i>juncifolia</i>			.		.	
	<i>Petrophile seminuda</i>			.			
	<i>Petrophile striata</i>					.	
	<i>Stirlingia latifolia</i>			.	.		
	<i>Synaphea spinulosa</i>					.	
Ranunculaceae							
	<i>Clematis pubescens</i>				.	.	
*	<i>Ranunculus muricatus</i>						.
Restionaceae							
	<i>Cyrtogonium leptocarpoides</i>			.			
	<i>Desmocladius fasciculatus</i>				.	.	
	<i>Desmocladius flexuosus</i>					.	
	<i>Hypolaena exsulca</i>				.		
	<i>Hypolaena pubescens</i>		.	.			
	<i>Lepyrodia glauca</i>		.			.	
	<i>Lepyrodia muirii</i>			.			
	<i>Lyginia barbata</i>			.	.		
	<i>Meeboldinia aristata</i>		.				
	<i>Meeboldinia cana</i>		.				
	<i>Meeboldinia coangustata</i>		.	.			
	<i>Meeboldinia roycei</i>		.				
Rhamnaceae							
	<i>Spyridium globulosum</i>	.					
Rubiaceae							
*	<i>Galium murale</i>	.					
	<i>Opercularia hispidula</i>			.	.	.	

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		Bch	clyp	WM	sand	j/m	D
	<i>Opercularia vaginata</i>			.			
*	<i>Sherardia arvensis</i>	.					
Ruppiaceae							
	<i>Ruppia megacapa</i>		.				
Rutaceae							
	<i>Boronia crenulata</i>			.			
	<i>Philothea spicata</i>				.	.	
Santalaceae							
	<i>Exocarpos sparteus</i>	
Sapindaceae							
	<i>Dodonaea viscosa</i> subsp. <i>spatulata</i>	.					
Scrophulariaceae							
*	<i>Bellardia trixago</i>			.			.
*	<i>Dischisma arenarium</i>	.					
*	<i>Dischisma capitatum</i>						.
	<i>Glossostigma diandrum</i>		.				
	<i>Gratiola peruviana</i>			.			
*	<i>Parentucellia latifolia</i>			.		.	
*	<i>Parentucellia viscosa</i>	.		.			.
*	<i>Veronica arvensis</i>	.		.			.
	<i>Veronica</i> sp					.	
Selaginellaceae							
	<i>Selaginella gracillima</i>		.	.			
Solanaceae							
*	<i>Solanum americanum</i>			.			
*	<i>Solanum nigrum</i>	.		.			
	<i>Solanum symonii</i>	.					
Stackhousiaceae							
	<i>Stackhousia huegelii</i>					.	
	<i>Tripterococcus brunonis</i>					.	
Stylidiaceae							
	<i>Levenhookia pusilla</i>		.	.		.	
	<i>Levenhookia stipitata</i>		.		.	.	
	<i>Stylidium brunonianum</i>				.		
	<i>Stylidium calcaratum</i>		.			.	
	<i>Stylidium dichotomum</i>		.	.			
	<i>Stylidium ecorne</i>		.	.			
	<i>Stylidium guttatum</i>			.			
	<i>Stylidium inundatum</i>		.				
	<i>Stylidium longitubum</i>			.			
	<i>Stylidium mimeticum</i>		.	.			
	<i>Stylidium periscelanthum</i>		.	.			
	<i>Stylidium petiolare</i>			.			
	<i>Stylidium piliferum</i>			.	.	.	
	<i>Stylidium pulchellum</i>			.			

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	<i>Stylidium repens</i>				•		
	<i>Stylidium roseo-alatum</i>		•	•			
	<i>Stylidium roseo-nanum</i>		•	•			
	<i>Stylidium schoenoides</i>				•	•	
Thymeleaceae							
	<i>Pimelea rosea</i>	•			•		
Tremandraceae							
	<i>Platytheca galioides</i>					•	
	<i>Tetratheca hirsuta</i>					•	
Typhaceae							
	<i>Typha domingensis</i>					•	
	* <i>Typha orientalis</i>					•	
Urticaceae							
	<i>Parietaria debilis</i>	•					
Violaceae							
	<i>Hybanthus floribundus</i>					•	
Xanthorrhoeaceae							
	<i>Xanthorrhoea preissii</i>		•				
Zamiaceae							
	<i>Macrozamia riedlei</i>	•	•		•	•	
Zanichelliaceae							
	<i>Lepilaena preissii</i>		•				