

FIELD DATA SHEETS

RICH ROAD RESERVE

RICH 01 — RICH 12
AND

MALYALLING RESERVE

MALY 01 — MALY 7
SHIRE OF WICKEPIN

LOGO

Prepared by the
Wildflower Society of Western Australia (Inc.)
as part of the
Bushland Plant Survey Project
for the
Wickepin LCDC

This field herbarium accompanies the following report:

Gunness, A.G. and Volunteers of the Bushland Plant Survey Project (2001). The vegetation and flora of two bushland reserves in the Shire of Wickepin: Rich Road-86 Gate Road Reserve and Malyalling Reserve. (Wildflower Society of WA Inc., Nedlands.)

This project was supported by funds from the Bushcare Program of the Natural Heritage Trust (1998-99). Support was also provided by the Department of Conservation and Land Management.

RICH01

checked

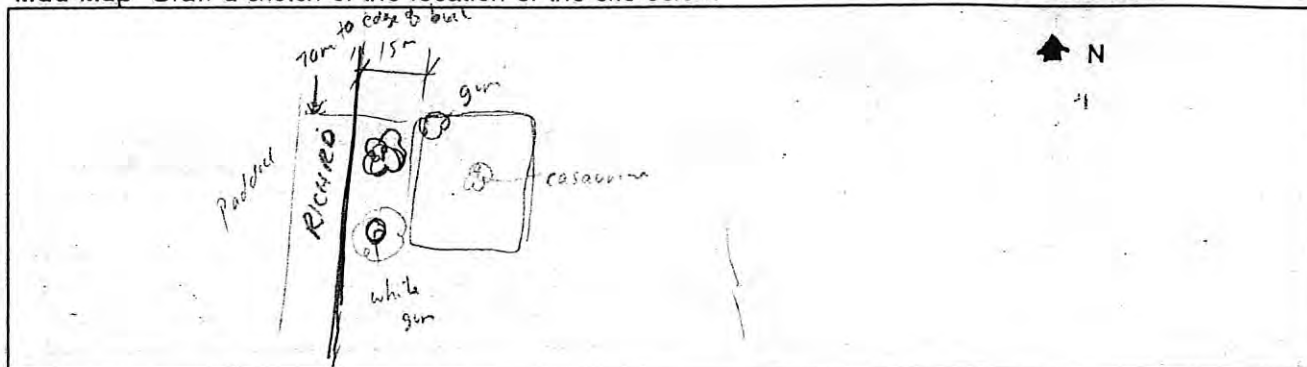
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA 86 GT = RICH ROAD RES SITE NUMBER 1 RICH1
 DATE TRIP 2/10/99 RECORDERS JODY M, LOUISA W, ROBIN C, HAZEL G, MARY H,
 DATE TRIP _____ RECORDERS HELEN, ROSEMARY, KELD, AIDEN W.
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

1. LOCATION of the QUADRAT

Mud Map Draw a sketch of the location of the site below.



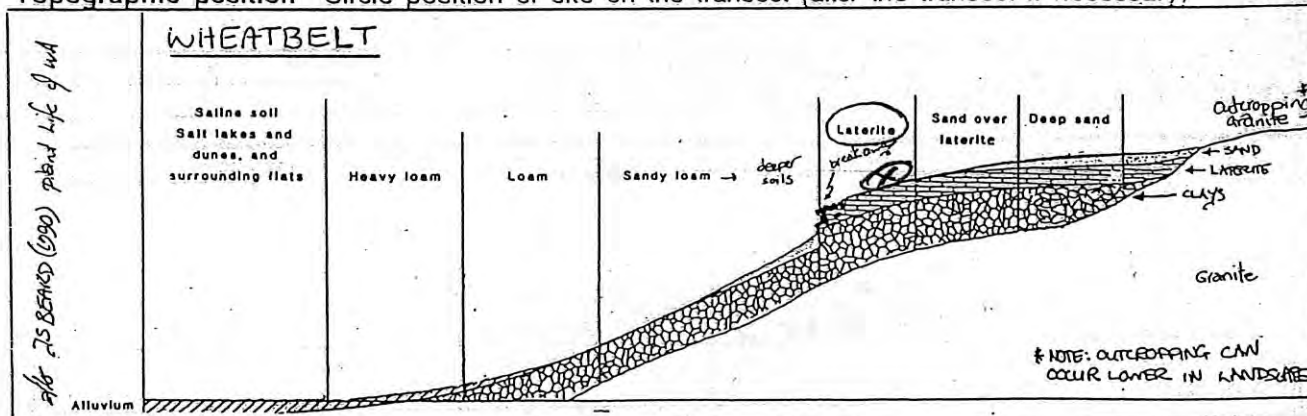
Road Location

Geographic Location Latitude: 32° 42' 9.1" S Longitude: 117° 42' 9.6" E Altitude: 419 ± 70

Reference Map Grid: 32° 42' 58.3" 117° 42' 57.6"

Photograph Photographer's Name: BRIAN Photo No: 283

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep Aspect: N NE E SE S SW W NW

Surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour
 Exposed rock: type LATERITE % surface

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour
 Rock: LATERITE, type depth to rock

Drainage: well mod, poor | depth water cm | Wet: all year winter/spring

Litter: 31-70 % cover
 1% Depth cm Bare Ground 11-30 % cover

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

LIFE FORM	TREES			MALLEES		
	over 30m	10-30m	under 10m	over 8m	under 8m	
						30m 10m
COVER CLASS (%)			2-10%			
DOMINANT SPECIES*			Eucalyptus wandoo SHEOAK Allocasuarina campestris			
LIFE FORM	SHRUBS		SHRUBS			
	over 2m	2m-1m	under 1m			
					2m 1m	
COVER CLASS (%)	2-10%	Less than 2%	2-10%			
DOMINANT SPECIES*	MELALEUCA uncinata Allocasuarina campestris	DRYANDRA aff. cuneata BRYANDRA aff. cuneata	DRYANDRA aff. cuneata			
LIFE FORM	GRASSES	HERBS	SEDGES	OTHER		
						
COVER CLASS (%)	Less than 2%	Less than 2%	Less than 2%			
DOMINANT SPECIES*						

WEEDS - % COVER

Trees/Mallees	%	COMMENTS NONE
Shrubs	%	
Grasses	%	
Herbs	%	
Sedges	%	

4.

VEGETATION CONDITION SCALE

1	'PRISTINE'	COMMENTS
2	EXCELLENT	
3	VERY GOOD	
4	GOOD	
5	DEGRADED	

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

SITE No 86 GT 1

Date 2/10/99.

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
EUCALYPTUS Wandoo	1	-	✓					SARGENOPHORA MUEBENII	27	✓	✓
PAROLASUARINA COMPESTRIS	2	-	✓					Beratoqyne oblongoides	28	✓	✓
MELEUCA UNCINATA	3	-	✓					BORINOSPORA DRUMMONDII	29	✓	✓
				MAIR 6 th 30 = see spec m 4/3/10/99				LEMANDRA EFFUSA	30	-	✓
								THYSANOTUS PATTERSONII	36	✓	✓
								PTEROSTYLIS SARGENTII	39	✓	✓
								PHYLLARGIA sulcatum	41	✓	✓
								HYDROCOYLE CALICOPHA	42	6	✓
								Paranthera microphylla	43		✓
								LEVENNOCKIA PUSILLA	44	-	✓
MALLEES											
				GRASSES							
				NEURACNE ALOPECUROIDES	9	✓	✓				
				*DIRA cupaniana/caryophylla	10	✓	✓				
				GRASS AUSTRORIPA ELEGANTISSIMA	12	✓	✓				
				*VULPIA MYRTAS	13	✓	✓				
SHRUBS				GRASS Neurachne alopecuroides	31	✓	✓				
DRYANDRA aff. CURSIOIDES	4	✓	✓	GRASS-infertile - poss. Amphipogon	32	?					
SARCKEN exsiliata	5	✓	✓					SEDGES			
ACACIA lasiocarpa var. sedifolia	6	-	✓					Schoenus nanus.	33		✓
WESTRINGIA CEPHALANTHA	7	-	✓					LEPIDODERMIS PREISSIANUS	35	-	✓
HIBBERTIA PUNGENS	8	✓	✓					SEDGE - LERIDOSPORA TENUE	37	✓	✓
HIBBERTIA PUNGENS	11	-	✓					SEDGE	38		3
GASTRODORUM spinosum	34	-	✓					SEDGE - LAMANDRA MIRANTHA	40	-	✓
var. spinosum				HERBS							
				GLISCHROCARPON AUREUM	14	✓	✓				
				CALADENIA FLAVA subsp. FLAVA	15	✓	✓	ADJACENTS			
				CALADENIA FALCATA	16	✓	✓	DIANELLA REVOLUTA	45	✓	✓
				PATERSONIA DRUMMONDII subsp. DRUMMONDII	17	✓	✓	STYLIDIUM squameosum	46	✓	✓
				PTEROSTYLIS SANGUINEA	18	✓	✓	LAXMANNIA squarrosa	47	W	✓
				DROSER A MACRANTHA	19	✓	✓	CALADENIA ROELI	48	6	✓
				WAITZIA ACUMINATA	20	✓	✓	POWELLSONIA JESSONII	49	7	✓
				COMESPERMA VOLUMINOSA	21	✓	✓	Phoradendron laetifolium	50	✓	✓
				STYLIDIUM PILIFERUM subsp. PILIFERUM	22	✓	✓	ERIOCHILUS dilatatus subsp. UNDULATUS	51	✓	✓
				TRACHYMENE ORNATA	23	✓	✓	GEOMPHOLOGUM MARGINATUM	52	8a	✓
				ARTHROPODUM CAPITIPES	24	-	✓	MARIANTHUS ERUBESCENS	53	-	✓
				SPOROTHECA ANASTASIOKIA	25	✓	✓	CALADENIA FLAVA subsp. FLAVA	54	✓	✓
				* HIGGS VRSINIA ANTHEMIDIS	26	✓	✓	Allocasuarina huegeliana			

RTCH01

Rich 2

checked

BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA 86 GATE RESERVE SITE NUMBER (86GT2) RICH2
 DATE TRIP 2/10/99 RECORDERS Alice Margaret Anderson
 DATE TRIP _____ RECORDERS Michelle, Ken, Bill
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

1. LOCATION of the QUADRAT

Mud Map Draw a sketch of the location of the site below.

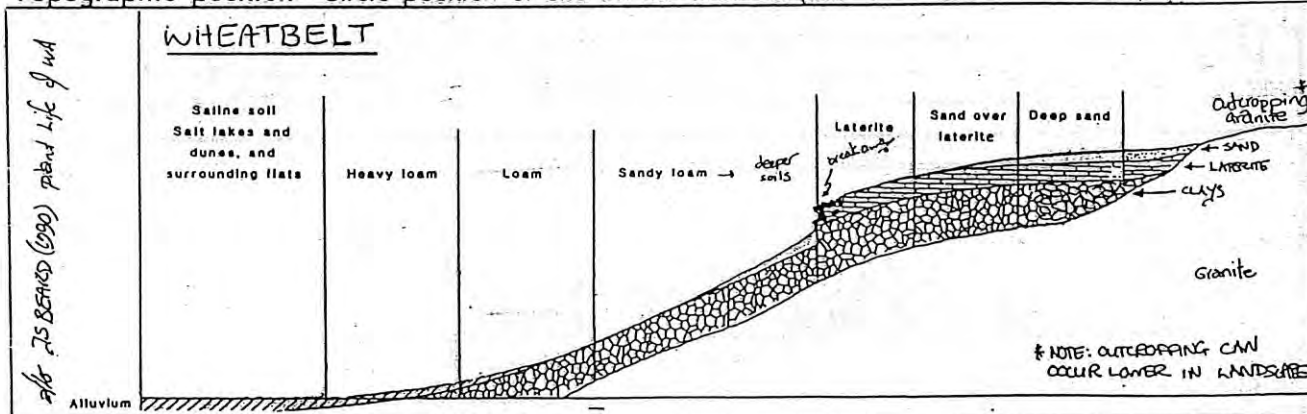


Road Location Rich Road

Geographic Location Latitude: 32° 43' 05.2" S Longitude: 117° 42' 57.1" E Altitude: 396 m ± 73
 Reference Map Grid: 32° 43' 03.1" 117° 42' 57.1"

Photograph 4 Photographer's Name: B. Mayle Photo No: 4-5

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep Aspect: N NE (E) SE S SW W NW
 Surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour light brown
 Exposed rock: type N/A % surface (moist)
 Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour light brown
 Rock: N/A type _____ depth to rock _____
 Drainage: (well) mod, poor | depth water _____ cm Wet: all year winter/spring
 Litter: _____ % cover _____ Bare Ground up, 10 % cover
 Depth up to 1 cm

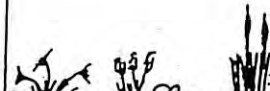
BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below), and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

		TREES			MALLEES		
		over 30m	10-30m	under 10m	over 8m	under 8m	
LIFE FORM							30m 10m
COVER CLASS (%)							
DOMINANT SPECIES*							
		SHRUBS			SHRUBS		
		over 2m	2m-1m	under 1m			
LIFE FORM							2m 1m
COVER CLASS (%)							
DOMINANT SPECIES*							
		GRASSES		HERBS	SEDGES	OTHER	
LIFE FORM							
COVER CLASS (%)							
DOMINANT SPECIES*							

WEEDS - % COVER

Trees/Mallees	%	COMMENTS very few weeds
Shrubs	%	
Grasses	%	
Herbs	%	
Sedges	%	

4.

VEGETATION CONDITION SCALE

		COMMENTS Return 2
1	'PRISTINE'	
2	EXCELLENT	
3	VERY GOOD	
4	GOOD	
5	DEGRADED	

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

SITE No 849T 2

Date 2-10-99

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour if species flowering
- Column 4 identification check

From 'Bushtland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
				<i>Cryptandra</i> ~~leucopogon~~ white	30	✓	✓	<i>Stylidium</i> ~~philae~~	52	✓	✓
				<i>Nerium</i> sp. ~~Aubin~~ (MELANOPHOBES off Kookoi)	31	✓	✓	<i>Hyalospermum</i> ~~oleumissum~~ white	50	✓	✓
				<i>Leucopogon</i> ~~pogonocalyx~~	32	X	✓	<i>Stachys</i> ~~mede~~ sp. ~~filae~~	51	X	✓
				<i>Acacia</i> ~~squarata~~	35	X	✓				
				<i>Kunzea</i> ~~micromera~~ pink	47	✓	✓	<i>Grosselia</i> ~~glauca~~ orange	57	✓	✓
				<i>Cryptandra</i> ~~aurata~~	48	X	✓	<i>Blennospora</i> ~~brunneoides~~	58	✓	✓
MALLEES								<i>Levenhookia</i> ~~pusilla~~ pink	61	✓	✓
				GRASSES				<i>Spikes</i> - ~~flowered~~ ~~hairy~~ yellow	62	✓	✓
				<i>Neurachne</i> ~~alopeuroidea~~ green	33	✓	✓	* <i>Hyphocarpus</i> ~~glaberrimus~~ green	64	✓	✓
				* <i>Vulpia</i> ~~myuros~~ green	41	✓	✓	<i>Preschoa</i> ~~lariculata~~ cream	65	✓	✓
				<i>Stanthonia</i> ~~pedunculata~~ green	42	✓	✓	<i>Levenhookia</i> ~~pusilla~~ pink	66	✓	✓
				grass 2* <i>Vulpia</i> ~~myuros~~ green	43	✓	✓	<i>Urtica</i> ~~acuminata~~ orange	67	✓	✓
				<i>Austrostylis</i> ~~pedunculata~~ green	44	✓	✓	<i>Hydrocotyle</i> ~~callicarpa~~ X	68	✓	✓
				grass - ~~Probably ally - not in list~~	55	X	?	SEDGES			PTD.
SHRUBS				* <i>Vulpia</i> ~~myuros~~ green	60	✓	✓	<i>Lomandra</i> ~~clavata~~ subsp. ~~terrestris~~	34	X	✓
<i>Dryandra</i> ~~confertifolia~~ var. ~~confertifolia~~	1	X	✓	* <i>Kia</i> ~~cuspidata~~ / ~~canophylla~~ green	63	✓	✓	<i>Schoenus</i> ~~sesquipedatus~~	37	X	✓
<i>Banksia</i> ~~sphaerocarpa~~	2	-	✓	<i>Hamiglossis</i> - <i>Neurachne</i> ~~alopeuroidea~~ green	73	X	-	<i>Schoenus</i> ~~sp. aff. claudens~~ green	45	X	✓
<i>Petrophile</i> ~~squarata~~ subsp. ~~squarata~~	3	✓	✓	HERBS				<i>Leptocarpus</i> ~~prostratus~~	54	X	✓
<i>Calyx</i> ~~leschenaultii~~ purple	4	✓	✓	<i>Opuntia</i> ~~sp. vaginata~~	20	X	✓	<i>Centropogon</i> ~~aristatus~~ green	56	✓	✓
<i>Banksia</i> ~~confertifolia~~ pale pink	5	✓	✓	<i>Conostylis</i> ~~villosa~~ yellow-red	21	✓	✓	<i>Centropogon</i> ~~aristatus~~ green	59	✓	✓
<i>Metaleuca</i> ~~sp.~~	6	X	✓	<i>Laxmannia</i> ~~grandiflora~~ subsp. ~~grandiflora~~	28	✓	✓	<i>Schoenus</i> ~~nanus~~	53	✓	✓
<i>Hibbertia</i> ~~phlegma~~ yellow	7	✓	✓	<i>Amoranthus</i> ~~humilis~~ yellow	24	✓	✓				
<i>Metaleuca</i> ~~mirabilis~~	8	X	✓	" <i>Didier</i> ~~rossii~~ <i>Amoranthus</i> ~~humilis~~ white	25	X	✓				
<i>Acacia</i> ~~lanceolata~~ var. ~~confertifolia~~	9	X	✓	<i>Stylidium</i> ~~equanillosum~~ green	26	✓	✓				
<i>Hibbertia</i> ~~pubescens~~ yellow	10	✓	✓	<i>Lupinus</i> ~~patersonii~~ purple	27	✓	✓				
<i>Acacia</i> ~~steroptea~~	11	X	✓	<i>Stylidium</i> ~~puberulum~~ subsp. ~~puberulum~~	28	✓	✓				
<i>Hakea</i> ~~incrassata~~	12	X	✓	<i>Plachnocalyx</i> ~~australis~~ yellow	29	✓	✓				
<i>Dampiera</i> ~~littoralis~~ purple	13	✓	✓	<i>Amoranthus</i> ~~sp.~~	36	X	✓				
<i>Verticordia</i> ~~grandiflora~~ yellow	14	✓	✓	<i>Stylidium</i> ~~sp.~~ MACRANTHA	39	X	✓				
<i>Petrophile</i> ~~brevitifolia~~ yellow	15	✓	✓	<i>Stylidium</i> ~~sp.~~	46	BUD	✓				
<i>Banksia</i> ~~clavata~~ / ~~clavata~~	16	✓	✓	<i>Parotilla</i> ~~angustifolia~~ yellow	49	✓	✓				
<i>Xanthorrhoea</i> ~~brunneoides~~	17	X	✓								
<i>Gymnolobium</i> ~~brunneum~~	18	X	✓								
<i>Dampiera</i> ~~littoralis~~ purple	19	✓	✓								
<i>Banksia</i> ~~lanceolata~~	23	X	✓								
<i>Banksia</i> ~~cuspidata~~ (NO TAG)		-	✓								

PTD.

RTCHD2

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

SITE No 86GT2

Date 2-10-99

Label each plant with plants number, site code, date and plant's name or working name if required
Record on Sheet

- Column 1 plant name.
- Column 2 plant number
- Column 3 flowering time- record flower colour if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
								ADJACENTS			
								<i>Myoporum laetifolium</i>	201	K	✓
								<i>Syntherisma tenax</i>	203	✓	✓
								<i>Calothamnia quadrifida</i>	209	✓	✓
								<i>Verticordia chrysanthra</i>	205	✓	✓
MALLEES								<i>Allocasuarina humilis</i>	206	✓	✓
								<i>Lawsonia rosea</i>	207	✓	✓
								<i>Diospyros pycnoblasta</i>	208	✓	✓
								<i>Pinetia brevifolia</i>	209	✓	✓
								<i>Melaleuca leucantha</i>	210	✓	✓
SHRUBS								<i>Chromolaena coccinea</i>	211	✓	✓
								GRASSES			
								<i>Acacia pycnantha</i>	212	-	✓
								<i>Cryptantha pungens</i>	213	✓	✓
								<i>Helianthus prostratus</i>	214	✓	✓
								<i>Leucopogon dielsianus</i>	215	✓	✓
								<i>Pereskia quinqueramis</i>	216	-	✓
								<i>Diospyros pycnantha</i>	217	-	✓
								<i>Quercus incassata</i> ssp. <i>incassata</i>	218	-	✓
								<i>Allocasuarina campestris</i>			
								<i>hugeliana</i>			
								HERBS (cont.)			
								<i>Rhodantha laevis</i>	69	✓	✓
								<i>Chamaecrista</i>	70	X	✓
								<i>Chamaecrista spiralis</i>	71	✓	✓
								<i>Pterocarya</i> sp. or <i>hypanthus</i>	72	X	?
								not enough material			

RICH03

✓checked

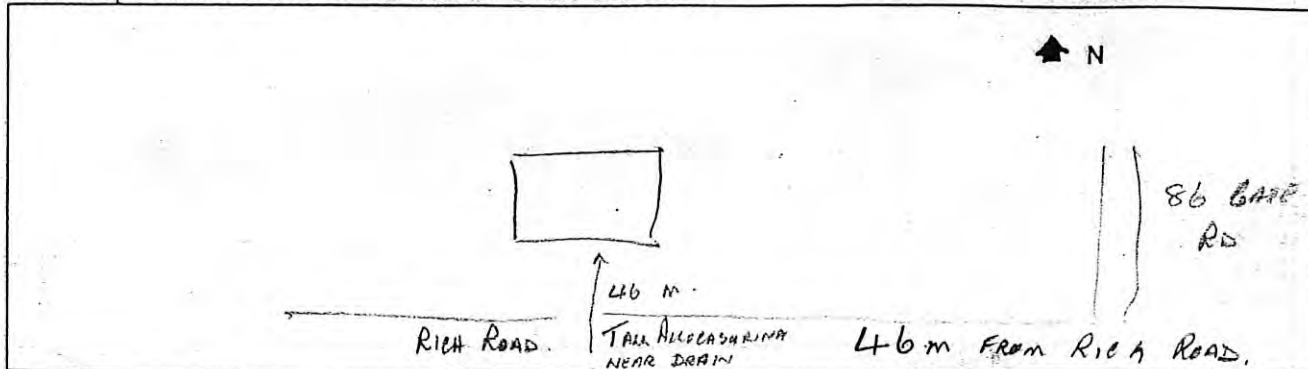
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA RYH ROAD RESERVE SITE NUMBER (866T3) RCH3
 DATE TRIP 2-10-99 RECORDERS ANNE HAN MARY JEFF MARY GRAY GARETH
 DATE TRIP _____ RECORDERS _____
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.



Road Location | RICH ROAD - 32° 43' 07.9" 117° 42' 59.3"

Geographic Location | Latitude: 32 43.131 S | Longitude: 117.42.989 E | Altitude: 279 ± 57.

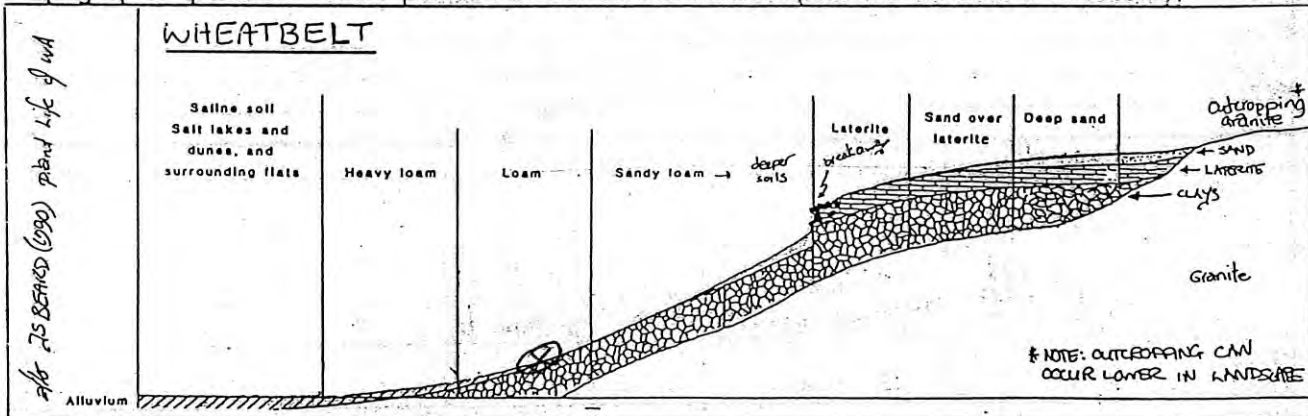
Reference Map 1000:

YEARNING 2432. RUN 6(5049-5069)

Photograph | Photographer's Name: BRIAN

Photo No: 34, 35

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep Aspect: N NE E SE S SW W NW

Surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour BROWN LIGHT.
 Exposed rock: type nil % surface

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour DARKER
 Rock: type _____ depth to rock _____

Drainage: well, mod, poor | depth water _____ cm | Wet: all year _____ winter/spring

Litter: 10 % cover Depth _____ cm Bare Ground, 30 %cover

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

TREES						MALLEES					
over 30m		10 - 30m		under 10m		over 8m		under 8m			
										30m	
LIFE FORM										10m	
COVER CLASS (%)		No. ↓		No. ↓		No. ↓		No. ↓		No. ↓	
DOMINANT SPECIES*								2%		No. ↓	
								MALLEE		1	
								Euc. albid.			

SHRUBS over 2m				SHRUBS 2m - 1m				SHRUBS under 1m			
											
LIFE FORM											
COVER CLASS (%)				No. ↓				No. ↓			
DOMINANT SPECIES*				30-70				11-30			
				DRYANDRA aff.				MIXED			
				Cirsioides.							

GRASSES		HERBS		SEDGES		OTHER	
							
LIFE FORM							
COVER CLASS (%)		No. ↓		No. ↓		No. ↓	
DOMINANT SPECIES*		2-10		2-10			
		MIXED		MIXED			

WEEDS - % COVER

Trees/Mallees	%	COMMENTS
Shrubs	%	
Grasses	%	
Herbs	%	
Sedges	%	

4.

VEGETATION CONDITION SCALE

1	PRISTINE	COMMENTS LIKE TO THINK ITS PRISTINE
2	EXCELLENT	
3	VERY GOOD	
4	GOOD	
5	DEGRADED	

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESENCE

SITE No 86GT3

Date 2-10-99

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name
- Column 2 plant number
- Column 3 flowering time- record flower colour if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
				<i>ALCORN STENOPTERA</i>	23	-	✓	<i>CHAMADENIA FALCATA</i>	43	G	✓
				<i>ACACIA SQUAMATA</i>	24	-	✓	<i>PTEROCHAETA PANICULATA</i>	44	W	✓
				<i>MYRTALEXIA SP.</i>	25	-	✓	<i>OPERULARIA VAGINATA</i>	45	G	✓
				<i>MYRTALEXIA SPINOSA</i>	35	OR	✓	<i>DAISY TINY FLORIDA</i>	46	Y	?
				<i>PLAKEA SCHIMMELMANNII</i>	36	-	✓	<i>BLENHOSPOA DUMMONDII</i>	47	W	✓
<i>ALLOCASUARINA HUEGENIANA</i>	2	-	✓	<i>ANDERSONIA CARULEA</i>	37	-	✓	<i>TALL DROSER A SP. INFRAH. D. MACULATA</i>	48	-	✓
MALLEES				<i>HIBBERTIA ACETOSA</i>	39	Y	✓	<i>WAITZIA YELLOW</i>	49	Y	NF
<i>EUC. SP. (MALLUS) = EUC. ALBIDA</i>	1	Bud	✓	<i>CRYPTANDRA LEUCOPOGON</i>	52	OR	✓	<i>ACACIA PYROCEPHALA</i>	53	-	✓
(small pink, peeling - lignobloss)				GRASSES				<i>PTEROSTYLIS SP.</i>	54	✓	✓
				<i>NEURACHNE APOPHYLLA</i>	50	✓	✓	<i>PTEROSTYLIS SANGUINEA</i>	55	✓	✓
				<i>AUSTOSTIPA ELEGANTISSIMA</i>	51	✓	✓	<i>MANOTAXIS GRANDIFLORA</i>	61	P	✓
SHRUBS				<i>HAIRY GRASS - AMPHIPOGON SP.</i>	56	-	✓	<i>CAREXES Arctotheca calendula</i>	62	Y	✓
<i>DAYANDRA AFFIRSIODES</i>	3	Y	✓	REED IN FLOWER (?)	57	B	?	<i>STYLIDIVM PILIFERUM SUBSP. PILIFERUM</i>	63	-	✓
<i>BANKSIA SPHAEROCARPA</i>	4	-	✓	<i>LEPIDOSPERMA SP. P. small reed (M.D. TINDALE 166A)</i>	58	B	✓	SEDGES			
<i>DAYANDRA (2) CONFERTA</i>	5	-	✓	<i>SCHORLUS SP. A2 KULIN (B. BRIGGS 7939)</i>			✓	<i>BLENHOSPOA DUMMONDII</i>	64	W	✓
<i>CHELOANTHES COCCINEA</i>	6	Bud	✓	<i>SCHORLUS aff. GLANDOSTYLIS</i>	60	-	✓	<i>? PTEROCHAETA PANICULATA (bushy material)</i>	65	✓	✓
<i>DAYANDRA VESTITA</i> flower yellow	7	-	✓					<i>? THYSANOTUS SP. (leaves only)</i>	69	?	?
<i>XANTHORHIZA DRUMMONDII</i>	8	-	✓	HERBS							
<i>XANTHORHIZA DRUMMONDII</i>	9	-	✓	<i>THYSANOTUS PATTERSONII</i>	26	M	✓	ADS.			
<i>GOMPHOLOBIUM MARGINATUM</i>	10	Y	✓	<i>LILY ? Thysanotus sp. - insufficient material</i>	27	-	?	<i>PETIOPHILE GLAUCA</i>	66	OR	✓
<i>HAUCKIA PREISSIANA / FLORACUNDA</i>	11	W	✓	<i>PASSYRA AUREA VAR. HIRTA</i>	28	-	✓	<i>CRYPTANDRA NUTANS</i>	67	-	✓
<i>PETIOPHILE BREVIFOLIA</i>	12	Y	✓	<i>CONOSTYLIS VIMOSA</i>	29	Y	✓	<i>GLISEROCARYON AUREUM</i>	68	X	✓
<i>CALYTRIX LESCHENAUTII</i>	13	P	✓	<i>DROSER A ANDROSACCA</i>	30	W	✓	<i>STYLIDIVM SQUAMELOSUM</i>	69	CI	✓
<i>HIBBERTIA PUNGENS</i>	14	Y	✓	<i>GOMPHOLOBIUM MARGINATUM</i>	31	Bud	✓	<i>COMERSPERMA VOLUBILE</i>	70	B	✓
<i>MEKARULA SP. (86GT315)</i>	15	Bud	✓	<i>WAITZIA ABUMINATA</i>	32	OR	✓	<i>Eucalyptus alba (juvenile leaves only)</i>	71	-	✓
<i>VERTICORDIA CHRYSAETHA</i>	16	Y	✓	<i>LEVENHOOKEA PHYLLO</i>	33	P	✓	<i>ALLOCASUARINA CAMPESTRIS</i>	72	✓	✓
<i>ALCORN SQUAMATA</i>	17	-	✓	<i>LAXMANIA GRANDIFLORA SUBSP. GRANDIFLORA</i>	34	W	✓	<i>MESOMELALEA PREISSII</i>	73	✓	✓
<i>BEAUFORTIA BRATEOSA</i>	18	-	✓	<i>DROSER A ANDROSACCA = 30.</i>	38	Pind.	✓	<i>LEPIDOSPERMA BRUNONIANUM</i>	74	✓	✓
<i>Beckeria unguiculata</i>	19	-	✓	<i>CHAMAEXEROS SERRA</i>	40	-	✓				
<i>LYSINEMA CILIATUM</i>	20	W	✓	<i>DAMPiera LINOLEYI</i>	41	B	✓				
<i>PETIOPHILE SQUAMATA SUBSP. SQUAMATA</i>	21	Bud	✓	<i>PTEROSTYLIS NIGRICANS</i>	42	-	✓				
<i>PULTENAEA ERICIFOLIA</i>	22	✓	✓								

86GT3

RICH04

✓checked

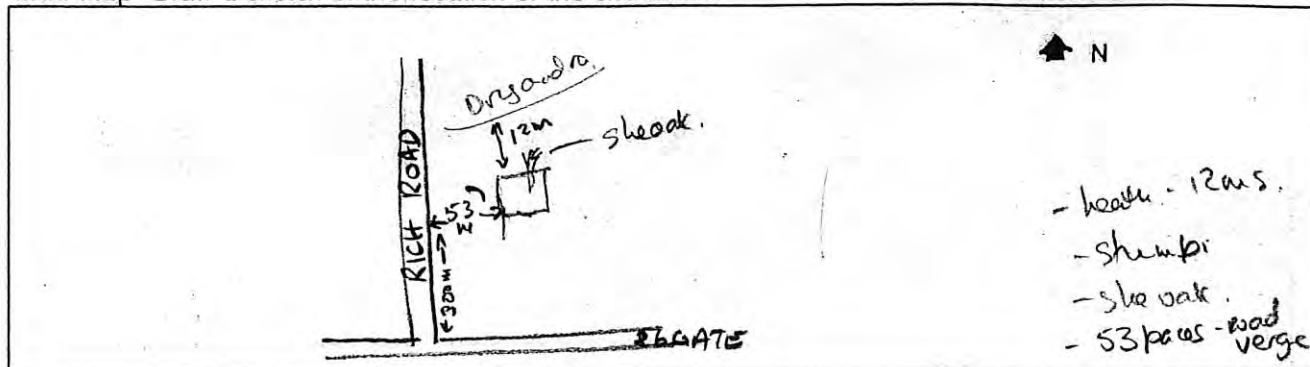
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA RICA ROAD RESERVE SITE NUMBER RICH 4
 DATE TRIP 2/10/99 RECORDERS Dorothy, Avril, Ella, Doreen, Phil
 DATE TRIP _____ RECORDERS _____
 DATE TRIP _____ RECORDERS _____
 BOTANIST Ann Guinness

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.



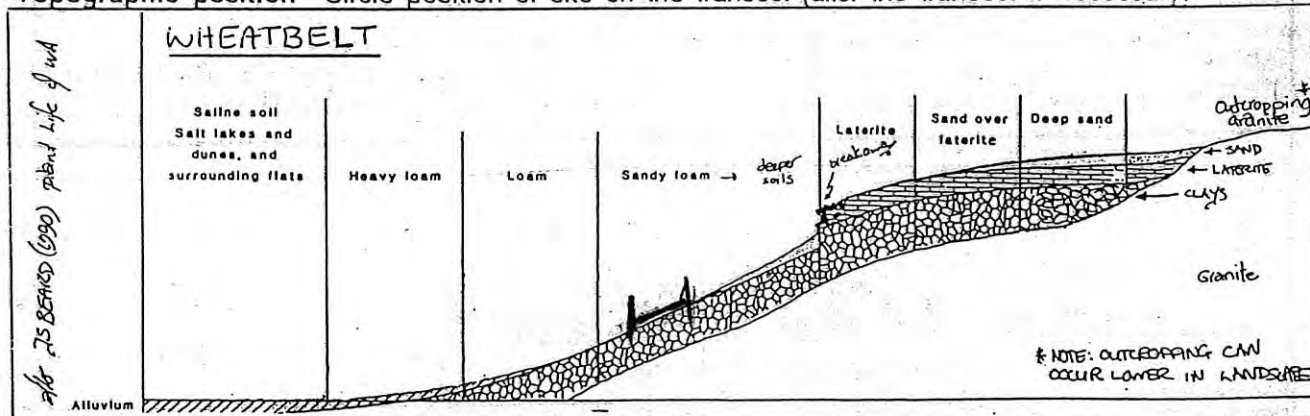
Road Location RICH ROAD

Geographic Location Latitude: 32° 48.234 S Longitude: 117° 42.970 E Altitude: 397 ± 188

Reference Map used: 32° 43' 14.0" 117° 42' 58.2"

Photograph Photographer's Name: Brian Photo No: 36/1

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope:	flat	<u>gentle</u>	steep	Aspect:	N	NE	E	<u>SE</u>	S	SW	W	NW
Surface Soil:	sand	<u>loamy sand</u>	sandy loam	loam	clay	laterite	Colour					
Exposed rock:	type						% surface					
Sub-surface Soil:	sand	<u>loamy sand</u>	sandy loam	loam	clay	laterite	Colour	<u>Brown</u>				
Rock:	type						depth to rock					
Drainage:	<u>well</u>	mod	poor	depth water	cm	Wet:	all year	winter/spring				
Litter:	<u>30 → 40</u>		% cover	Bare Ground		<u>30</u>		% cover				
<u>sparse</u>	Depth	cm										

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

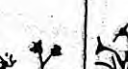
From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

LIFE FORM	TREES		MALLEES	
	over 30m	10-30m	under 10m	over 8m
				
COVER CLASS (%)		11-30%	2-10	
DOMINANT SPECIES*		Wandoo	Sheoak	
			<i>Allocasuarina</i>	

LIFE FORM	SHRUBS		SHRUBS	
	over 2m	2m-1m	under 1m	
				
COVER CLASS (%)			11-30	
DOMINANT SPECIES*			Poison-Gastrophysophyllum	
			<i>Elytix lescleraultii</i>	

LIFE FORM	GRASSES		HERBS		SEDGES		OTHER	
								
COVER CLASS (%)		30-70		10-30				
DOMINANT SPECIES*		Borya sp.		Desmodium				
		<i>Evelashig</i>		<i>Lepidosperma</i>				
		<i>Dampiera</i>		<i>plat.</i>				

WEEDS - % COVER less than 1% 0

4. VEGETATION CONDITION SCALE

		COMMENTS
1	'PRISTINE'	
2	EXCELLENT	✓ Rubbish dump
3	VERY GOOD	needs cleaning up.
4	GOOD	Hardly any weeds.
5	DEGRADED	

* If more than 3 dominant species write "mixed"

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

SITE No. RICH 4

Date 2/10/99.

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
(if species flowering)
- Column 4 identification check

From 'Bushland Plant Survey' written by
B. Keighery (1994) and published by the
Wildflower Society of WA (Inc.), PO Box
64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
<i>Euc. Wandoo</i>	1	-	✓					<i>Benno spora drummondii</i>	21	W	✓
<i>Allocasuarina hanceana</i>	2	-	✓					<i>Tachymene ornata</i>	22	W	✓
<i>Acacia acuminata</i>	8	Y	✓					<i>Drosera glanduligera</i>	23	O	✓
								<i>Phoradendron virens</i>	24	-	✓
								<i>Calandula sp</i> --- no specimen			
								<i>Gnaphalium drummondii</i>	25	G	✓
MALLEES								<i>Popultheca argusifolia</i>	26	Y	✓
								* <i>Peractocellia latifolia</i>	28	P	✓
				GRASSES				* <i>Aechthoea calandula</i>	29	Y	✓
				<i>Neulachne alpepeculoides</i>	40	✓	✓	<i>Xybocharis glabra</i>	30		✓
				<i>Austroshya stemmopogon</i>	41	-	✓	<i>Calandula (?)</i> ORCHID sp.	31	-	✓
SHRUBS				* <i>Pantascistes aroides</i>	42	✓	✓	<i>Haemodorum sp.</i>	32	-	✓
<i>Calytrix tetrantha</i>	3	P	✓	* <i>Vulpea myrtos</i>	43	✓	✓	* <i>Ursinia anthemoides</i>	33		✓
<i>Gastrolobium paviflorum</i>	4	Q	✓	* <i>Ara caryophylla</i> NIS	49	✓	✓	SEDGES			
<i>Hakea laurifolia</i>	5	-	✓	<i>Austroshya elegantissima</i>	61	✓	✓	<i>Lepidosperma sp. 12</i> ISLAND FLAT	34	-	✓
<i>Acacia lasiocarpa</i> var <i>sedifolia</i>	6	Y	✓					<i>Mesomacra PREISSII</i> (Keighery 1994)	35		✓
<i>Jacksonia benderisana</i>	27	Y	✓					<i>Lepidosperma PREISSII</i>	36	-	✓
				HERBS (Cont. PRO)				<i>Mesomacra asper</i>	37	-	✓
				<i>Dampiera lavandulacea</i>	7	M	✓	<i>Schoenus nanus</i> (1)	48	✓	✓
				<i>Lawrencella rosea</i>	9	P	✓	<i>Centropus leptosperma</i>	51	✓	✓
				<i>Stylidium glauca</i>	10	B	✓	<i>Schoenus sesquipedalis</i>	62	✓	✓
				<i>Podolepis leptosperma</i> Lessonii	11	Y	✓				
				<i>Sonchella sphaerocarpa</i>	12	W	✓				
				<i>Stylidium filiforme</i> subsp. <i>filiforme</i>	13	W	✓				
				<i>Glischocaryon aureum</i>	14	Y	✓				
				<i>Waltzia acuminata</i>	15	O	✓				
				<i>Drosera macrantha</i>	16	W	✓				
				<i>Dichopogon capillipes</i>	17	-	✓				
				<i>Conostylis sp. VIMOSA</i>	18	Y	✓				
				<i>Thysanotus patersonii</i>	19	M	✓				
				<i>Opephodaea vaginata</i>	20	-	✓				

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE Label each plant with plants number, site code, date and plant

SITE No
Date

Record on Sheet

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time-
- Column 4 identification

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA . 6008.

TREES				No	FI	ID	SHRUBS (cont.)				No	FI	ID	HERBS (cont.)				No	FI	ID
				</																

RIC#05

✓ checked

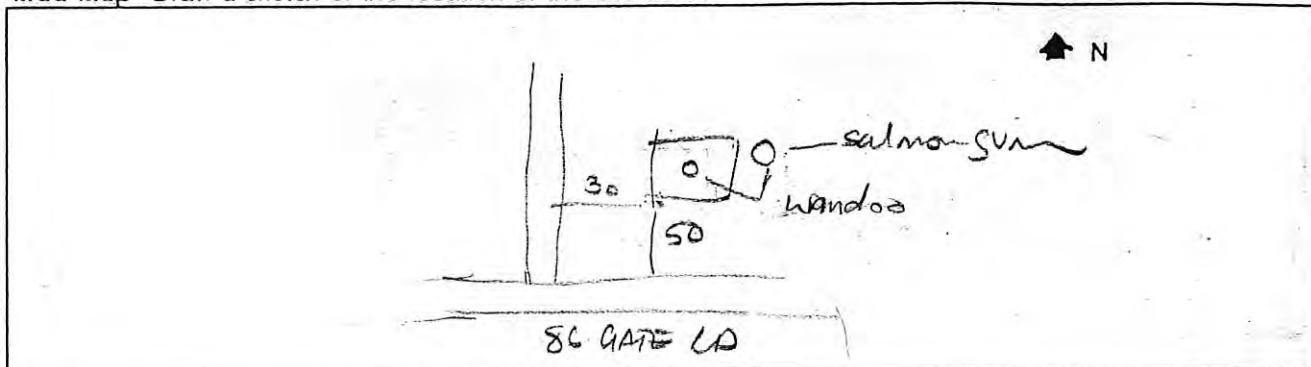
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA RICH RD RESERVE SITE NUMBER RIC#5
 DATE TRIP 2-10-99 RECORDERS Shie, Margaret, Michelle
 DATE TRIP _____ RECORDERS Ken, Amanda, Bill
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

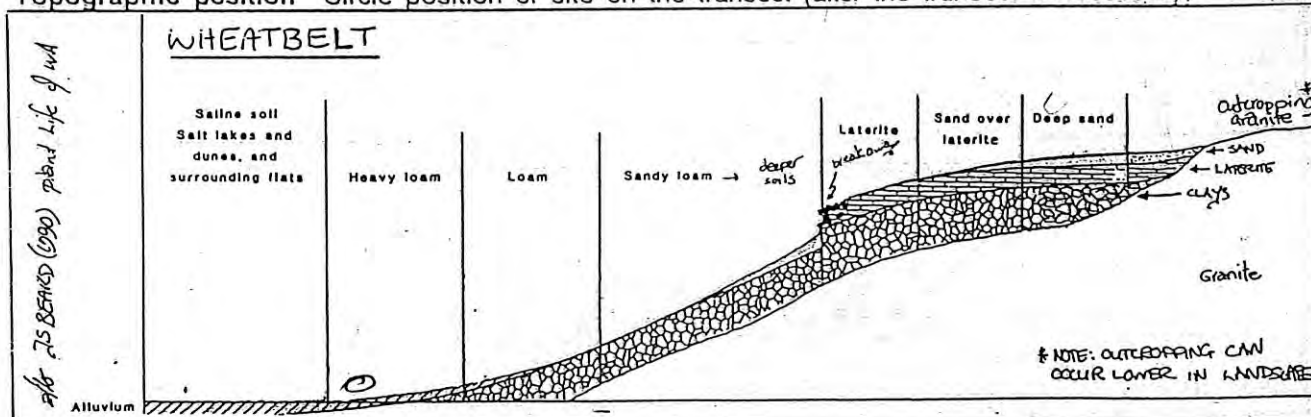
Mud Map Draw a sketch of the location of the site below.



Road Location | Rich Road + 86 Gate Road

Geographic Location | Latitude: 32° 43' 42" S | Longitude: 117° 42' 49" E | Altitude: 396 + - 150Reference Map used: 32° 43' 24.7" 117° 42' 58.1"Photograph | Photographer's Name: Brian Moyle | Photo No: 13

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope:	flat	<u>gentle</u>	steep	Aspect:	N	NE	E	SE	<u>S</u>	SW	W	NW
Surface Soil:	sand	loamy sand	sandy loam	<u>loam</u>	clay	laterite	Colour <u>red brown</u>					
Exposed rock:	type <u>N/A</u>				% surface							
Sub-surface Soil:	sand	loamy sand	sandy loam	loam	<u>clay</u>	laterite	Colour <u>grey yellow</u>					
Rock:	type				depth to rock							
Drainage:	<u>well</u>	mod	poor	depth water	cm	Wet:	all year	winter/spring				
Litter:	<u>90</u>		% cover	Bare Ground	<u>2</u>		% cover					
Depth	<u>2</u>		cm									

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From '*Bushland Plant Survey*' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class	2-10%	11-30%	31 - 70%	over 71%
-------------	-------	--------	----------	----------

TREES				MALLEES			
	over 30m	10 - 30m	under 10m	over 8m	under 8m		
LIFE FORM			 			30m	10m
COVER CLASS (%)		PLANT No. 10-30 20-70	No. 2-10%	No.	No.		
DOMINANT SPECIES*		EUC Samolandra	Ac. acuminata (Jam)				
SHRUBS							
	over 2m	2m - 1m	SHRUBS under 1m				
LIFE FORM	  	  	   				
COVER CLASS (%)		No.	No.	No.			
DOMINANT SPECIES*							
GRASSES							
	HERBS	SEDGES	OTHER				
LIFE FORM	 	  	   				
COVER CLASS (%)	10-30	No. 2-10	No.	No.			
DOMINANT SPECIES*	Aust. tricha						

WEEDS - % COVER

Trees / Malters	%	COMMENTS
Shrubs	%	
Grasses	15 %	
Herbs	5 %	
Sedges	%	

Ursinia

4. VEGETATION CONDITION SCALE

1	'PRISTINE'		COMMENTS <i>Weed invasion</i>
2	EXCELLENT	✓	
3	VERY GOOD		
4	GOOD		
5	DEGRADED		

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

SITE No RICH 5
Date 2-10-99

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA .6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
Salmon Gum - <i>E. salmonopholia</i>	1	X	✓					<i>Lagotis leucolepis</i>	23	X	✓
<i>Achyrocline acuminata</i> (yellow)	2	✓	✓					<i>Hypochaeris glabra</i> (weed)	25	✓	✓
Woodoo - No specimen. <i>Euc. umbro</i>	3	X	✓					<i>Stachys monochaeta</i> (white)	28	✓	✓
								<i>Borua sphaerocephala</i>	30	X	✓
MALLEES											
				GRASSES							
				* <i>Briza Major maxima</i>	5	X	✓				
				<i>Austrostipa tucophylla</i> (Green/Brown)	6	✓	✓				
SHRUBS				* <i>Bromus rubens</i> (Green)	7	✓	✓				
				wild Oats * <i>Havena sp. barkata</i>	8	X	✓				
				African Velt * <i>Ehrharta longiflora</i>	9	X	✓				
				* <i>Eolium rigidum</i> (green)	21	✓	✓	SEDGES			
				<i>Austrodanthonia setacea</i> (Green + Red)	26	✓	✓	<i>Desmodium asper</i>	13	✓	✓
				<i>Austrostipa trachophylla</i> (Green + Brown)	29	✓	✓	<i>Lobelia effusa</i>	27	X	✓
				<i>Neurachne alopecuroides</i> (Green)	31	✓	✓				
				HERBS				ADJACENTS			
				<i>Dianella revoluta</i>	4	X	✓	<i>Rhodanthe manaliensis</i> (Pink)	201	✓	✓
				<i>Crassula ciliata</i> var <i>calatula</i> (red)	10	✓	✓	<i>Veronica filiformis</i> (purple)	202	✓	✓
				<i>Oxalis perennans</i> (Yellow)	11	✓	✓	<i>Gastrolobium parviflorum</i>	203	✓	✓
				* <i>Anagallis arvensis</i> (Purple/Blue)	12	✓	✓				
				<i>Helichrysum leucopsidum</i> (Pink)	14	✓	✓				
				<i>Ptilotus spathulatus</i> forma <i>spatulatus</i>	15	✓	✓				
				<i>Dampiera laurifolia</i> (Purple)	16	✓	✓				
				<i>Waitia acuminata</i> (Yellow)	17	✓	✓				
				<i>Dichopogon capillipes</i>	18	X	✓				
				<i>Rhodanthe polycapala</i> (Cream)	19	✓	✓				
				* <i>Ursinia anthemoides</i> (Cream)	20	✓	✓				
				<i>Trachymene cyanopetala</i>	21	✓	✓				
				<i>Calandrinia calyptata</i> (Maroon)	22	✓	✓				

RICH 5

RIC#06

✓checked

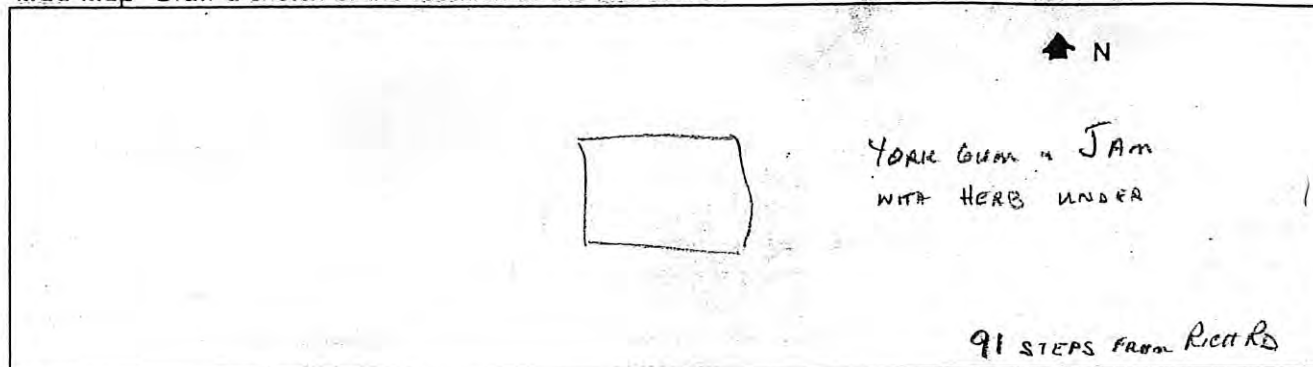
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA Rich Rd. SITE NUMBER Rich 7
 DATE TRIP 2.10.99 RECORDERS MARY JEFF MARY GRAY ANNE ALLEN & GWEN
 DATE TRIP _____ RECORDERS _____
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.

Road Location Rich Rd.Geographic Location Latitude: 32° 43' 41.2" S Longitude: 117° 42' 44.8" E Altitude: 334 m

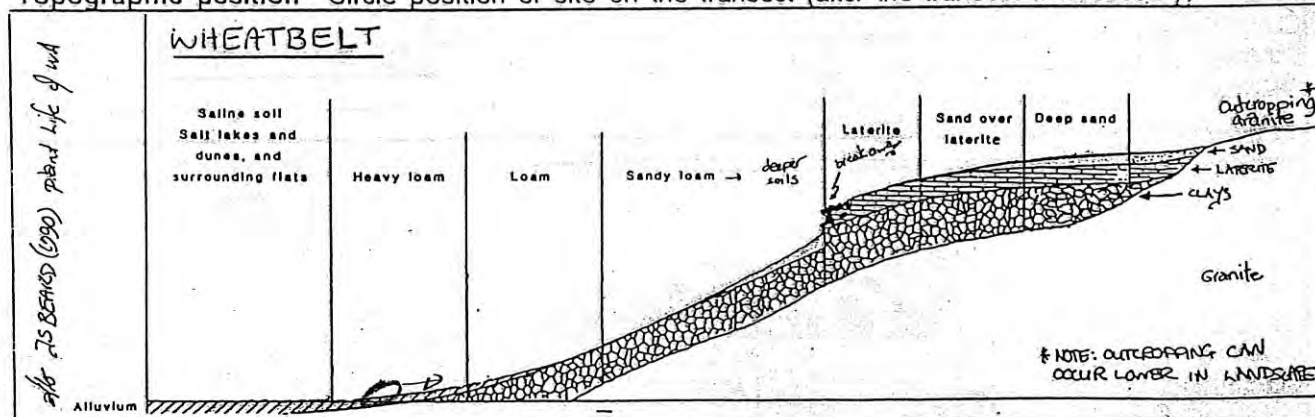
Reference Map used:

YEALERING 2432 32° 43' 24.7" 117° 42' 59.9"

Photograph Photographer's Name:

Photo No: 11/12

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: very gentle (flat) gentle steep Aspect: (N) NE E SE S SW W NW

Surface Soil: sand, loamy sand, (Sandy loam), loam, clay, laterite Colour Red Brown
 Exposed rock: type LATERITE PEBBLES % surface _____

Sub-surface Soil: sand, loamy sand, (Sandy loam), loam, clay, laterite Colour Brown
 Rock: type _____ depth to rock _____

Drainage: well, (mod), poor | depth water _____ cm | Wet: all year — winter/spring

Litter: 11-30 % cover Bare Ground 30 % cover
 Depth 2 cm

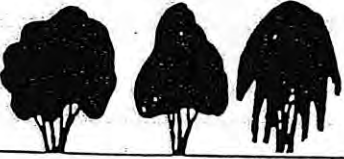
BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

		TREES			MALLEES		
		over 30m	10 - 30m	under 10m	over 8m	under 8m	
LIFE FORM							30m 10m
	COVER CLASS (%)	2-10%	11-30%	31-70%	31-70%	over 71%	
DOMINANT SPECIES*				Yorlk Gum Jam.			
		SHRUBS			SHRUBS		
		over 2m	2m - 1m	under 1m			
LIFE FORM							2m 1m
	COVER CLASS (%)	2-10%	11-30%	over 71%			
DOMINANT SPECIES*							
		GRASSES		HERBS	SEDGES	OTHER	
LIFE FORM						1m	
	COVER CLASS (%)	10-30%		130-70	10-30		
DOMINANT SPECIES*		Neurachne do Amphipogon cari		DAMPiera OPERCULARIA	Lepidosperma costata		

WEEDS - % COVER

Trees/Mallees	%	COMMENTS
Shrubs	%	VERY FEW
Grasses	%	
Herbs	%	
Sedges	%	

4.

VEGETATION CONDITION SCALE

1	'PRISTINE'	COMMENTS
2	EXCELLENT	Ant Hill.
3	VERY GOOD	MANY DEAD TREES
4	GOOD	MAY INDICATE SALT DAMAGE
5	DEGRADED	

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

Record on Sheet • Column 1 plant name:

SITE No. Riest 6

Date 2-10-99

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES			SHRUBS (cont.)			HERBS (cont.)		
No	FI	ID	No	FI	ID	No	FI	ID
FUC. LOXOPHYLLA NO SPEC.	1	✓	THYSANOTIS PATTERSONII NIS.	41	✓	Bladenia laevis	19	C ✓
ACADIA ACUMINATA NIS	2	✓				Hidrocotyle pilifera var glabrata	20	G ✓
ANDRASWARINA. huageliang.	3	✓				CANADENIA ROVI NO SPEC.		✓
						ARTHROPODIUM CURVITES	29	- ✓
						DANIELS. TRACHYMENE PILOSA	30	W ✓
						PHYLLANDRIA SCLERATUM	31	W ✓
						SMALL GREEN FLOWER PORANTHERA MICROPHALLA	32	G ✓
						LAGENARIA DEUGENII	33	W ✓
						URSINIA ANTHYMIDES	34	Y ✓
						AIRA cupaniana Caryophyllae	35	✓ ✓
						FLAT WOOD Xiphocheilus glaberrima	37	Y ✓
						BRENNOSPORA DRUMMONDII	38	W ✓
						Bladenia Polyccephala	39	W ✓
						SEDGES		
						SEDGE L. LEPIDOSPERMA COSTALE	27	- ✓
						THIN SEDGE - AMPHIPOGON SP.	28	✓ ✓
						AUSTROSTIPA TRILOPHYLLA	36	✓ ✓

RC 對 66

checked

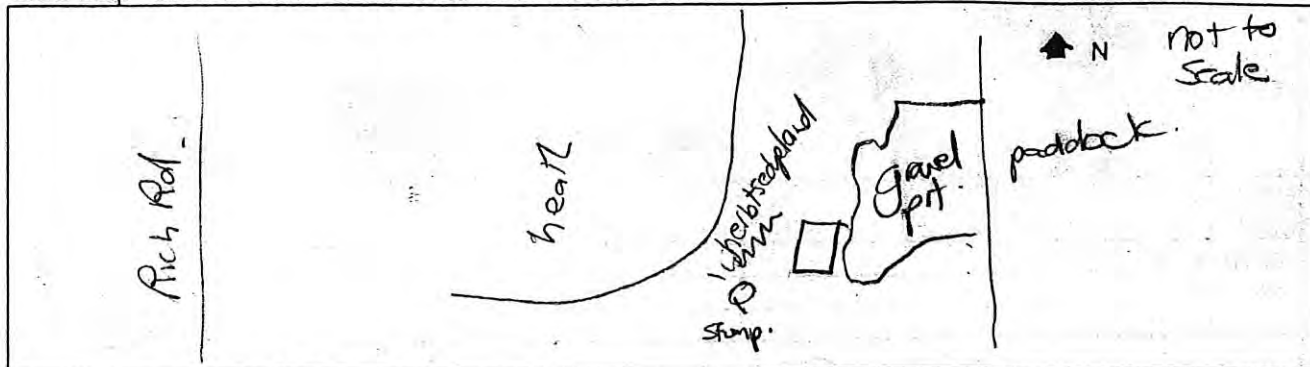
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA Rich Road Reserve SITE NUMBER Rich 7
 DATE TRIP 2-10-99 RECORDERS Dorothy
 DATE TRIP _____ RECORDERS Phyl
 DATE TRIP _____ RECORDERS Ella Averil Jokeen
 BOTANIST Anne Lynness

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

1. LOCATION of the QUADRAT

Mud Map Draw a sketch of the location of the site below.



Rich Road -

Road Location 86 Gate Road gravel pit

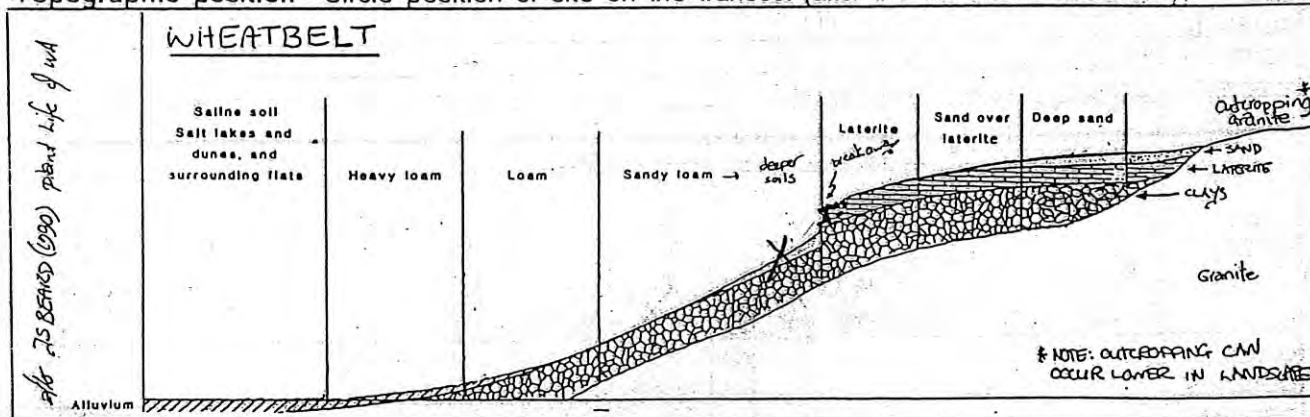
Geographic Location Latitude: 32° 43' 21.0 S Longitude: 117° 43' 01.5 E Altitude: 287m + 56

Reference Map Grid: 32° 43' 12.6" 117° 43' 00.9"

Photograph Photographer's Name: Brian

Photo No: 7 + 8

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep Aspect: N NE E SE S SW W NW

Surface Soil: sand loamy sand sandy loam, loam, clay, laterite Colour Orange-Tan
 Exposed rock: type _____ % surface

Sub-surface Soil: sand loamy sand sandy loam, loam, clay, laterite Colour _____
 Rock: type _____ depth to rock

Drainage: well mod, poor | depth water _____ cm | Wet: all year winter/spring

Litter: 70 % cover Bare Ground 10 % cover
 Depth 1-2 cm 2

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

		TREES			MALLEES		
		over 30m	10-30m	under 10m	over 8m	under 8m	
LIFE FORM				 			30m 10m
	COVER CLASS (%)						30-70
DOMINANT SPECIES*							Euc. rigida Euc. hypoleuca suberectus
		SHRUBS			SHRUBS		
		over 2m	2m-1m		under 1m		
LIFE FORM		  	  		  		
	COVER CLASS (%)	10 to 30					
DOMINANT SPECIES*		Medialia uncinata Leptospermum calocarpum					
		GRASSES		HERBS	SEDGES		OTHER
LIFE FORM		 		 	 		1m
	COVER CLASS (%)				0-10		
DOMINANT SPECIES*					Lepidosperma sp. A2 Island Plat (Keighery 2000)		

WEEDS - % COVER < 1%

Trees/Mallees	%	COMMENTS
Shrubs	%	
Grasses	< 1%	
Herbs	%	
Sedges	%	

4. VEGETATION CONDITION SCALE

1	'PRISTINE'	COMMENTS Dirty Big Rabbit warren nearby
2	EXCELLENT	
3	VERY GOOD	
4	GOOD	
5	DEGRADED	

* If more than 3 dominant species write "mixed"

5. SPECIES PRESCENCE

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

[illegible]

LOMANDRA MICRANTHA subsp. *TERETIFOLIA* 19 ✓ ✓

PTO

 $\text{KIC} \phi 7$

5. SPECIES PRESCENCE

SITE No

Date _____

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA .6008.

[illegible]

Drosera menziesii

checked

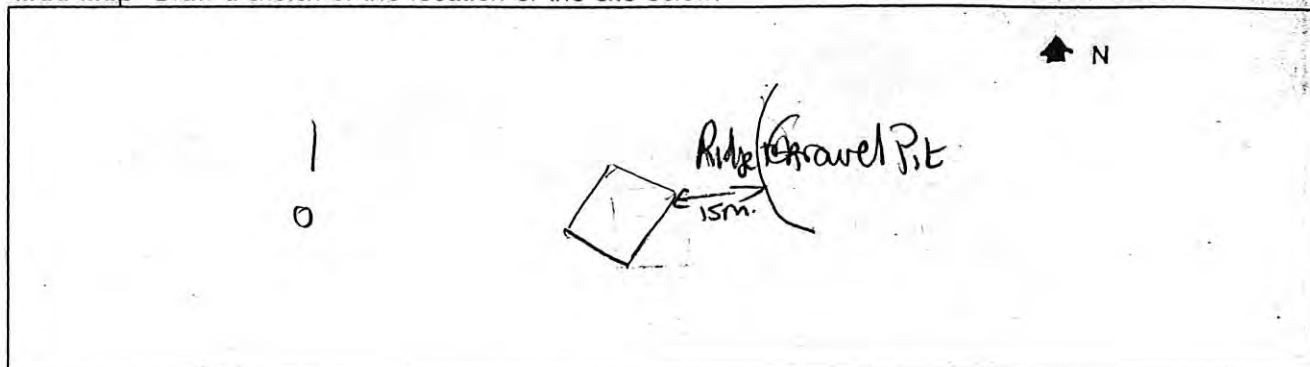
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA RICH ROAD RESERVE SITE NUMBER 8 RICH
 DATE TRIP 2/10/99 RECORDERS Helen, Keld, Robyn, Rosemary, Mary
 DATE TRIP _____ RECORDERS _____
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by
 B. Keighery (1994) and published by the
 Wildflower Society of WA (Inc.), PO Box
 64 Nedlands WA 6008.

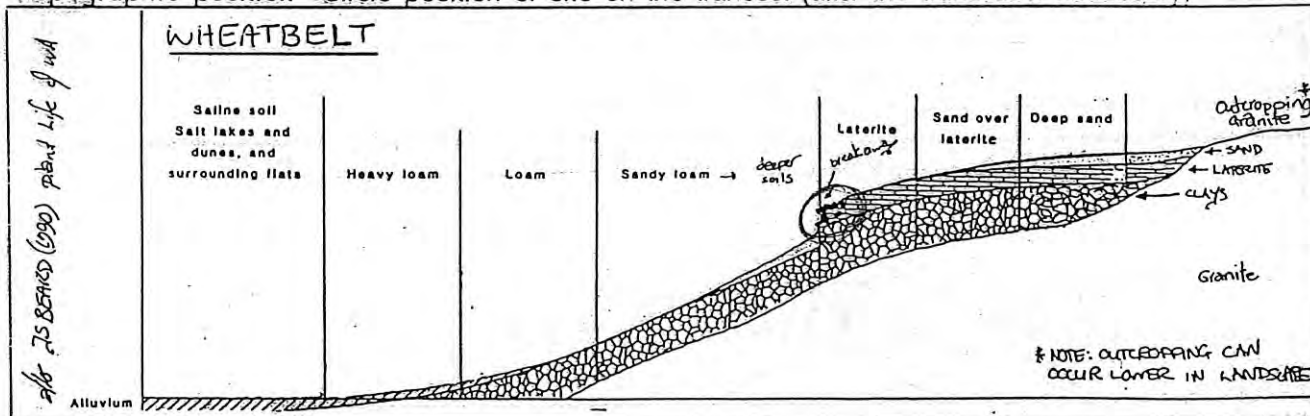
Mud Map Draw a sketch of the location of the site below.

Road Location Rich Road - 86 Gate Road.Geographic Location Latitude: 32° 43' 143" S Longitude: 117° 43' 040" E Altitude: 337 ± 40

Reference Map used:

32° 43' 08.6"117° 43' 02.4"Photograph Photographer's Name: Brian Mayne Photo No: 9, 10

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep Aspect: N NE E SE S SW W NWSurface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour Red

Exposed rock: type _____ % surface

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour Brown

Rock: type _____ depth to rock

Drainage: well, mod, poor | depth water _____ cm Wet: all year winter/spring

Litter: _____ % cover
 Depth 3 cm Bare Ground 2-10 % cover

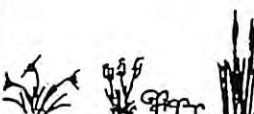
BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

LIFE FORM	TREES			MALLEES		
	over 30m	10-30m	under 10m	over 8m	under 8m	
						30m 10m
COVER CLASS (%)		10-30% No. 1	2-10% No. 1			
DOMINANT SPECIES*		WANDOO	CASUARINA huughiana			
LIFE FORM	SHRUBS		SHRUBS			
	over 2m	2m-1m	under 1m			
					2m 1m	
COVER CLASS (%)	<2%	2-10% No. 1	<2% No. 1			
DOMINANT SPECIES*		GASTROELIUM parviflorum	Hakea lissocarpa			
LIFE FORM	GRASSES	HERBS	SEDGES	OTHER		
						
COVER CLASS (%)	<2%	2-10% No. 1	2-10% No. 1			
DOMINANT SPECIES*		Lomandra spp.				

WEEDS - % COVER

Trees/Mallees	%	COMMENTS
Shrubs	%	
Grasses	%	
Herbs	%	
Sedges	%	

4. VEGETATION CONDITION SCALE

1	'PRISTINE'	COMMENTS
2	EXCELLENT	
3	VERY GOOD	
4	GOOD	
5	DEGRADED	

* If more than 3 dominant species write "mixed"

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

SITE No Dich 8

Date 2/10/98

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour (if species flowering)
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
<i>Eucalyptus wandoo</i>	1	-	✓					<i>Hydrangea rugulosa</i>	29	✓	✓
<i>Allocasuarina huegeliana</i>	2	✓	✓					<i>Phyllanthus tenuifolia</i>	30	✓	✓
								<i>Weitzia acuminata</i>	31	✓	✓
								<i>Dampiera laevandulacea</i>	32	✓	✓
								Green leaves !! <i>Sydlia</i>	33	-	?
								<i>Kobelia</i> sp.	34	-	✓
MALLEES								<i>Dichopogon capillipes</i>	37	-	✓
								<i>Dianella revoluta</i>	40	-	✓
				GRASSES				<i>Caladenia calyptrata</i>	41	✓	✓
				<i>Austrodanthonia setacea</i>	9	✓	✓	<i>Lagenorhiza hughesii</i>	42	✓	✓
				*Rye Grass <i>Lolium rigidum</i>	10	-	✓	<i>Stenotaphrum dimorphum</i>	43	✓	✓
SHRUBS				Grass <i>AUSTROSTIPA ELEGANTISSIMA</i>	11	-	✓	<i>Trachymene cyanopetala</i>	44	✓	✓
<i>Gastrolobium (parviflorum)</i>	3	✓	✓	Grass <i>AUSTROSTIPA TRICHOPHYLLA</i>	12	✓	✓				
<i>Dryandra aff. circarioides</i>	4	✓	✓	<i>Neurachne alopecuroides</i>	13	✓	✓	SEDGES			
<i>Acacia lasiocarpa var. sedifolia</i>	5	-	✓	<i>Austrostipa</i> sp. (infertile - prob. <i>ef. elegantissima</i>)	14	-	✓	Sedge - <i>Lomandra effusa</i>	35	-	✓
<i>Melaleuca uncinata</i>	6	-	✓	<i>Aira cupaniana</i> / <i>caryophyllae</i>	24	✓	✓	Sedge <i>Stenotaphrum DRUMMONDIANUM</i>	36	-	✓
~~MAKED ZISSOPHYLLA~~	7	-	✓	<i>AUSTROSTIPA ELEGANTISSIMA</i>	35	✓	✓	~~W. sedge~~ <i>LOMANDRA MICRANTHA</i>	38	-	✓
<i>MORANTHUS erythescens</i>	8	-	✓					Sedge - no spec found.	39	-	A
<i>Oleandra rudis</i>	15	✓	✓	HERBS				<i>AUS</i>			
				<i>Comesperma volubile</i>	16	✓	✓	ADJACENT			
				<i>Callitriche canyana</i> <i>anumum</i>	17	✓	✓	<i>Stylidium PLIFERUM subsp. PLIFERUM</i>	45	✓	✓
				<i>Trachymene ornata</i>	18	✓	✓	<i>Dampiera Lindleyi</i>	46	✓	✓
				<i>Phyllanthus sulcatus</i>	19	✓	✓	<i>Xanthorrhoea drummondii</i>	47	-	✓
				<i>Caladenia FALCATA</i>	20	✓	✓	<i>Caladenia roei</i>	48	✓	✓
				<i>ZANNOCELLA ROSEA</i>	21	✓	✓	<i>Eucalyptus WANDOO</i>	49	-	✓
				<i>Drosera LACRANTHA</i>	22	✓	✓				
				<i>Drosera</i> sp.	23	-	✓				
				<i>Rodalepsis lessonii</i>	25	✓	✓				
				<i>Didymopanax angustifolia</i>	26	✓	✓				
				<i>Hellianthus leucopsideum</i>	27	✓	✓				
				Tiny yellow daisy	28	✓	?				

2/10/98

checked:

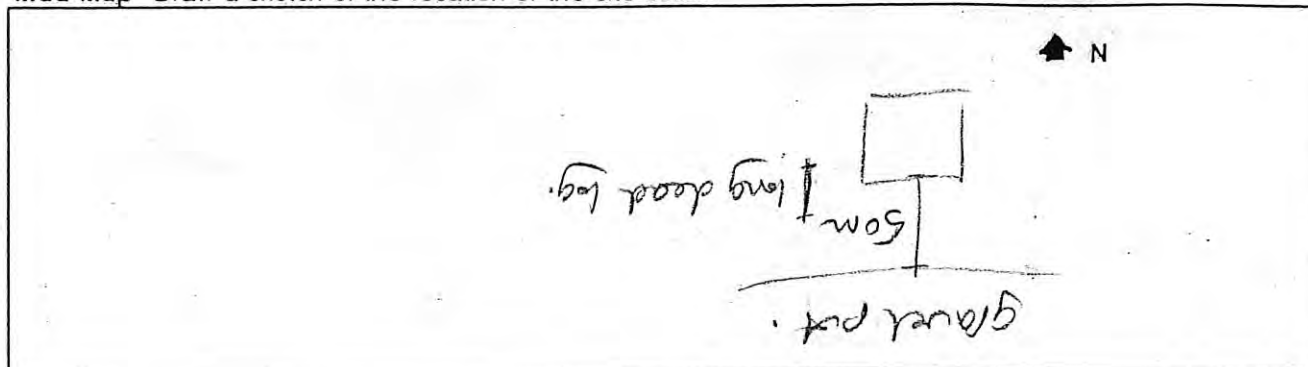
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA RICH ROAD RESERVE SITE NUMBER RICH. 9
 DATE TRIP 2-10-99 RECORDERS Alice Margaret, Bill
 DATE TRIP _____ RECORDERS Michelle, Ken, Snodden
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

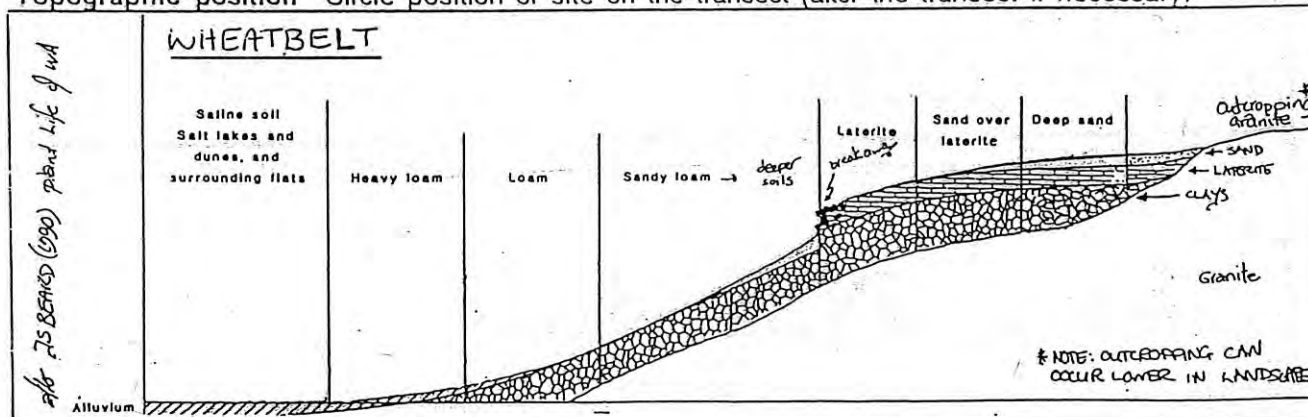
Mud Map Draw a sketch of the location of the site below.



Road Location | Rich Road - 86 Gate Road.

Geographic Location | Latitude: 32° 43' 12.2" S | Longitude: 117° 43' 10.8" E | Altitude: 354 + - 5Reference Map used: 32° 43' 07.3" 117° 43' 06.5"Photograph | Photographer's Name: Bra | Photo No: 16+17

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat (gentle) steep | Aspect: (N) NE E SE S SW W NWSurface Soil: sand, loamy sand, sandy loam, loam, clay, laterite | Colour Red brownExposed rock: type N/A | % surfaceSub-surface Soil: sand, loamy sand, sandy loam, loam, (clay), laterite | Colour Red brown

Rock: type | depth to rock

Drainage: (well) mod, poor | depth water cm | Wet: all year winter/springLitter: 10-50 % cover | Bare Ground: 40 % coverDepth 2-3 cm

(gravel)

including dead branches

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From '*Bushland Plant Survey*' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below), and dominant species in each layer.

Cover Class	2-10%	11-30%	31-70%	over 71%
-------------	-------	--------	--------	----------

[illegible]

WEEDS - % COVER

Trees / Malters	%	COMMENTS
Shrubs	%	Very few weeds
Grasses	%	
Herbs	%	
Sedges	%	

4. VEGETATION CONDITION SCALE

		COMMENTS
1	'PRISTINE'	
2	EXCELLENT	
3	VERY GOOD	✓
4	GOOD	
5	DEGRADED	

* If more than 3 dominant species write "mixed".

5. SPECIES PRESCENCE

SITE No RICH 9

Date 2-70-99

Record on Sheet

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES				SHRUBS (cont.)				HERBS (cont.)			
No	FI	ID		No	FI	ID		No	FI	ID	
MALLEES				GRASSES				SEDGES			
1	✓	✓	<i>Eucalyptus capillosa</i> subsp. <i>polyclada</i>	15	✓	✓	<i>Neurachne alopecuroides</i>	20	x	✓	<i>Lepidosperma brunonianum</i>
SHRUBS				16	✓	✓	<i>Amphipogon</i> sp.				
2	✓	✓	<i>Dryandra aff. cuneata</i>								
3	✓	✓	<i>Marrubium cuneatum</i>								
4	✓	✓	<i>Baccharis confertiflora</i> pink								
9	✓	✓	<i>Leucadendron campestre</i>								
10	✓	✓	<i>Metelaria uncinata</i>								
11	✓	✓	<i>Conospermum volubile</i> blue								
18	✓	✓	<i>Baccharis crispiflora</i> pink								
19	✓	✓	<i>Stenanthium tridentatum</i>								
				HERBS							
				5	✓	✓	<i>Drosera macrantha</i>				
				8	✓	✓	<i>Thysanotus patersonii</i>				
				12	✓	✓	<i>Trachymene pedunculata</i>				
				13	✓	✓	<i>Blennospora drummondii</i>				
				14	✓	✓	<i>Levanhoskia pusilla</i> pink				
				17	✓	✓	<i>Pterostylis sanguinea</i> green				
								ADJACENT			
				21	x	✓	<i>Hydrocotyle rugulosa</i>	201	x	✓	<i>Acacia erichsoniae</i>
				22	✓	✓	<i>Rhodanthe laevis</i> cream	202	x	✓	<i>Acacia linearis</i> var. <i>acutifolia</i>
				23	✓	✓	<i>Wentia acuminata</i> orange	203	✓	✓	<i>Trachymene ornata</i> white
				24	x	✓	<i>Lobelia</i> sp.	204	✓	✓	<i>Thlaspi sp.</i>
				6	✓	✓	<i>Lomandra effusa</i>	205	✓	✓	<i>Nemera</i> sp. at obovate (capitate)
				7	?	?	<i>Lomandra/chamaejasme</i> ?	206	✓	✓	<i>Podostroma gnaphaloides</i> yellow

spec. missing.

RTc

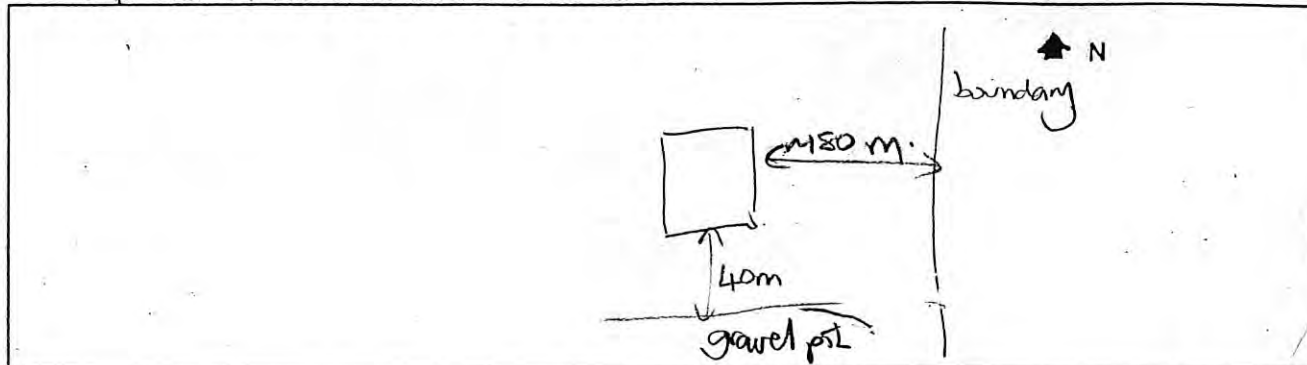
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA RICH ROAD RESERVE SITE NUMBER RIC 10
 DATE TRIP 2-10-99 RECORDERS JOJO LOVISA ROBYN C HAZEL
 DATE TRIP _____ RECORDERS HELEN KELD ARDEN
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.



Road Location Rich Road - 86 Gate Road.

072

115

Geographic Location Latitude: 32° 43' 05.2" S Longitude: 117° 43' 15.9" E Altitude: 382 ± 55'

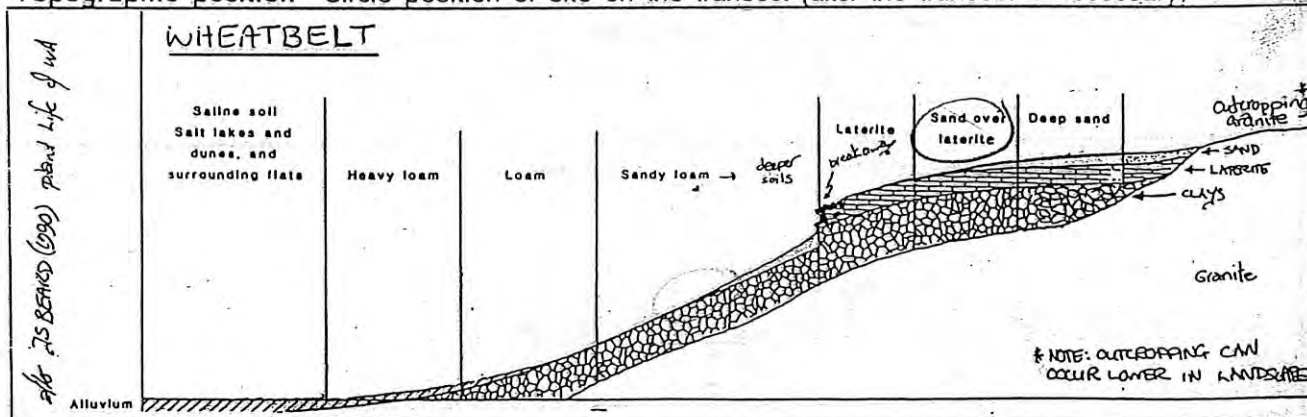
Reference Map Used:

32° 43' 04.3" 117° 43' 06.9"

Photograph Photographer's Name: BRIAN

Photo No: 18

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep

Aspect: N NE E SE S SW W NW

Surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite

Colour light brown

Exposed rock: type % surface

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour

Rock: type laterite depth to rock 150 m

Drainage: well mod, poor | depth water

cm | Wet: all year winter/spring

Litter: 30-70 % cover

Bare Ground 2 < 10 % cover

Depth < 1 cm

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From '*Bushland Plant Survey*' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below), and dominant species in each layer.

Cover Class	2-10%	11-30%	31 - 70%	over 71%
-------------	-------	--------	----------	----------

		TREES				MALLEES			
		over 30m	10 - 30m	under 10m	over 8m	under 8m	30m	10m	
LIFE FORM				 					
COVER CLASS (%)			PLANT No. ↓	No. ↓	10 - 30% No. ↓	No. ↓		No. ↓	
DOMINANT SPECIES*				<i>Allocas huegeliana</i>					
		SHRUBS over 2m		2m - 1m	SHRUBS under 1m				
LIFE FORM				  	   				
COVER CLASS (%)				<10% 10-30% No. ↓					
DOMINANT SPECIES*				<i>Xanthorrhoea drummondii</i>					
		GRASSES		HERBS	SEDGES		OTHER		
LIFE FORM		 		   	   				
COVER CLASS (%)		<2% No. ↓		>70% No. ↓	<2% No. ↓				
DOMINANT SPECIES*				<i>opercularia</i>					

WEEDS - % COVER

Trees / Mallers	%	COMMENTS
Shrubs	%	
Grasses	%	
Herbs	%	
Sedges	%	
	%	

4. VEGETATION CONDITION SCALE

1	'PRISTINE'		COMMENTS Some Rubbish.
2	EXCELLENT		
3	VERY GOOD	✓	
4	GOOD		
5	DEGRADED		

* If more than 3 dominant species write "mixed".

5. SPECIES PRESCENCE

SITE No RICH 40

Date 2-10-39

- From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
Alocasaura kuegeliana	1	-	✓					Dichopogon capillipes	30	-	✓
WANDOO Euc.	2	-	✓					Stylidium calcaratum	31	✓	✓
								Pterochaeta paniculata	32	✓	✓
								Caladema FASCATA	33	✓	✓
								Drosera androsacea (fr pink)	34	✓	✓
MALLEES								Hydrocotyle calceolaria	35	✓	✓
								Xanthoxylum GRACILE	36	✓	✓
								HAKOSPERMUM demissum	37	✓	✓
				GRASSES				Pterochaeta paniculata	38	✓	✓
				* Briza maxima	11	✓	✓	? pink " Blennospora drummondii	39	✓	✓
				Grass-AUSTROANTHUS setaceus	12	✓	✓	STYLIDIUM CALCARATUM	40	✓	✓
				Grass-AUSTROSTIPA elegantissima	13	✓	✓	HAKOSPERMUM demissum	41	✓	✓
SHRUBS				Borja. sphaerocephala	15	✓	✓	Stylidium leptophyllum	42	✓	✓
Hakea GIBBATA	3	B	✓	* Aira cupaniana/caryophyllae	16	✓	✓	SEDGES			
Baeckea crispiflora (pink)	4	P	✓	GRASS - neurachne alopecuroides	17	✓	✓	Centropogon Schoenus nanus	36	✓	✓
Metaleuca sp.	5	-	✓					Schoenus cf. A. Kuhn (B. Briggs 79.59)	42	✓	✓
HAEKEA SCOPARIA	6	-	✓					LIPIDODERMIS PREISSIANA n.s.	43	-	✓
Hibbertia Pungens	7	✓	✓	↓ HERBS							
Calyptrix leschenaultii	8	✓	✓	Drosera subviridula subsp. subviridula	14	✓	✓				
Glossocaryon aureum (yellow)	9	✓	✓	white flowers LAXMANIA squarrosa	18	✓	✓	Adj			
Opecularia vaginata	10	✓	✓	stylidium calcaratum	19	✓	✓	comesperma volubile	45	B	✓
Xanthorrhoea drummondii	44		✓	WAITZIA ACUMINATA	20	✓	✓	GASTROLABIUM spinosum var spinosum	47	X	✓
(on structure page).				PODOTHECA ANGUSTIFOLIA	21	✓	✓				
Baeckea preissiana floribunda	50		✓	china orchid Cyathella gemmata N.S.	22	✓	✓				
				Chamaecypella corymbosa var. corymbosa	23	✓	✓				
				* Parenticellia latifolia	24	✓	✓				
				STACKHOUSIA monogyne N.S.	25	W	✓				
				Rhodalepis lessonii	26	✓	✓				
				tiny pink flower Trachymene pilosa	27	✓	✓				
				Vetiveria cyano-potamica	28	✓	✓				
				even leafed specimen destroyed	29	✓	✓				

Rhodanthe laevis (in specimen will 27) 27th ✓ ✓

PTO

RTCiφ

5. SPECIES PRESCENCE

SITE No

Date _____

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA .6008.

[illegible]

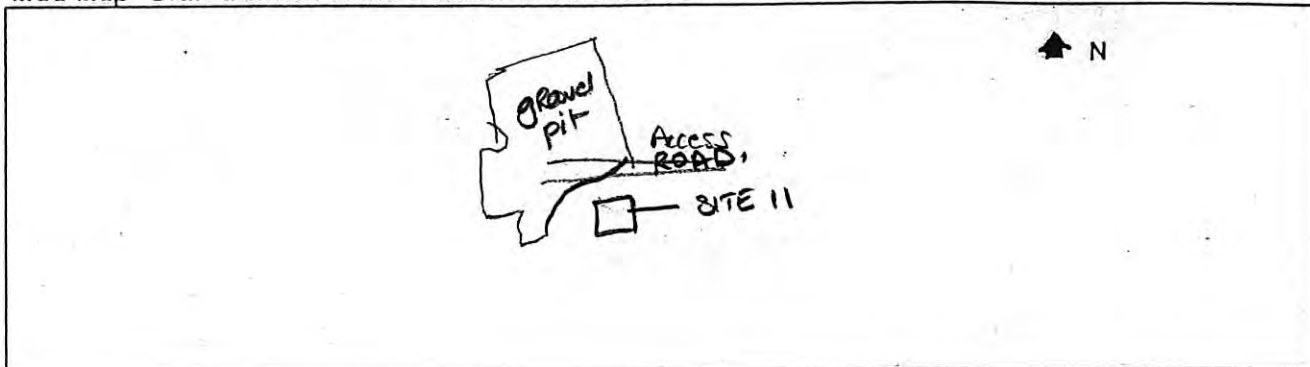
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA RICH ROAD RESERVE SITE NUMBER RICH SITE 11
 DATE TRIP 2/10/99 RECORDERS AURIL, DOONHY, DOREEN,
 DATE TRIP _____ RECORDERS ELLA, PHIL, Brian
 DATE TRIP _____ RECORDERS _____
 BOTANIST ANN GUNNESS.

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.

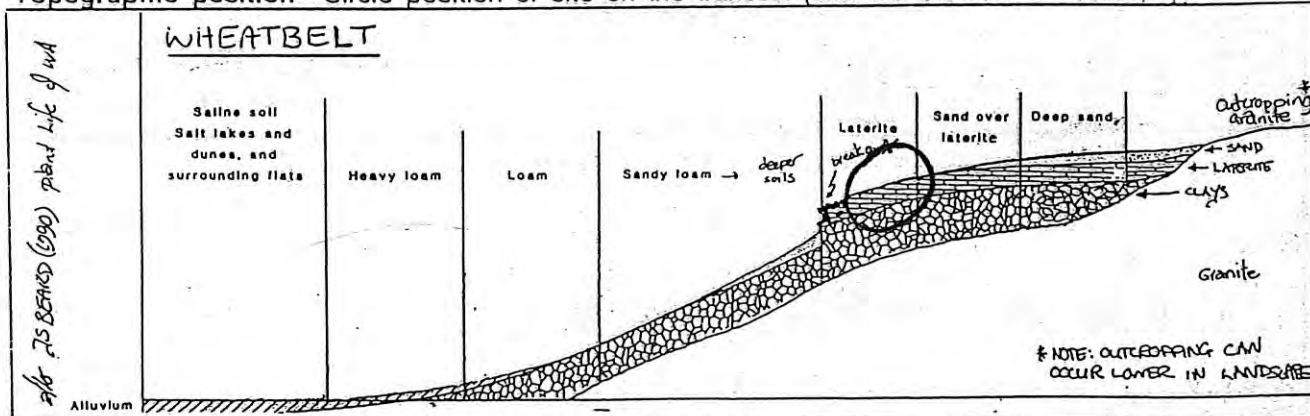


Road Location Rich Road - 86 Gale Rod.

Geographic Location Latitude: 32° 43.167 S Longitude: 117° 48.129 E Altitude: 382 + 53
 Reference Map used: 32° 43' 10" 117° 43' 07.7"

Photograph Photographer's Name: Brian Photo No: 14, 15

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope:	flat	<u>gentle</u>	steep	Aspect:	N	NE	E	<u>SE</u>	<u>S</u>	SW	W	NW
Surface Soil:	sand	loamy sand	sandy loam	loam	clay	<u>laterite</u>	Colour	<u>Tan</u>				
Exposed rock:	type	<u>gravel</u>	%	<u>surface</u>								
Sub-surface Soil:	sand	loamy sand	sandy loam	loam	clay	<u>laterite</u>	Colour					
Rock:	type		depth to rock									
Drainage:	<u>well</u>	mod	poor	depth water	cm	Wet:	all year	winter/spring				
Litter:	<u>40</u>	% cover	Bare Ground	<u>15</u>	% cover							
Depth	cm											

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

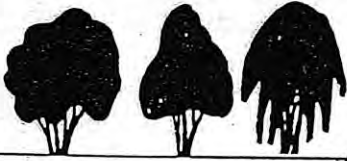
3. VEGETATION STRUCTURE AND COVER

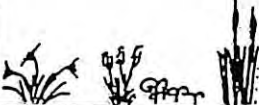
From '*Bushland Plant Survey*' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class	2-10%	11-30%	31 - 70%	over 71%
-------------	-------	--------	----------	----------

TREES				MALLEES			
	over 30m	10 - 30m	under 10m	over 8m	under 8m		
LIFE FORM			 			30m	10m
COVER CLASS (%)		PLANT No. ↓ 2	No. ↓ 2-10	No. ↓	No. ↓		
DOMINANT SPECIES*			AK. longirostris 1				

SHRUBS			SHRUBS		
	over 2m	2m - 1m		under 1m	
LIFE FORM					2m 1m
COVER CLASS (%)		No. ↓ 30-30	No. ↓	10 < 30	No. ↓
DOMINANT SPECIES*	Hebeleana unanata Allocasuarina ^{Campestris} ~~torulosa~~ Calochortus ^{sinensis} ~~sp.~~		4 3 6	Banksia sphaerocarpa, Pterocarpus sp. glauca	5 7

GRASSES		HERBS		SEDGES		OTHER	
LIFE FORM							1m
COVER CLASS (%)	No. ↓	No. ↓	No. ↓				
DOMINANT SPECIES*							

WEEDS - % COVER
 $< 1\%$

Trees / Mallee	%	COMMENTS
Shrubs	%	
Grasses	%	
Herbs	%	
Sedges	%	
	%	

4. VEGETATION CONDITION SCALE

1	'PRISTINE'		COMMENTS Nearly pristine
2	EXCELLENT	✓	
3	VERY GOOD		
4	GOOD		
5	DEGRADED		

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

SITE No RICH 11

Date 2/10/99

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name
- Column 2 plant number
- Column 3 flowering time- record flower colour if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
<i>Allocasuarina huegeliana</i>	1	r						<i>Haemodorum</i> sp.	35	-	✓
								<i>Peostylis</i> SARGENTII	35	✓	✓
								<i>Millotia</i> tenuifolia	37	GI	✓
								<i>Hypochaeris glabra</i> No specimen			✓
								<i>Chamaezedon</i> SERNA	38	W	✓ !!
MALLEES											
				GRASSES							
				<i>Neurachne alopecuroides</i>	31	✓	✓				
				<i>Austrostipa elegantissima</i> (Griffith)	32		✓				
SHRUBS											
<i>Dalmanella</i> aff <i>cirsoides</i>	2	Y	✓					SEDGES			
<i>Allocasuarina lampesthis</i>	3	-	✓					<i>Lepidosperma</i> aff <i>tenuis</i>	33	-	✓
<i>Melaleuca ucinata</i>	4	-	✓					<i>Lepidosperma</i> PREISSMANII	34	-	✓
<i>Banksia sphaerocarpa</i>	5	Y	✓					<i>Centeolepis</i> avistata	36	✓	✓
<i>Calothamnus sanguineus</i>	6	-	✓								
<i>Petrophile glauca</i>	7	GI	✓								
<i>Calothamnus quadrifidus</i>	8	-	✓	HERBS							
<i>Hakea subulcata</i>	9	-	✓	<i>Drosera macrantha</i>	16	Y	✓				
<i>Calothamnus quadrifidus</i>	10	-	✓	<i>Stylidium PILIFERUM</i> subsp <i>PILIFERUM</i>	17	GI	✓				
<i>Baeckha preissiana</i> / <i>puberula</i>	11	W		<i>Polygonum juncea</i>	18	GI	✓				
<i>Hibbertia pungens</i>	12	Y	✓	<i>Stylidium squamulosum</i> (S)	19	GI	✓				
<i>Xanthorrhoea drummondii</i>	13	-	✓	<i>Chamaescilla corymbosa</i> ^{var corymbosa}	20	-	✓				
<i>Nemcia</i> sp. aff. <i>obovata</i> capitata	14	Y	✓	<i>Boraginaceae</i> <i>Splachnaceae</i>	21	✓	✓				
<i>Zenopsis</i> <i>DIETSIANUS</i>	15	-	✓	<i>Pterodroma paniculata</i>	22	W	✓				
<i>Melaleuca</i> sp. (Rich 126)	26	-	✓	<i>Comesparme volubilis</i>	23	B	✓				
<i>Beaufortia BRATEOSA</i>	39	-	✓	<i>Oreocaulum vaginatum</i> ?	24	GI	✓				
				<i>Utricularia antherodes</i>	25	✓	✓				
				<i>Rhodanthe laevis</i>	27	GI	✓				
				<i>Elythranthera bursaria</i>	28	GI	✓				
				<i>Isanthus micrantha</i> ^{aff}	29		✓				
				ORCHID sp.	329	✓	✓				
								<i>Schoenus</i> sp. aff. <i>pleiostemonus</i>			✓
								<i>Schoenus</i> sp. aff. <i>pleiostemonus</i>			✓

RICH 11

Total 4g < 44 on quadrat → Sweeds.

✓checked.

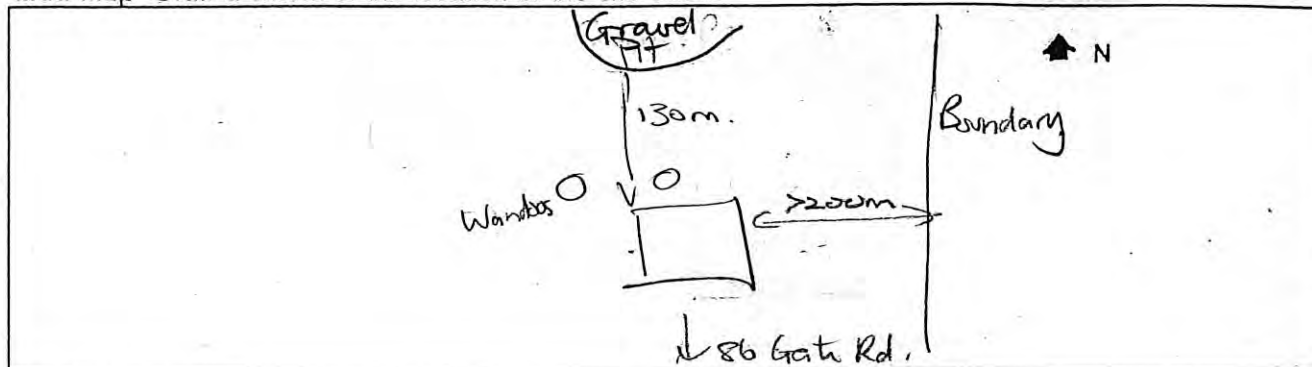
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA RICH ROAD RESERVE SITE NUMBER RICH 12
 DATE TRIP 2-10-99 RECORDERS M. Gray, K. Woodward, Gwen Gath, Anne, Alan
 DATE TRIP _____ RECORDERS Mary, Geoff
 DATE TRIP _____ RECORDERS _____
 BOTANIST Anne Bellman

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.



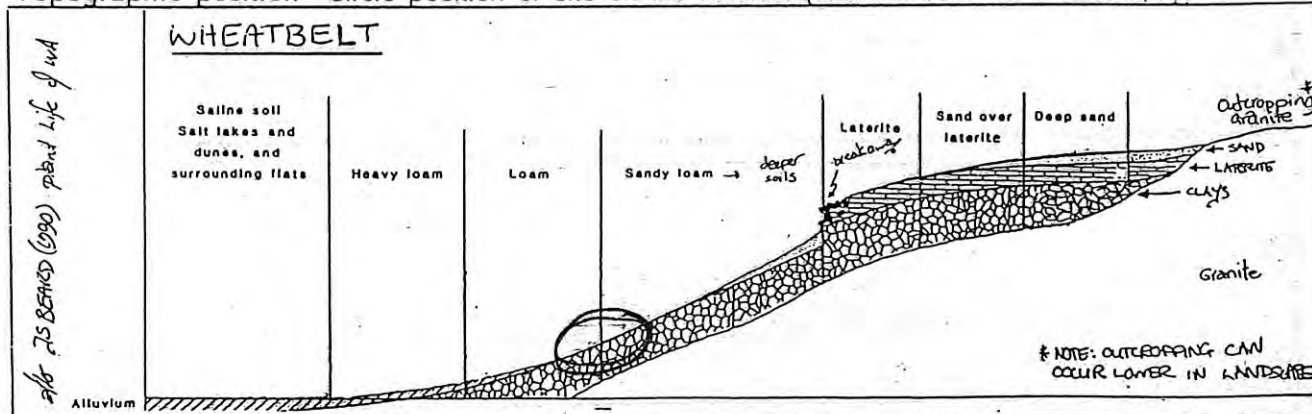
Road Location | RICH RD & 86 GATE RD

Geographic Location | Latitude: 32° 43' 30.6"S | Longitude: 117° 43' 06.4"E | Altitude: 380 ± 150

Reference Map Used: Yealering 2432 32° 43' 18.4" 117° 43' 03.8"

Photograph | Photographer's Name: B. MOYLE | Photo No: 19

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep | Aspect: N NE E SE (S) SW W NW

Surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite | Colour grey-brown
 Exposed rock: — type treebark laterite | % surface —

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite | Colour grey-brown
 Rock: — type — | depth to rock —

Drainage: well, mod, poor | depth water cm | Wet: all year winter/spring

Litter: — — 70 % cover | Bare Ground — — ~ 10 % cover
 Depth — — ~ 1 cm

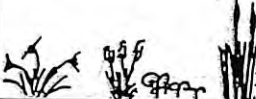
BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class	2-10%	11-30%	31-70%	over 71%
-------------	-------	--------	--------	----------

		TREES				MALLEES			
		over 30m	10 - 30m	under 10m	over 8m	under 8m			
LIFE FORM							30m	10m	
	COVER CLASS (%)		10%	10%					
DOMINANT SPECIES*			Wandoo	Wandoo 10% + Allocasuarina 10%					
SHRUBS									
		over 2m	2m - 1m	SHRUBS under 1m					
LIFE FORM							2m	1m	
	COVER CLASS (%)								
DOMINANT SPECIES*									
GRASSES									
		HERBS	SEDGES	OTHER					
LIFE FORM									
	COVER CLASS (%)								
DOMINANT SPECIES*									

WEEDS - % COVER

Trees / Malters	%	COMMENTS
Shrubs	%	
Grasses	%	
Herbs	%	
Sedges	%	
	%	

< 1%

4. VEGETATION CONDITION SCALE

1	'PRISTINE'		COMMENTS V.G. large ^{old} trees dying back. "Whiptail" Ca & mineral defic due to 20S water.
2	EXCELLENT		
3	VERY GOOD	✓	
4	GOOD		
5	DEGRADED		

* If more than 3 dominant species write "mixed".

5. SPECIES PRESCENCE

SITE No RICH 12

Record on Sheet

Date 2-10-99

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA .6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
<i>Alcornoque HUEGELIANA</i>	1		✓					<i>Brennansia drummondii</i>	25	wh	✓
Euc. wendoo - not collected			✓					<i>Calandrinia calyptrata</i>	26	P	✓
								<i>Crassula colutea var. esolata</i>	27	G	✓
								<i>Gnaphosia drummondii</i>	28	C	✓
								* <i>Parentucellia latifolia</i>	29	P	✓
MALLEES								<i>Glischrocaryon alireum</i>	30	M	✓
								<i>Stylidium piliferum</i> outsp. <i>piliferum</i>	31	Wh	✓
								<i>Podathea angustifolia</i>	32	cr	✓
				GRASSES				<i>Mitella tenuifolia</i>	33	cr	✓
				<i>Hesperanthus setacea</i>	12	✓	✓	<i>Hydrocotyle filitosa</i> var. <i>glabrata</i>	34	G	✓
				<i>Austrostipa</i> sp.	13	-	✓	<i>Kobelia</i> sp.	35		✓
SHRUBS				<i>Nerachne alopecuroides</i>	14	✓	✓	<i>Thysanotus patersonii</i>	36	-	✓
<i>Gastrolobium parviflorum</i>	2	Y	✓	* <i>Aira cupaniana/coryphileca</i>	37	✓	✓	Flatweed * <i>Hypochaeris glabra</i>	39		✓
				<i>Briza major maxima</i>	38		✓	SEDGES			
HERBS (cont'd)				<i>Grass AMPHIPOGON CARICINUS</i>	49	✓	✓	Sedge - <i>Lomandra micrantha</i>	11	-	✓
<i>Orchid - ? Leporella fimbriata</i>	40	-	✓?					Sedge - <i>Lomandra effusa</i>	17	-	✓
<i>Penstemon obionoides</i>	42	w	✓					<i>Loxocarya desmodioides asper</i>	18	-	✓
<i>Stypania graeca</i>	43	Bl	✓	HERBS				<i>Bovaria spheerocarpa</i>	19	wh	✓
<i>Helichrysum leucopsideum</i>	48	P	✓	<i>Olearia rudis</i>	3	Bl	✓	<i>Ranunculus preissianus</i>	20	✓	✓
<i>Brachycomia pappusilla</i> var. <i>tenuella</i>	42	✓	✓	<i>Dampiera</i> (PROBABLY <i>LAVANDULAEDE</i>)	4	Bl	✓	Sedge - <i>Lomandra micrantha</i>	21	-	✓
ADJACENT				<i>Waltzia acuminata</i>	5	Yell	✓	sedge - <i>Centrolepis cristata</i>	41	✓	✓
<i>Stipa AUSTRALIS VARIABILIS</i>	44	✓	✓	* <i>Vrsinia anthemoides</i>	6	Y	✓				
<i>Acacia lesiocarpa</i> var. <i>sedifolia</i>	45	-	✓	<i>Lagenaria kungii</i>	7	-	✓				
<i>Hakea LISOCARPA</i>	46	-	✓	* <i>Hypochaeris glabra</i>	8	Y	✓				
<i>Helichrysum leucopsideum</i>	47	wh	✓	<i>Helichrysum leucopsideum</i>	9	-	✓				
<i>Podolepis canescens</i> adj		w.	✓	* <i>Parentucellia rosea</i>	10	P	✓				
				<i>Dichrocentron capillares</i>	15	-	✓				
				<i>Dioscorea macrantha</i>	16	-	✓				
				<i>Podolepis lessonii</i>	22	Y	✓				
				<i>Trachymene pilosa</i> T. cyanopetala	23	wh	✓				
				<i>Opeurura vaginata</i> (unwed)	24	-	✓				

RTC 12

✓checked

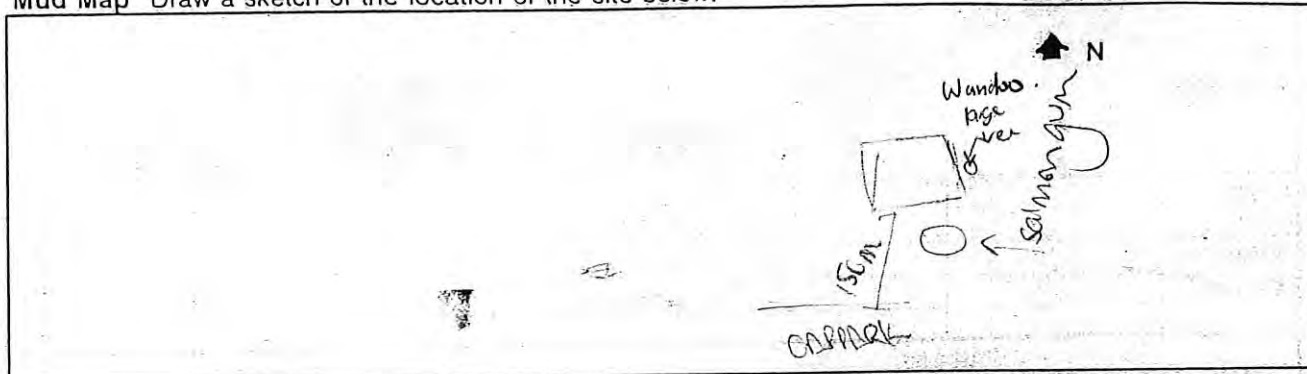
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA MALTAUNING RES. SITE NUMBER MALR1
 DATE TRIP 3-10-99 RECORDERS Alice Margaret P. Avrit
 DATE TRIP _____ RECORDERS Lizzy Margaret
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.



Road Location Kirk Rock Road

Geographic Location Latitude: 32° 42' 74.3 S Longitude: 117° 36' 46.2 E Altitude: 313 ± 54

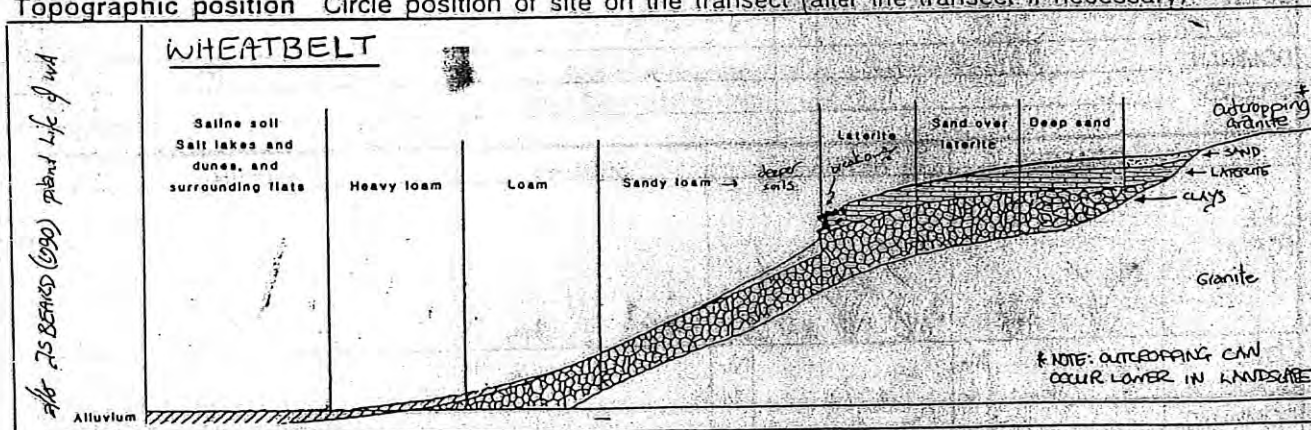
Reference Map used:

32° 42' 44.6" 117° 36' 27.7"

Photograph Photographer's Name: Brian Moyle

Photo No. 22, 23

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep Aspect: N NE E SE S SW W NW

Surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour light brown
 Exposed rock: no type with little loam 1% surface dry

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour light brown
 Rock: type depth to rock

Drainage: well, mod, poor | depth water cm Wet: all year winter/spring

Litter: 20 % cover Bare Ground 102 % cover
 Depth 1cm cm

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

LIFE FORM	TREES			MALLEES		
	over 30m	10-30m	under 10m	over 8m	under 8m	
			+ Wandoo <10%			30m 10m
COVER CLASS (%)			11-30			
DOMINANT SPECIES*			<i>Acacia</i> <i>hugeliana</i>			
	SHRUBS			SHRUBS		
	over 2m	2m-1m		under 1m		
						2m 1m
COVER CLASS (%)			<3%			
DOMINANT SPECIES*		<i>Gompholobium</i> <i>Gastrophysum parviflorum</i>				
	GRASSES	HERBS	SEDGES	OTHER		
						
COVER CLASS (%)	2-10	70-80				
DOMINANT SPECIES*		<i>Boraginaceae</i> <i>sphaerocephala</i>				

WEEDS - % COVER

Trees/Mallees	%	COMMENTS
Shrubs	2%	Not many weeds
Grasses	2%	in site but
Herbs	2%	areas around
Sedges	1%	distributed

4. VEGETATION CONDITION SCALE

		COMMENTS
1	'PRISTINE'	
2	EXCELLENT	✓
3	VERY GOOD	Regeneration happening
4	GOOD	
5	DEGRADED	

* If more than 3 dominant species write "mixed"

5. SPECIES PRESCENCE

SITE NORMAL

Date 3-10-99

- From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES			SHRUBS (cont.)			HERBS (cont.)		
No	FI	ID	No	FI	ID	No	FI	ID
<i>Alloraspina huegeliana</i>	✓	✓				<i>Rhodanthe laevis</i> cream	16	✓
<i>Hyacinth</i>						* <i>Parentucellia latifolia</i>	17	✓
<i>Wendoo</i> & <i>Joan</i>						<i>Rhodanthe mangrove</i> pink	18	✓
						<i>Leptocarpus</i> <i>concolor</i>	19	X
						<i>Trachymene</i> <i>blakelyi</i>	29	✓
						<i>Hydrangea</i> <i>calceolaria</i> white	30	✓
MALLEES						<i>Caesia</i> <i>almond</i>	31	X
						<i>Mitella</i> <i>tenuifolia</i> cream	32	✓
						<i>Pycnanthemum</i> <i>gladuligerum</i>	33	X
						* <i>Hydrangea</i> <i>hypochaeris</i>	34	✓
						<i>Thymus</i> <i>patersonii</i> purple	39	✓
						<i>Phyllanthus</i> <i>sulcatus</i> yellow	40	✓
						<i>Gonolobus</i> <i>modulus</i> red/green	44	✓
SHRUBS								
<i>Gastrophysalis</i> (Box poison) yellow	2	✓						
<i>Potamogeton</i>								
		</						

Wandoo.

717

RC 13

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

Label each plant with plants number, site code, date and plant's name or working name if required

SITE No

Date _____

Record on Sheet

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA . 6008.

[illegible]

RTIC 14

checked

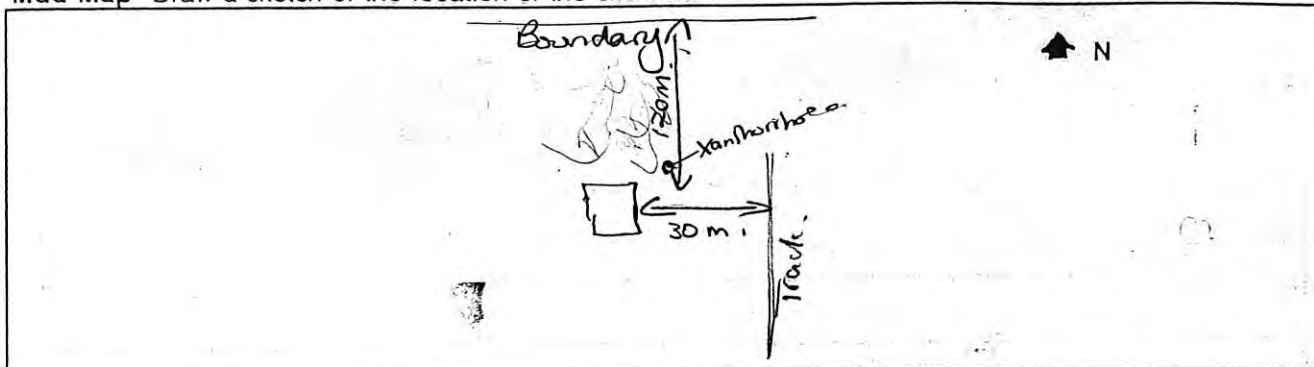
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA MAUR SITE NUMBER 2
 DATE TRIP 3-10-99 RECORDERS Helen, Keld, Rosemary, Heather, Matt
 DATE TRIP _____ RECORDERS _____
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

1. LOCATION of the QUADRAT

Mud Map Draw a sketch of the location of the site below.



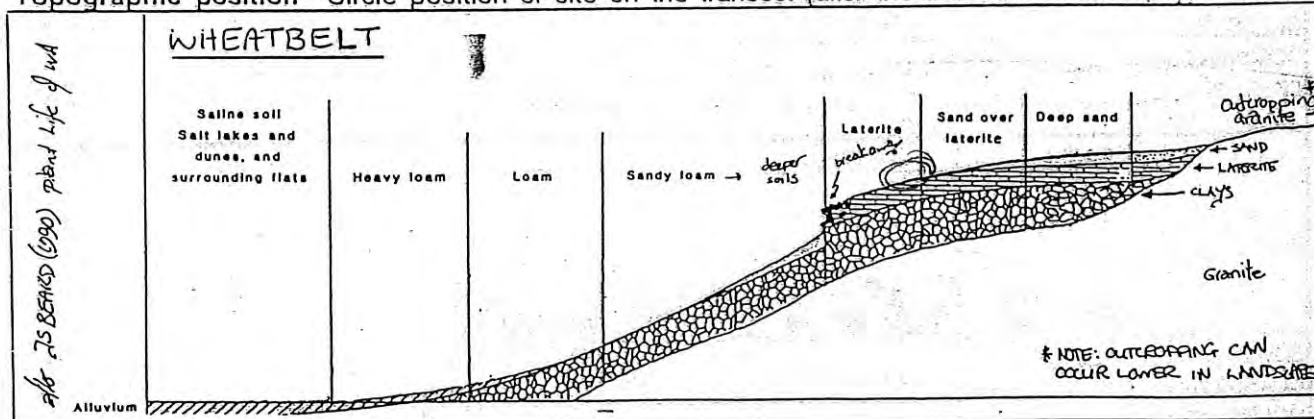
Road Location KINC ROCK ROAD

Geographic Location Latitude: 32° 42' 00" S Longitude: 117° 36' 53" E Altitude: 353 ± 91

Reference Map Grid: 32° 42' 42" 117° 36' 31.9"

Photograph Photographer's Name: BRIAN Photo No: 24

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope:	flat	<u>gentle</u>	steep	Aspect:	<u>(N)</u>	NE	E	SE	S	SW	W	NW
Surface Soil:	sand, loamy sand, <u>(sandy loam)</u> , loam, clay, laterite										Colour:	<u>Red Brown</u>
Exposed rock:	type										% surface with heavy scattering of	<u>laterite pebbles.</u>
Sub-surface Soil:	sand, loamy sand, sandy loam, loam, clay, <u>(laterite)</u>										Colour	
Rock:	type										depth to rock	
Drainage:	<u>(well)</u>	mod	poor	depth water	cm	Wet:	all year	winter/spring				
Litter:	> 70%		% cover	Bare Ground		, 2-10		% cover				
Depth	1		cm									

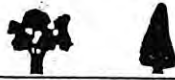
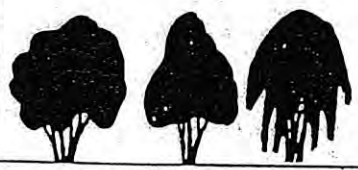
BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below), and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

LIFE FORM	TREES			MALLEES		
	over 30m	10-30m	under 10m	over 8m	under 8m	
						30m 10m
COVER CLASS (%)			10-30			
DOMINANT SPECIES*			Alocasauria huegeliana			
	SHRUBS			SHRUBS		
	over 2m	2m-1m		under 1m		
						2m 1m
COVER CLASS (%)		<2%		<2%		
DOMINANT SPECIES*		ACACIA multispicata				
	GRASSES		HERBS	SEDGES	OTHER	
						
COVER CLASS (%)	<2%		2-10%	<2%		
DOMINANT SPECIES*						

WEEDS - % COVER

Trees/Mallees	%	COMMENTS
Shrubs	%	a few grasses
Grasses	%	
Herbs	%	
Sedges	%	

4. VEGETATION CONDITION SCALE

1	'PRISTINE'		COMMENTS
2	EXCELLENT	✓	
3	VERY GOOD		
4	GOOD		
5	DEGRADED		

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

SITE No **MALE 2**

Date **3-10-99**

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name
- Column 2 plant number
- Column 3 flowering time- if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
<i>Allocasuarina huegeliana</i>	1	-	✓					* Flat weed <i>Hypochaeris glabra</i>	21	✓	✓
								<i>Chenopodium Drummondii</i>	22	✓	✓
								<i>Phytolacca Saligna</i>	23	✓	✓
								<i>Stylidium LEPTOPHYLLUM</i>	24	P	✓
								<i>Xanthorrhoea pusilla</i>	25	P	✓
								* <i>Ursinia antheroides</i>	26	✓	✓
MALLEES								<i>Hypochaeris pilifera</i> var <i>glabrata</i>	27	✓	✓
								<i>Dianella revoluta</i>	28	✓	✓
				GRASSES				<i>Tiny daisy</i>	29	✓	?
				~~held data~~ * <i>Ehrharta longiflora</i>	4	✓	✓	<i>Trachyrhynchus cyanopetalus</i>	30	✓	✓
				<i>GRASS AUSTRORIPA ELEGANTISSIMA</i>	5	✓	✓	<i>Oreocera</i> sp.	31	-	✓
SHRUBS				* <i>Briza maxima</i>	6	✓	✓	<i>Rhodanthe laevis</i>	32	✓	✓
<i>Acacia multispicata</i>	2	✓	✓	* <i>Ara cupaniana/caryophyllea</i>	14	✓	✓	~~<i>Chenopodium</i>~~ <i>arvensis</i>	33	✓	✓
<i>Styphandra glauca</i>	3	✓	✓					SEDGES			
								<i>Schoenus nanus</i>	36	✓	✓
								<i>Sedge - Lepidosperma tenue</i>	37	-	✓
				HERBS							
				<i>Opercularia URGINATA</i>	7	✓	✓	ADJACENTS			
				<i>Caladenia saccharata</i>	8	✓	✓	<i>Acacia acuminata</i>	38	-	✓
				<i>Caladenia flava subsp. minor</i>	9	✓	✓	<i>Caladenia pulcata</i>	39	✓	✓
				<i>Gilchristia aureum</i>	10	✓	✓	* <i>Cape weed</i> <i>Arctotheca calendula</i>	40	✓	✓
				<i>Boraginaceae</i>	11	✓	✓	<i>Acacia seedling</i> (UNABLE TO POSITIVE I.D.)	41	-	?
				<i>Drosera macrantha</i>	12	✓	✓	<i>Drummondia Drummondii</i>	42	-	✓
				* <i>Parvifloria latifolia</i>	13	✓	✓	<i>Thysanotus patersonii</i>	43	✓	✓
				<i>Pterostylis sanguinea</i>	15	-	✓	<i>MURACHNE MOPECUROIDES</i>	44	✓	✓
				<i>PARVIFLORA ROSEA</i> Pink	16	✓	✓	<i>QUINETIA URVILLEI</i>	45	-	✓
				<i>Chamaejasme COMBOSA</i> var <i>COMBOSA</i>	17	-	✓	<i>Allocasuarina camphoroides</i>			
				<i>Diuris</i> sp. var <i>CORYMBOSA</i>	18	✓	✓				
				<i>Waltzia ACUMINATA</i>	19	✓	✓				
				<i>Podolepis lessonii</i>	20	✓	✓				

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5. SPECIES PRESCENCE

SITE No

Date _____

Label each plant with plants number, site code, date and plant's name or working name if required

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA .6008.

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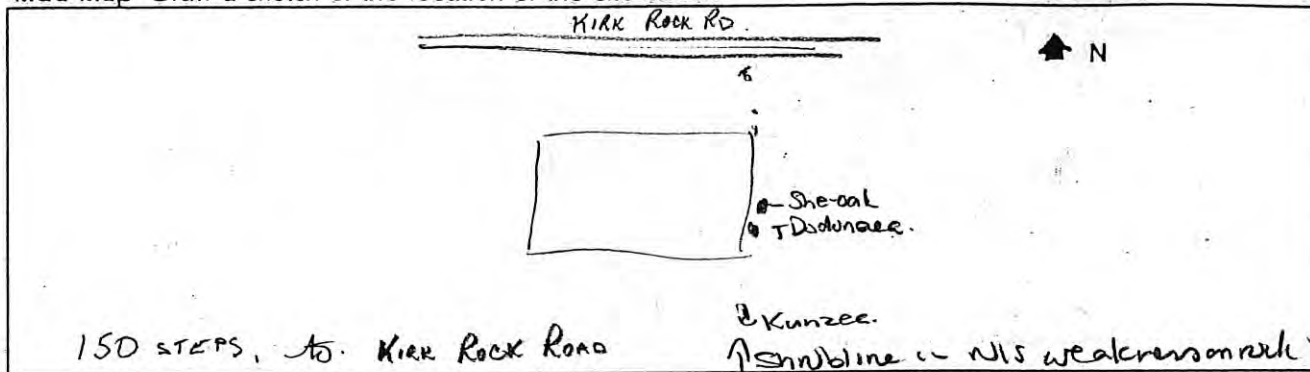
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA MUKATYUP RESERVE SITE NUMBER MALY 3
 DATE TRIP 3-10-99 RECORDERS MARY JEFF DOROTHY BET ALAN ANNE
 DATE TRIP _____ RECORDERS _____
 DATE TRIP _____ RECORDERS _____
 BOTANIST _____

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

1. LOCATION of the QUADRAT

Mud Map Draw a sketch of the location of the site below.



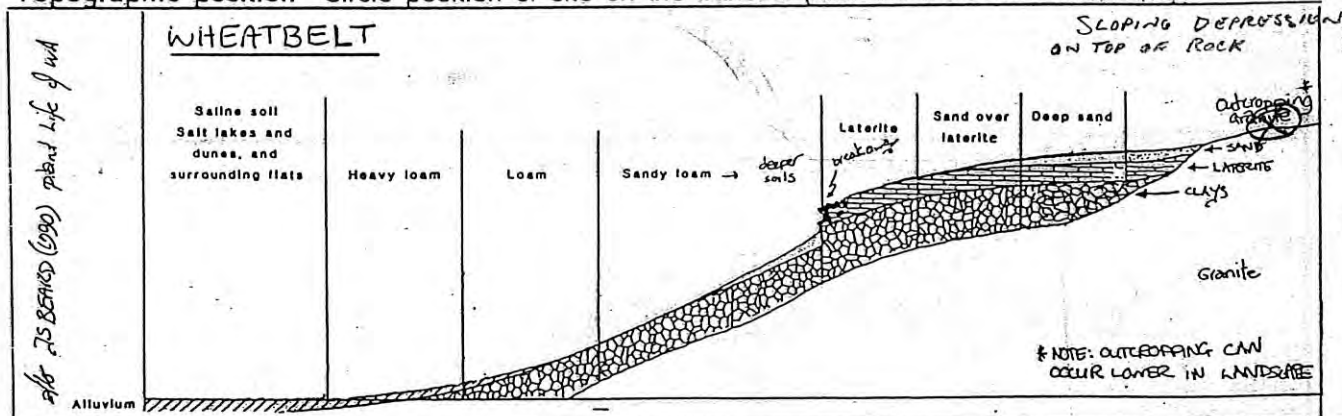
Road Location | to KIRK ROCK ROAD

Geographic Location | Latitude: 32° 42' 9.12" S | Longitude: 117° 36' 627 E | Altitude: 274 ± 53

Reference Map used: 32° 42' 54.7" 117° 36' 37.6"

Photograph | Photographer's Name: BRIAN MOYLE | Photo No: 26/27

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep | Aspect: N NE E SE S SW W NW

Surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite | Colour GRANITE

Exposed rock: type WEATHERED GRANITE | % surface

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite | Colour G

Rock: GRANITE type | depth to rock IN DEPRESSIONS TO 5cm

Drainage: well, mod, poor | depth water 5 cm | Wet: all year winter/spring

WATER IN POOLS

Litter: _____ % cover

Depth _____ cm | Bare Ground 30 % cover

Rock

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

LIFE FORM	TREES			MALLEES		
	over 30m	10-30m	under 10m	over 8m	under 8m	
						30m 10m
COVER CLASS (%)	/	No. ↓	C 1%	/	No. ↓	
DOMINANT SPECIES*			CASUARINA huegeliana			
LIFE FORM	SHRUBS		SHRUBS			
	over 2m	2m-1m	under 1m			
					2m 1m	
COVER CLASS (%)	/	No. ↓	1%	No. ↓		
DOMINANT SPECIES*			DODONAEA VISCOSSA KUNZEA ADJACENT			
LIFE FORM	GRASSES	HERBS	SEDGES	OTHER		
						
COVER CLASS (%)	1%	No. ↓	50%	No. ↓	LICHEN 71-30%	
DOMINANT SPECIES*	CLOVER	BORYA sphaerolephala CRASSULA				

WEEDS - % COVER

Trees/Mallees	1%	COMMENTS NEED CAUGHT UNDER TREES AND IN BORYA
Shrubs	1%	
Grasses	5%	
Herbs	1%	
Sedges	1%	

4. VEGETATION CONDITION SCALE

1	'PRISTINE'	COMMENTS
2	EXCELLENT	
3	VERY GOOD ✓	
4	GOOD	
5	DEGRADED	

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESENCE

Label each plant with plants number, site code, date and plant's name or working name if required

SITE No MAAY 3

Record on Sheet

Date 3-10-99

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
<i>Allocasuarina huegeliana</i>	1	-	✓	<i>Eriacanthus ovata</i>	51	✓	✓	<i>Phasopyllum gracile</i>	26	✓	✓
				<i>Podolepis lessoni</i>	52	✓	✓	<i>Epilobium ciliatum</i>	28	-	✓
				<i>Stachys monogyna</i>	53	✓	✓	<i>Thelymitra antennifera</i>	29	✓	✓
				<i>Thysanotis tenuis</i>	54	✓	✓	<i>Diuris</i> sp aff <i>corymbosa</i>	30	✓	✓
								<i>Thelymitra</i>	31		
								<i>Thelymitra</i> aff <i>macrophylla</i>	32	✓	✓
MALLEES								<i>Chellanthus sieberi</i> subsp <i>sieberi</i>	33	-	✓
				GRASSES				<i>Glossostigma drummondii</i>	176	✓	✓
				<i>*Clover Trifolium arvense</i>	38	P	✓	(mixed specimen)			
				<i>*Aira cupaniana/caryophylla</i>	4	✓	✓				
SHRUBS				<i>*Hypochaeris glabra</i>	5	W	✓				
<i>Dodonaea viscosa</i> ssp. <i>angustissima</i>	2	Rev	✓	<i>*Mursinia anthemoides</i>	6	Y	✓				
				GRASS 1 <i>Eriacanthus ovata</i>	7	✓	✓	SEDGES			
ADJACENT ROCK EDGES				GRASS 2 - no specimen	8	✓	?	<i>Aphelia bizzula</i>	25	✓	✓
<i>Kunzea pulchella</i>	34	-	✓	GRASS 3 <i>*Nulphia myuros</i>	9	✓	✓	<i>*Isoplexis marginata</i>	27		✓
<i>Sedge-Lepidosperma costale</i>	35	-	✓	<i>*Briza maxima</i>	10	✓	✓				
<i>Stylidium calceatum</i>	36	P	✓	<i>*Clover *Trifolium campestre</i>	11	X	✓	ADJ CONT			
<i>Stylidium glauca</i>	37	B	✓	HERBS				<i>Podolepis canescens</i>	55	Y	✓
<i>Erodium cymosum</i>	38	-	✓	<i>Borja sphaerocarpa</i>	12	W	✓	<i>Hydrocotyle glutinosum</i>	56	Y	✓
<i>Rhodanthe manglesii</i>	39	P	✓	<i>Drosera glanduligera</i>	13	O	✓	<i>Dianella revoluta</i>	57		✓
<i>Drosera subhystella</i> subsp. <i>subhystella</i>	40	Y	✓	<i>Trachymene ornata</i>	14	-	✓	<i>Diuris</i> sp aff <i>corymbosa</i>	58	X	✓
<i>Pyrolis polystachya</i> forma <i>polystachya</i>	41	W	✓	<i>*Trifolium campestre</i>	15		✓	<i>Thelymitra antennifera</i>	59	Y	✓
<i>Stylidium emarginatum</i> subsp. <i>emarginatum</i>	42	P	✓	<i>Crassula exerta</i>	16	Rev	✓	WEED	60		?
<i>Psoralea angustifolia</i>	43	W	✓	<i>Hydrocotyle diantha</i>	17	G	✓	<i>Drosera glanduligera</i>	61	O	✓
<i>Isloxeris multiflorus</i>	44	W	✓	<i>Lilij-artaropodium curvipes</i>	18	Y	✓	<i>Thelymitra</i> aff <i>macrophylla</i>	-	✓	✓
<i>Rhodanthe laevis</i>	45	W	✓	<i>Chaenobrya corymbosa</i> var <i>corymbosa</i>	19	-	✓				
<i>Epilobium hirtigerum</i>	46	-	✓	<i>Levenhookia dubia</i>	20	W	✓				
<i>Gullrush - Typha domingensis</i>	47	-	✓	<i>Thysanotis patersonii</i>	21	Bio	✓				
MALLEE - <i>Euloxophora</i> subsp. <i>loxophora</i>	48	✓	✓	<i>Calandrinia calytrata</i> x2	22	-	✓				
<i>W. acuminata</i>	49	✓	✓	<i>Quiddegrass Romulea rosea</i>	23		✓				
<i>Allocasuarina huegeliana</i>	50	✓	✓	<i>*Aira cupaniana</i>	24		✓				

REC 15

5. SPECIES PRESCENCE

SITE No

Date _____

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA .6008.

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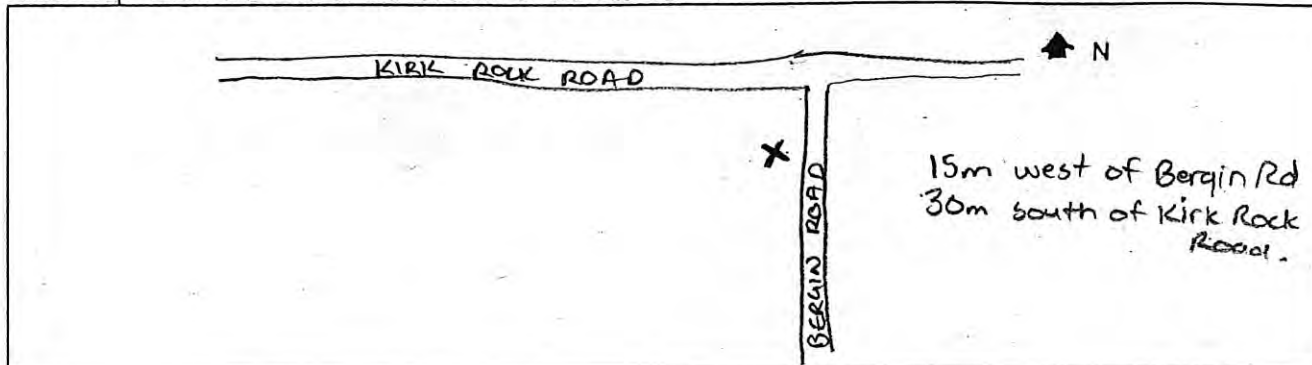
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA MALTAUNG RESERVE SITE NUMBER MALY 4
 DATE TRIP 3/10/99 RECORDERS Ann, Robyn, Doreen, Mary, Len,
 DATE TRIP _____ RECORDERS Mary, Phil.
 DATE TRIP _____ RECORDERS _____
 BOTANIST Ann Garness

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.



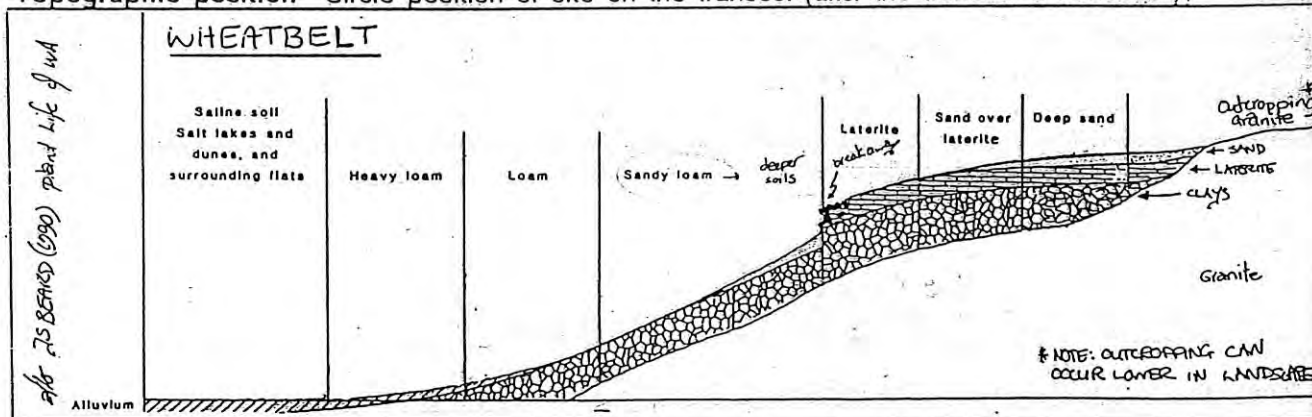
Road Location Bergin Road & Kirk Rock Rd

Geographic Location Latitude: 32°42' 85.6S Longitude: 117°36' 81.4E Altitude: 277m

Reference Map Grid: 32°42' 51.4 117°36' 48.8" ± 47

Photograph Photographer's Name: BRIAN Photo No: 28+29

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: (flat) gentle steep Aspect: (N) NE E SE S SW W NW

Surface Soil: sand, loamy sand, (sandy loam), loam, clay, laterite Colour Red brown
 Exposed rock: type None % surface

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour
 Rock: type depth to rock

Drainage: (well) mod, poor | depth water cm | Wet: all year winter/spring

Litter: 30-40% cover Bare Ground 10-15% cover
 Depth cm

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below), and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

LIFE FORM	TREES			MALLEES		
	over 30m	10-30m	under 10m	over 8m	under 8m	
						30m 10m
COVER CLASS (%)		2-10%	10-30%			
DOMINANT SPECIES*		Euc. 10x. (York gum)	Tam Sheoak (Rock)			
	SHRUBS			SHRUBS		
	over 2m		2m - 1m	under 1m		
	  		  	   		
COVER CLASS (%)						
DOMINANT SPECIES*						
	GRASSES		HERBS	SEDGES	OTHER	
	 		  	  		
COVER CLASS (%)	2-10%		30-70%	10-30%		
DOMINANT SPECIES*	Austrostipis		Borja & opercularia	Lepidosperma		

WEEDS - % COVER

Trees/Mallees	%	COMMENTS
Shrubs	%	
Grasses	<2%	Blowfly grass
Herbs	%	
Sedges	%	

4. VEGETATION CONDITION SCALE

1	'PRISTINE'	COMMENTS
2	EXCELLENT	Weeds near edge
3	VERY GOOD	but not spreading,
4	GOOD	some dieback in York
5	DEGRADED	gum crowns, Sheoaks
		not regenerating.

* If more than 3 dominant species write "mixed".

5. SPECIES PRESCENCE

SITE No MALY 4

Record on Sheet

Date 3/10/99

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

TREES				No	Fl	ID	SHRUBS (cont.)	No	Fl	ID	HERBS (cont.)	No	Fl	ID
<i>Acacia acuminata</i>	- yellow	1	✓	✓							*Capeweed <i>Arctotheca calendula</i>	24	✓	✓
<i>Allocasuarina huegeliana</i>		2	✓	✓							<i>Ayalosperma demissum</i>	25	✓	✓
											<i>Caesia alforesii</i>	26	✓	✓
											<i>Stachysia monogyna</i>	27	✓	✓
											<i>Stipandra glauca</i>	28	✓	✓
MALLEES											<i>Oreocera subnitella</i> subsp. <i>subnitella</i>	29	✓	✓
											<i>Dampiera lanudulacea</i>	30	P	✓
											<i>CYANICULA CEMMATA</i>	31	B	✓
											<i>Caladenia rubi</i>	32	CAR	✓
											<i>Duris</i> sp. aff. <i>corimbosa</i>	33	Y	✓
SHRUBS											<i>Gleditsia cynorhiza</i> leaf	34	-	✓
											<i>Trachymene cyanopetala</i>	35	-	✓
											<i>Ceratogyne obionoides</i>	36	w	✓
											SEDGES			P
											<i>Lepidosperma costale</i>	10	✓	✓
											<i>Schoenus nanus</i>	46	B	✓
											<i>Lepidosperma costale</i>	50	✓	✓
											ADJACENT			
											ADF			
											Turnip * <i>Brassica turneri</i> /hi	ns.		
											<i>Eucalyptus loxophleba</i>			
											<i>Thysanotis tenuis</i>			✓
											* <i>Sonchus oleraceus</i>			✓
											<i>Caladenia - pale form</i>			
											aff. <i>robei</i> ?	t	✓	
											? <i>Lyperanthus</i>			
											<i>Thysanotus PATTERSONII</i>	p	✓	
											* <i>Anagallis arvensis</i>			✓
											<i>ERIOCHLIS DIATATUS</i> subsp. <i>UNDULATUS</i>	y	✓	
											<i>EUC WANDOO</i>	-	✓	
											<i>Comesperma integrimum</i>			✓

5. SPECIES PRESCENCE

SITE No

Record on Sheet

Date _____

- Column 1 plant name.
- Column 2 plant number
- Column 3 flowering time: record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA .6008.

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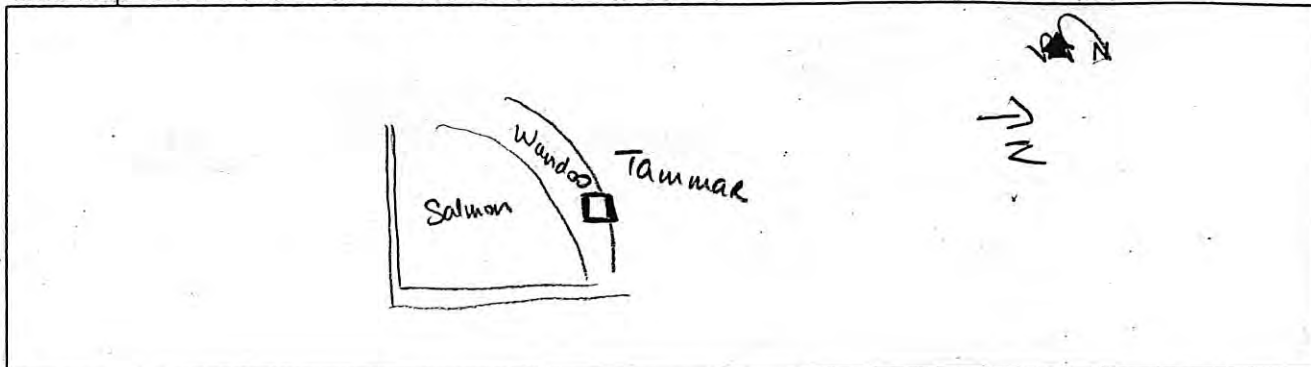
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA MALYALLING RES. SITE NUMBER MAL 5
 DATE TRIP 3/10/99 RECORDERS Amanda, Avril, Margaret
 DATE TRIP _____ RECORDERS Libby, Matthew
 DATE TRIP _____ RECORDERS _____
 BOTANIST Alice, Margaret

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.

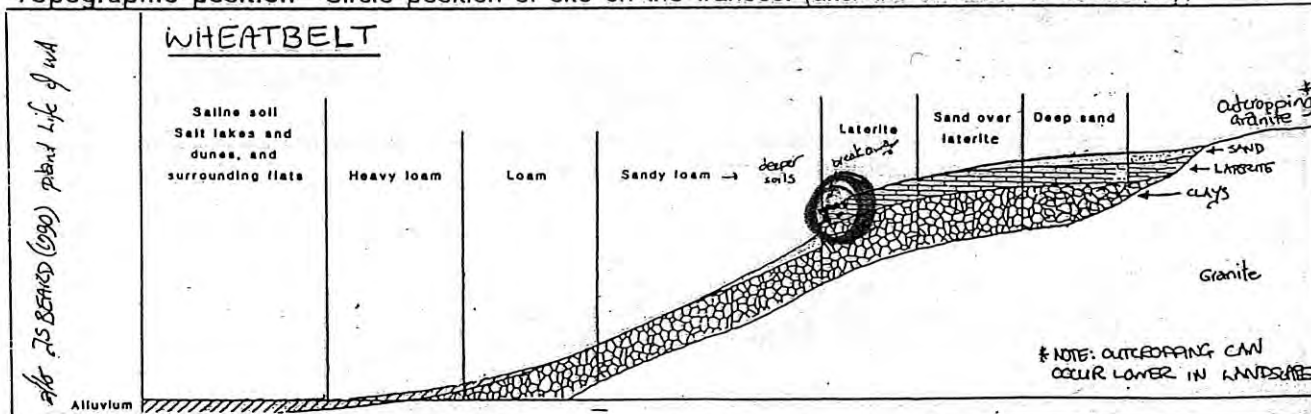


Road Location Kirk Rock Rd

Geographic Location Latitude: 32°42.770 S Longitude: 117°37.024 E Altitude: 247+39
 Reference Map Grid: 32°42'46.2" 117°37'01.4"

Photograph Photographer's Name: Brian Photo No: 30

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep Aspect: N NE E SE S SW W NW
 Surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour Red/Brown
 Exposed rock: type gravel % surface _____
 Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour _____
 Rock: type _____ depth to rock _____
 Drainage: well, mod, poor | depth water _____ cm | Wet: all year winter/spring
 Litter: 50 % cover Bare Ground 25 % cover
 Depth one cm

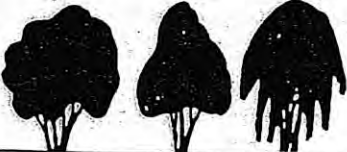
BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer **record** - appropriate **life form**, **cover class** (see below), and **dominant species** in each layer.

Cover Class	2-10%	11-30%	31 - 70%	over 71%
-------------	-------	--------	----------	----------

		TREES			MALLEES			
		over 30m	10 - 30m	under 10m	over 8m	under 8m		
LIFE FORM				 			30m 10m	
COVER CLASS (%)			PLANT No. $< 10\%$ No. $\downarrow$					
DOMINANT SPECIES*			Wandoo 1					
		SHRUBS over 2m		2m - 1m	SHRUBS under 1m			
LIFE FORM					2m 1m			
COVER CLASS (%)		~~10-30~~ 2-10% No. $\downarrow$	2-10 No. $\downarrow$	2-10 No. $\downarrow$	2-10 No. $\downarrow$			
DOMINANT SPECIES*		Allocasuarina campbellii 3	Dryandra sp. aff. arisida 7	Hibbechia pinguens 5				
		GRASSES	HERBS	SEDGES	OTHER			
LIFE FORM								1m
COVER CLASS (%)		2 No. $\downarrow$	No. $\downarrow$	No. $\downarrow$	No. $\downarrow$			
DOMINANT SPECIES*		shpa						

WEEDS - % COVER		COMMENTS
Trees / Mallards	%	
Shrubs	%	
Grasses	%	
Herbs	%	
Sedges	%	

4. VEGETATION CONDITION SCALE

		COMMENTS
1	'PRISTINE'	
2	EXCELLENT	
3	VERY GOOD	Disturbance further down
4	GOOD	... water shedding
5	DEGRADED	

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

SITE No MALR 5

Date 3/10/99.

Label each plant with plants number, site code, date and plant's name or working name if required

Record on Sheet

- Column 1 plant name.
- Column 2 plant number
- Column 3 flowering time- if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64, Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
Eucalyptus wandoo	1	-	✓					Mitella tenuifolia	34	cr	✓
								Blenospora deumurdii	35	W	✓
								Phyllanthus salicifolius	36	✓	✓
								Stylidium squamulosum	37	cr	✓
								Symplocaria glauca	39	B	✓
								Chaemascilla corymbosa	40	-	✓
MALLEES								(shrub) Cryptandra nana	41	cr	✓
								Thysanotus patersoni	42	-	✓
								Drosera sp.	43	-	✓
				GRASSES				PORANTHERA MACROPHYLLA	44	W	✓
				Austro stilix elegantissima	15	✓	✓	Sedge			
				ADSTROSTIPA sp (PROBABLY Hemipogon)	16	✓	✓	Lepidosperma aff. Tenue	20	-	✓
SHRUBS				Grass - AUSTRADANTHONIA setacea	17	R/B	✓	Schoenus nanus	38	✓	✓
Hakea sp. (Hakea robusta)	2	-	✓	* Briza major maxima	18	✓	✓	ADJACENT. = In band along breakaway			
Allocasuarina cuneata	3	R	✓	Grass AUSTRADANTHONIA setacea	21	✓	✓	Isopogon diversus	201	P	✓
Dodonea Binifolia	4	B	✓	Tiny grass * Vulpia myuros	30	✓	✓	WESTERNIA YIGIDA - STIFF WESTERNIA	202	W	✓
Hibbertia PANGENS	5	Y	✓	* Aira cupaniana/campylocha	31	✓	✓	Calyptrix Reschenaultii	203	M	✓
NEMUA obovata	(a) 6	0	✓	Agrostis avenacea	33	G/B	✓	Xanthorrhoea sp. Drummondii	204	✓	✓
NEMUA "SPATHULATA"	(b) 6	0	✓					Leptosporum FRABESCENS	205	W	✓
Dryandra aff. citrioides	7	-	✓	HERBS				Lepidosperma bumenianum	206	✓	✓
Acacia Lissocarpa in sadiifolia	8	Y	✓	Glischrocaryon aureum	12	Y	✓	Lomandra MICRANTHA	207	✓	✓
Baeckia CYSPIDORA	9	P	✓	Stachysia MONOCYNA	13	C	✓	Sagittaria laevis	208	W	✓
Comesperma volubile	10	L	✓	Trachymene sp. CYANOPETALA	14	PP	✓	Hakea Lissocarpa	209	W	✓
Dampiera laevis	11	P	✓	Oporocaulis vaginata	19	G	✓	Acacia CYNACEAE	210	✓	✓
Cryptandra nana	41	or	✓	DICHOPOCON BAPHILIPES	21	-	✓	Baeckia CYSPIDORA	211	P	✓
				Borja sphaerocarpa	23	W	✓	Crassula RADICULATA	212	R	✓
				Caladenia falcata	24	Y	✓	GODENIACACEE KRAUSEANA	213	Y	✓
				Hydrocotyle callicarpa	25	G	✓	Hydrocotyle demissum	214	W	✓
				* Flat weed Hypochaeris glabra	26	✓	✓	Olearia Radix	215	M	✓
				Lobelia sp. prob. L. tenuis	27	✓	✓	Acacia acuminata	216	W	✓
				VENEA CYANOPETALA	28	-	✓	Helaleuca sp.	217	-	✓
				Rhodanthe laevis	29	Y	✓				
				NAUREBERGIA GRACILENTA	32	G	✓				

- In envelope with 35 Ceratogyne obionoides Pt. ✓

checked

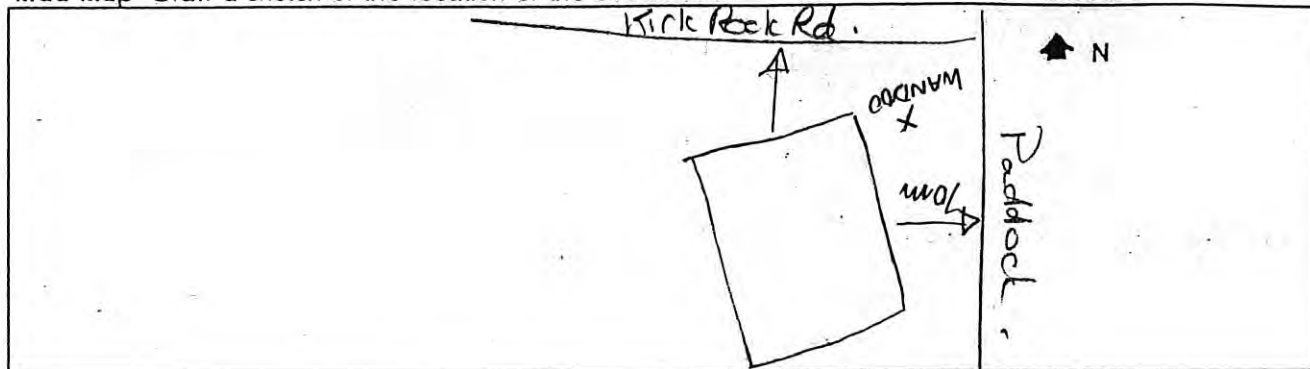
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA MALYALLING RES SITE NUMBER MAUR 6
 DATE TRIP 3/10/99 RECORDERS Mary, Doreen, Len, Phil, Rosemary
 DATE TRIP _____ RECORDERS Mary, Karen
 DATE TRIP _____ RECORDERS _____
 BOTANIST Ann G

1. LOCATION of the QUADRAT

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

Mud Map Draw a sketch of the location of the site below.



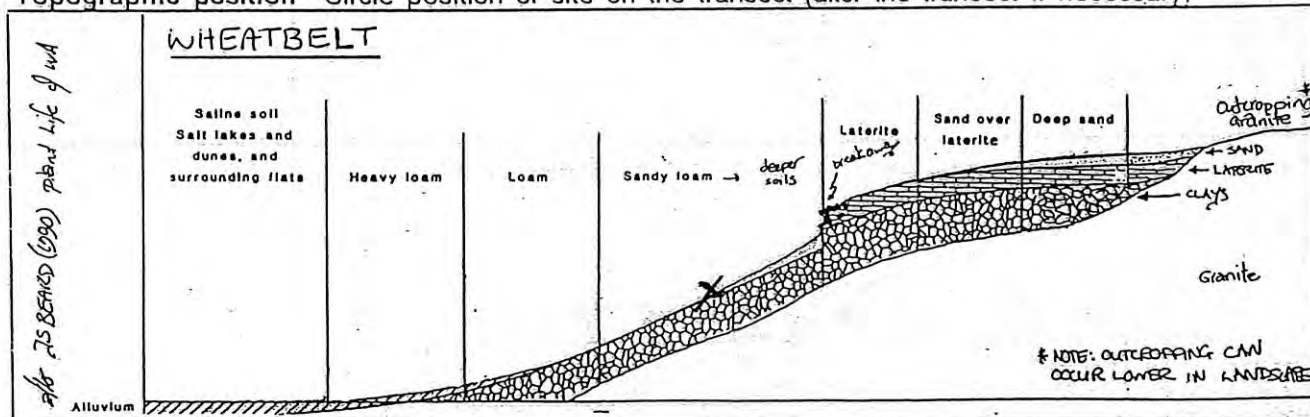
Road Location Kirk Rock Rd.

Geographic Location Latitude: 32° 42' 87" S Longitude: 117° 37' 085 E Altitude: 350m ± 46

Reference Map used: 32° 42' 52.3" 117° 37' 05.1"

Photograph Photographer's Name: Brian Mayle Photo No: 31/32

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep Aspect: N NE E SE S SW W NW

Surface Soil: sand loamy sand sandy loam, loam, clay, laterite Colour grey/brown

Exposed rock: type granite derived % surface

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour

Rock: type depth to rock

Drainage: well mod, poor | depth water cm Wet: all year winter/spring

Litter: single leaf 15 % cover Bare Ground 20 % cover

Depth cm

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below) and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

LIFE FORM	TREES				MALLEES			
	over 30m	10-30m	under 10m	over 8m	under 8m	30m	10m	
								
COVER CLASS (%)		2-10%	2-10%					
DOMINANT SPECIES*		Euc. Wandoo	rock sheoak Jam					

On SAP d/base, have put these both together in the 5-15m tree height

LIFE FORM	SHRUBS		SHRUBS	
	over 2m	2m - 1m	under 1m	
				
COVER CLASS (%)				
DOMINANT SPECIES*				

LIFE FORM	GRASSES	HERBS	SEDGES	OTHER
				
COVER CLASS (%)	2-5%	10-30%	2-10%	
DOMINANT SPECIES*	Vulpia Neurachne	Stylidium Borya sphaerophala	Lepidolobos praeians.	

WEEDS - % COVER

Trees/Mallees	%	COMMENTS
Shrubs	%	
Grasses	%	
Herbs	<2%	Ursinea Vulpia
Sedges	%	

4. VEGETATION CONDITION SCALE

1	'PRISTINE'	COMMENTS
2	EXCELLENT	
3	VERY GOOD	sm. wandoo dieback sad sheoak, nice litter and herb layer.
4	GOOD	
5	DEGRADED	unburnt

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

S. SPECIES PRESCENCE	Label each plant with plants number, site code, date and plant's name or working name if required
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SITE No <i>MAN 6</i>	Record on Sheet	• Column 1	code, date and	plant's name or working name if required
----------------------	-----------------	------------	----------------	--

Date	3/10/99
------	---------

Record on Sheet • Column 1 plant name.

- Column 1 plant name-
 - Column 2 plant number
 - Column 3 flowering time- record flower colour
 - Column 4 identification check if species flowering
- From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA .6008.

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

[illegible]

Flavor

PTD

NTC#18

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

Label each plant with plants number, site code, date and plant's name or working name if required

SITE No

Date _____

- Column 1 plant name-
- Column 2 plant number
- Column 3 flowering time- record flower colour
if species flowering
- Column 4 identification check

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA .6008.

[illegible]

checked

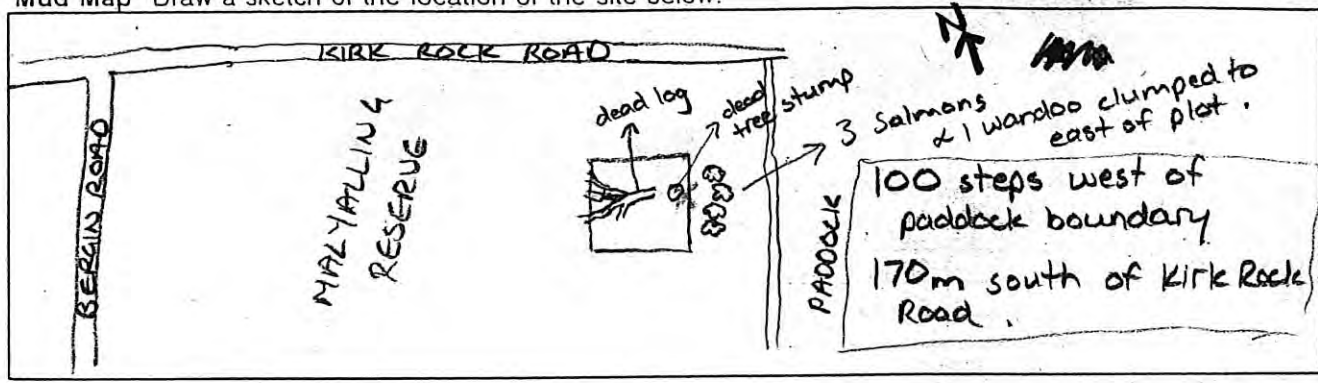
BUSHLAND PLANT SURVEY RECORDING SHEET 1- use pencil only

BUSHLAND AREA MALYALLING RESERVE SITE NUMBER MALY 7
 DATE TRIP 3/10/99 RECORDERS Anne, Bette, Rhyn, Jeff, Alan,
 DATE TRIP _____ RECORDERS Dorothy, Mary.
 DATE TRIP _____ RECORDERS _____
 BOTANIST Anne Ballman

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

1. LOCATION of the QUADRAT

Mud Map: Draw a sketch of the location of the site below.

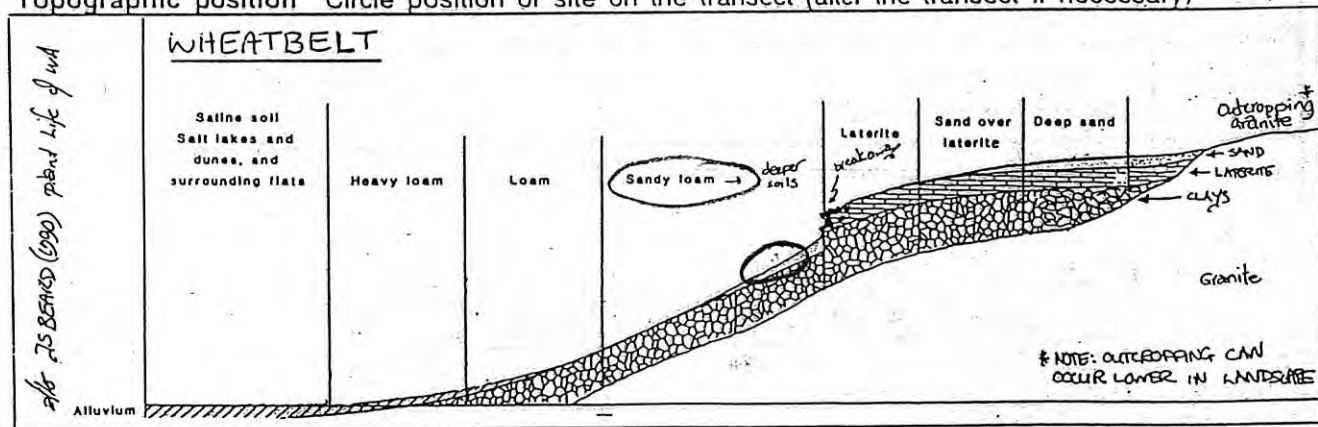


Road Location KIRK ROCK ROAD

Geographic Location Latitude: 32°42'830 S Longitude: 117°37'039 E Altitude: 263 m
 Reference Map Grid: 32° 42' 49.8" 117° 37' 02.3" ±128

Photograph Photographer's Name: BRIAN Photo No: 33

Topographic position Circle position of site on the transect (alter the transect if necessary)



2. SITE DATA Circle the correct response.

Slope: flat gentle steep Aspect: N NE E SE S SW W NW

Surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour fawn
 Exposed rock: type Nil % surface

Sub-surface Soil: sand, loamy sand, sandy loam, loam, clay, laterite Colour fawn
 Rock: type _____ depth to rock

Drainage: well mod, poor | depth water _____ cm | Wet: all year winter/spring

Litter: _____ 50-70 % cover Bare Ground, 30 % cover
 Depth _____ cm
 1 log laying down

BUSHLAND PLANT SURVEY RECORDING SHEET 2 - use pencil only

3. VEGETATION STRUCTURE AND COVER

From 'Bushland Plant Survey' written by B. Keighery (1994) and published by the Wildflower Society of WA (Inc.), PO Box 64 Nedlands WA 6008.

For each layer record - appropriate life form, cover class (see below), and dominant species in each layer.

Cover Class 2-10% 11-30% 31-70% over 71%

LIFE FORM	TREES			MALLEES	
	over 30m	10-30m	under 10m	over 8m	under 8m
					
COVER CLASS (%)		2-10%			
DOMINANT SPECIES*		Salmon & Wandoo			
LIFE FORM	SHRUBS		SHRUBS		
	over 2m	2m-1m	under 1m		
					
COVER CLASS (%)			2%		
DOMINANT SPECIES*			Olearia nudis		
LIFE FORM	GRASSES	HERBS	SEDGES	OTHER	
				SURROUNDING SALMON WOODLAND HAS CASTROLOBILUM & OLEARIA & OCCASIONAL SHEOAK.	
COVER CLASS (%)	<2%	<2%	<2%		
DOMINANT SPECIES*	Mixed	Olearia			

WEEDS - % COVER
Negligable

Trees/Mallees	%	COMMENTS
Shrubs	%	
Grasses	%	
Herbs	%	
Sedges	%	

4. VEGETATION CONDITION SCALE

1	'PRISTINE'	COMMENTS
2	EXCELLENT	
3	VERY GOOD	Dead log across quadrat.
4	GOOD	Wandoo does not look very healthy.
5	DEGRADED	Salmons look healthy.

* If more than 3 dominant species write "mixed".

BUSHLAND PLANT SURVEY RECORDING SHEET 3 - use pencil only

5. SPECIES PRESCENCE

Label each plant with plants number, site code, date and plant's name or working name if required

SITE No **MALY 7**

Record on Sheet

Date **3/10/99**

• Column 1 plant name

• Column 2 plant number

• Column 3 flowering time

• Column 4 identification check

record flower colour
if species flowering

From 'Bushland Plant Survey' written by
B. Keighery (1994) and published by the
Wildflower Society of WA (Inc.), PO Box
64 Nedlands WA 6008.

TREES	No	FI	ID	SHRUBS (cont.)	No	FI	ID	HERBS (cont.)	No	FI	ID
Salmon gum - juvenile	1							ADJACENT (cont.)			
Wardoo - juvenile	2	-	✓					Wild oats <i>Bromus diandrus</i>	34		✓
Fuc. <i>SARMENTOSA</i> - buds + fruit			✓					* <i>Polygonum aviculare</i>	35		✓
								<i>OLEARIA rudis</i>	36		✓
								* <i>Bromus rubens</i>	37	✓	✓
								* <i>Avellinia michellii</i>	38	✓	✓
								<i>Hydrocotyle pilifera</i> var <i>glabrata</i>	39	✓	✓
								<i>Rhooanthus cetrina</i>	41	✓	✓
								* <i>Hypochaeris glabra</i>	40		✓
MALLEES				GRASSES							
				Grass sp <i>AUSTROSTIPA VARIABILIS</i>	6	✓	✓				
				Grass sp <i>AUSTRODANTHONIA setacea</i>	7	✓	✓				
				<i>Neurachne alopecuroides</i>	8		✓				
SHRUBS				<i>AUSTROSTIPA ELEGANTISSIMA</i>	9	✓	✓				
<i>Acacia lasiocarpa</i> var <i>Sedifolia</i>	3	-	✓	* <i>Aira canophyllea</i> NIS	21		✓	SEDGES			
<i>Ac. eremacaea</i>	4	✓	✓					<i>LOMANDRA EFFUSA</i>	17	-	✓
<i>Oleandra Revoluta</i> (in bud)	5	-	✓					<i>LOMANDRA MICRANTHA</i> subsp. <i>TERETIFOLIA</i>	18	-	✓
<i>Oleandra rudis</i> = 36	12	B	✓					<i>LOMANDRA EFFUSA</i>	19	-	✓
				HERBS				Wavy-leaf- <i>LOMANDRA MICRANTHA</i>	20	-	✓
				<i>Laganifera heugeli</i>	10	-	✓	ADJACENT			
				* <i>Hypochaeris glabra</i>	11		✓	<i>Rhagodia Reissii</i> subsp. <i>Preissii</i>	22	W	✓
								<i>Acacia acuminata</i>	23	✓	✓
				*Cape weed <i>Arctotheca calendula</i>	13	✓	✓	<i>WESTRINGIA RIGIDA</i>	24	✓	✓
				* <i>Ursinia anthemoides</i>	14	✓	✓	<i>Oleandra rudis</i>	25	-	✓
				<i>Podolepis</i>	15	✓	✓	<i>Neurachne alopecuroides</i>	26	✓	✓
				<i>Calandrinia CALYPTRATA</i>	16	✓	✓	<i>Dampiera laevigata</i>	27	✓	✓
								<i>Allocasuarina HAEGERIANA</i>	28	-	✓
								<i>STENANTHEUM TRIDENTATUM</i>	29	-	✓
								<i>Oesmodia asper</i>	30	✓	✓
								<i>Sedae SPERIDOSPERMA Tenax</i>	31	✓	✓
				<i>Podolepis capillaris</i> (adj)	32		✓	<i>Asteraceae</i> (finished flowering)	32		✓
								<i>WESTRINGIA CEPHALANTHA</i>	33	-	✓

Oleandra Rudis, adj

RIC 19