

Ashton Coal: NEOC/woodland/grassland reference sites/SVCA01,02,03/Ravensworth Woodland20 x 20m Quadrat monitoring including full BAM (ex diversity/m²)Date: 13.15.125Site reference code: RUMEX 4Surveyors Name: RM, AJVegetation community:

NB: TEC PCT 1603 Narrow-leaved Ironbark - Bull Oak - Grey Box shrub - grass open forest of the central and lower Hunter

General Site Description:

Buloke Forest over water with mess
 & *S. madagascariensis* to ~ 2m tall, with some
E. crebra Occasional *Bundicoot* ref-poles.

Structural characteristics: 1m length every 2m situated along 20m transect

At ten, 1m lengths along 20m transect. Note: the ground components (litter, cryptogram, rock, bare ground and lower perennial foliage) should add to 100%. Calculate projected foliage cover of perennial vegetation to minimise seasonal variations.

Habitat Structure		Starting distance									
		0m	2m	4m	6m	8m	10m	12m	14m	16m	18m
% Dead litter < 5cm diameter		90	85	75	85	95	75	85	85	80	80
% Annual plants (live litter)			5	5	10			10			
% Cryptogram (exclude on rocks or logs ≥ 5cm across)										10	
% Rock ≥ 5cm across											
% Log ≥ 5cm across							14				
% Sand											
% Gravel/small rocks (< 5cm)											
% Bare ground							11		5	5	
Foliage cover (native & introduced)	Perennial plants 0 - 0.5m	10	10	20	5	5		5	10	5	20
	<u>Ground cover</u>										
	= 100%										
	(total % of litter, crypt, rock, bare gr., log and foliage 0-0.5m should=100%)										
	0.5 - 2m			2							
	2 - 4m					5					
	4 - 6m	5	10	10	20						
	> 6m	30	20	20		30		30	40		

Site Name: Pump 04

[illegible]

Rill Assessment Data Sheet

[illegible]

Date: 13 / 5 / 28

Site reference code: RUMY04

Surveyors Name: A + R M

The diagram shows a rectangular study area with a central plot area. A vertical transect line runs through the center, with 13 numbered points (1-13) marked along it. A horizontal line at the bottom is labeled 'START LFA' and 'END LFA'. A vertical line on the left is labeled '20m'. Six waypoints are marked around the perimeter, each with a box containing its coordinates and other data. The waypoints are:

- Waypoint No. 1: E: 56 316604, N: 6406159
- Waypoint No. 2: E: 56 316609, N: 6406162, Photo: 4, Marker peg: 4
- Waypoint No. 3: E: 56 316617, N: 6406164
- Waypoint No. 4: E: 56 316612, N: 6406140, LFA Slope: 40, Aspect: 40, Photo: 4, Marker peg: 4
- Waypoint No. 5: E: 56 316617, N: 6406151, Aspect: 325, Photo: 4, Marker peg: 4
- Waypoint No. 6: E: 56 316623, N: 6406151, LFA Slope: 40, Aspect: 40, Photo: 4, Marker peg: 4

Additional notes include 'Take photo of general site from LFA start point' and 'Take close up photos' with checkboxes.

Soil samples taken

Photo #'s
1119
to 1130

Pasture height

A graph with a vertical y-axis labeled 1, 2, 3 and a horizontal x-axis. Two curves are plotted: one is strictly increasing and the other is strictly decreasing. They intersect at a point. The intersection point is located between the horizontal lines corresponding to y=2 and y=3.

Overstorey density (>5 cm dbh) - 20m x 20m PLOT

Site Code:

RUMEX 04

Date:

13.5.25

DBH Limb 1	Limb 2	Limb 3	Species ID	Decortic ating bark	Fire scar	Dieback	Mistletoe	Hollows	Dead /Alive	Flowers /fruit
11			Bulloak			2				
29			"			2				
9	9		"			2				
26			"			2				
22			"			2				fruit
22			"			2				
19			"			2				fruit
15			"			2				fruit
20			"			2				fruit
16			"			2				fruit
13	12		"			2				
10			"			2				
17	10		"			2				
6			"			3				
20			"			2				fruit
9			"			2				fruit
21			"			2				
21			"			1				
11	11	10	Scrub (crebra)			2				
10			Bulloak			2				
19			"			2				
7			Scrub			2				
17			Bulloak			2				
19			"			2				
8			"			1				
11			"			2				
16			Eccebra			2				
11			Bulloak			3				
5			Bulloak			3				
8			"			2				
10			"			2				
8			"			2				
6			"			2				
6			Eccebra			2				
7			"			3				
29	12		Bulloak			2				
20			Eccebra			1				
10			Bulloak			2				

Understorey density - 20m x 20m plot

Site Code: RUMEX 04

Date: 13.5.25

Understorey shrubs <5 cm dbh (including tubestock, direct seeding and tree regeneration)

Species (dead and alive)	0 - 0.5m	0.5 - 1.0 m	1.0 - 1.5 m	1.5 - 2.0 m	>2.0 m	Total
Bulloak	### ###	##### #####	##### 1	#####	###	
	###					
Eccebr	###				1	
Bathorn						

LFA Soil Surface Assessment (SSA) Data SheetDate: 13/5/25Site Name: RUMEROY

Each mini-transect needs to have it's location on the LO transect (in metres from 0) and its patch or interpatch type identified in this row of cells.

SSA Indicators	Woodlawn Patch										Class Values of Surface Features									
Rainsplash Protection (1-5)	2-3	7-8	11-12	15-16	19-20															
Perennial vegetation cover (1-4)	2	2	3	2	3															
Litter cover, origin & incorporation (1-10)	4	2	4	4	4															
Cryptogam cover (1-4)	3/4	3/4	5/m	6/m	5/m															
Crust broken-ness (1-4)	4	4	2	1	2															
Erosion type & Severity (1-4)	4	4	4	4	4															
Deposited materials (1-4)	4	4	3	2	3															
Soil Surface Roughness (1-5)	3	3	3	3	3															
Surface resistance to disturbance (5-1)	4	3	3	3	3															
Slake test (1-4)	4	4	4	4	4															
Surface Texture (1-4)	2	2	2	2	2															

No. large trees (>50cm dbh) in 50 x 20m plot:

Tally..... 107

Total length of fallen logs

>10cm dbh and >0.5m long: 50 x 20m (within plot area only)

	Walking up plot (right hand side)		Walking down plot (left hand side)
10 x 50	5	20 x 50	
10 x 40	6	20 x 40	3
10 x 30	13	20 x 30	0.5
10 x 20		20 x 20	
10 x 10	0.5	20 x 10	
	Total		Total
	Total 20 x 50 (m)	28	

% Litter cover

5 x (1x1m) plots: Include all dead and detached < 10cm.

Site reference code: RUMEX 04

Date: 13.5.25

Litter includes leaves, seeds, twigs, branchlets and branches (<10 cm in diameter). The assessor must include all plant material that is detached from a plant and forms part of the litter layer on the ground surface. Litter cover is the two-dimensional litter layer in contact with the ground surface, including litter under the canopies of erect plants. Plant material that is not detached should be assessed as growth form foliage cover, regardless of whether it appears alive or dead.

	5m	15m	25m	35m	45m	Average
Litter	90	70	95	95	90	

AM Full Floristics: 20 x 20m plot

Site reference code: RUMEX04

Date: 13, 5, 25

Percent foliage cover: Foliage cover is the percentage of the plot covered by a vertical projection of all attached plant material, regardless of whether it appears alive or dead, of all individuals of a species. This includes leaves, stems, twigs, branchlets and branches, from forb, grass and grass-like species, and any canopy overhanging the plot, even if the stem is outside the plot.

For species with cover >5% abundance estimates are not required

% Cover: 0.1, 0.2, 0.3, ..., 1, 2, 3, ..., 10, 15, 20, 25, ..., 100% foliage cover

Abundance: 1, 2, 3, ..., 10, 20, 30, ..., 100, 200, ..., 1000

0.63 x 0.63 = 0.1%	4 x 4 = 4%
1 x 1 = 0.25%	4 x 5 = 5%
1.4 x 1.4 = 0.5%	4 x 6 = 6%
2 x 2 = 1%	5 x 5 = 6.25%
2 x 4 = 2%	5 x 10 = 12.5%
3 x 3 = 2.25%	8 x 10 = 17.5%
3 x 4 = 3%	10 x 10 = 25%

	Species	N, E, HTW	% Cover	Abundance	Specimen taken
1x1	<i>Aristida vagans</i> (super line)		2	~200	
	<i>Microlaena stipoides</i>		2	~400	
	<i>Cynanthium ciliatum</i>	E	0.01	~20	n= 7
	<i>Eremophila debilis</i>		0.5	~20	c= 1
	<i>Grossa varians</i>		0.05	~50	
	<i>Sida corrugata</i>		0.01	~20	
	<i>Cymbopogon refractus</i>		0.1	~10 clumps	
	<i>Cheilanthes sicula</i>		1	~200	
1x2	<i>Aristida cana</i> (thinner)		2	~200	
	<i>Senecio madagascariensis</i>	HTW	3	~200	n= 10
	<i>Bethnialla decipiens</i>		0.01	3	c= 5
	<i>Hypochaeris albiflora</i>	E	0.01	5	
	<i>Bromelia australis</i>		0.02	~50	
	<i>Opuntia stricta</i>	HTW	0.5	~20	
	<i>Plantago lanceolata</i>	E	0.01	5	
2x2	<i>Cirsium vulgare</i>	E	0.01	3	
	<i>Anastrostipa scabra</i>		1	~50 tussocks	n= 12
	<i>Dichondra repens</i>		0.5	~100	c= 6
5x5	<i>Allocasuarina leucomanni</i>		20	lots	n= 22
	<i>Opuntia aurantiaca</i>	HTW	0.01	~10	c= 12

	Species	N, E, HTW	% Cover	Abundance	Specimen taken
5x5	Megathyrsus maximus	E	0.01	5	
	Brachycome ^{brachy} spatulata - spatulate		0.01	~10	✓ NO Specimen?
	Arthropodium sp. leaves emerging		0.01	5	
	Wahlenbergia sp. rosettes w. cactus teeth		0.01	~50	
	Androstaphylos verticillata		0.1	~10	
	Cyperus gracilis		0.01	~5	
	Conyza bonariensis	E	0.01	~5	
	Eucalyptus cobra (seedling)		5	1 in plot + ~10 seedlings	
	Brassica seedlings (smooth) - Sisymbrium sp. F	0.01	3	✓	
	Senecio olivaceus	E	0.01	1	
	Luzula sp. (rosettes) ^{orthocladum} gracile	E	0.01	3	✓ ?
	Lomandra filiformis		0.25	~20	
	Chryscephalum apiculatum		0.01	~20	
	Acacia salicina? (seedling)		0.01	1	
5x10	Lycium ferocissimum	HTW	0.1	~20 mostly seedlings	
	Eriachne mutans		0.05	~10 small ones	
	Hybanthus monopetalus		0.01	2	✓ n=26
	Asperula conferta		0.01	~20	n=13
	~~Brachycome~~ / ^{L. gracilis} Lagenophara 2 w. flowers / toothed leaf.		0.01	~10	✓
10x10	Chloris gayana	HTW?	0.01	1	
	Eriochloa tomentosa		0.1	~10	n=31
	Glossocardia bidentata		0.01	~10	n=14
	Lomandra multiflora		0.05	3	
	Oxytes brachypodium		0.01	1	
	Vittadinia unguata		0.01	~10	
10x20	Sclerum cinereum		0.1	~10	
	Rytidosperma sp. - coarctatum		0.01	~20	✓ n=35
	Calotis leppulacea		0.01	5	n=14
	Euphorbia dallachyana ^(receptacle fringed)	✓	0.01	5	✓
20x20	Richardia stellaris	E	0.01	~20	✓
	Sporobolus exilis		0.01	1	n=42
	Oxalis purpurans		0.01	3	n=16
	Senecio ~~oblatricolus~~ ^{madagascariensis} above	E	0.01	1	✓
	Glycine tabacina?		0.01	~20	✓ w. pod

20x20 *Setaria splachelata* E 0.01 /
Wahlenburgia sp. - *gracilis* 0.01 ~50 (D) tiny
Panicum effusum? 0.01 1 (✓)
Hypochaeris glomerata 0.01 1 5
~~*Lemanea* sp. big filiformis? above~~ 0.1 ~20 (D)
Wahlenburgia sp 2 = *W. luteola* (alt. thin leaves) 0.01 ~20 (D) bigger

Babblers distant calls.