



Appendix 3 Site description and transect forms

Site description form

Basic site description

Location description: _____

Brief site description: _____

Site ID (STATE number e.g. SA001): _____ Protocol: Ground cover monitoring

Revisit (Y/N): _____

Field operators: _____

Date (dd/mm/yyyy): _____ Time (hh:mm): _____

Zone (UTM/MGA94)(49-56): _____ Geodetic datum (WGS84/GDA94): _____

Easting: _____ Northing: _____

Landholder consent for data to be released (Y/N): _____

Slope (%): _____ Aspect (degrees): _____

Land use code (ALUMv7): _____

Cropping (Y/N): _____ Commodity: _____

Plant growth stage (establishment, immature/growing, mature, senescence/residue, none):

Management phase (abandoned, baled, burnt, cultivated, grazed, incorporated, mulched, sprayed, standing/none, other):

Photo numbers (7 natural/pasture sites; 5 cropping sites): _____

Field spectra collected (Y/N): _____ Reflectance for field spectra: _____

Field measurement of fractional ground cover

Vegetation description

Biomass estimate (kg/ha): _____ Biomass method: _____

Average non-woody vegetation height (m): _____

Fire occurrence (0 no evidence, 1 minor burn, <5% of site or >3 years, 2 recent /major burn >5% of site or <3 years):

Perennial vegetation (0-5%, 6-25%, 26-50%, 51-75%, 76-100%): _____

Average woody vegetation height (m): _____

Vegetation structure	Dominant species by biomass					
	Species 1	%	Species 2	%	Species 3	%
Woody vegetation >2m						
Woody vegetation <2m						
Non-woody ground cover						

Tree basal area	Prism factor	Observer	Number of live trees	Number of dead trees	Converted (prism factor × No. live trees)
1. Centre					
2. North					
3. Northeast					
4. Southeast					
5. South					
6. Southwest					
7. Northwest					
Total					

Average (live) tree basal area = total converted / 7: _____ m²/ha

Land surface

Erosion

State of erosion (N none, A active, S stabilised, P partly stabilised): _____

Wind erosion (0 none, 1 minor, 2 moderate, 3 severe, 4 very severe): _____

Scald erosion (0 none, 1 minor <5% of site, 2 moderate 5–50% of site, 3 severe >50% of site): _____

Sheet erosion (0 none, 1 minor, 2 moderate, 3 severe): _____

Rill erosion (0 none, 1 minor occasional, 2 moderate common, 3 severe corrugated): _____

Gully erosion (channels >0.3 m deep) (0 none, 1 minor isolated, 2 moderate restricted to drainage lines, 3 severe branch away from primary drainage lines): _____

Deposited materials

Deposited materials (sand <2 mm, gravel 2–60 mm, stones >60 mm): _____

Abundance (0 none, 1 very few <2%, 2 few 2–10%, 3 common 10–20%, 4 many 20–50%, 5 abundant 50–90%, 6 very abundant >90%):

Microrelief

Soil microrelief present in the site (0 smooth <3 mm variation, M mounds, D depressions, C crop rows):

Vertical interval between base and crest i.e. height (m): _____

Horizontal distance between crests (m): _____

Biotic microrelief – specify up to 3 agents (NH horse, NS sheep, NC cow, NG goats, NP pigs, NM macropod, NL camel, NR rabbits), H human, B bird, T termite, A ant, V vegetation, O other): _____

Soil description

Surface condition (when dry) – specify up to 3 conditions (G cracking, M self-mulching, L loose, S soft, F firm, H hard setting, C surface crust, X surface flake, Y cryptogam surface, T trampled, P poached, R recently cultivated, Z saline, O other):

Soil strength (0 loose, 1 very weak, 2 weak, 3 firm, 4 very firm, 5 strong, 6 very strong, 7 rigid): _____

Surface cracks (except self-mulching soils or loose sand) (1 fine <5 mm, 2 medium 5–10 mm, 3 coarse 10–20 mm, 4 very coarse 20–50 mm, 5 extremely coarse >50 mm): _____

Soil colour	Example	Crust dry	Disturbed dry	Crust moist	Disturbed moist
Soil hue	5YR				
Soil value	5				
Soil chroma	3				

Cryptogam

Cryptogam cover (none, <2%, 2–10%, 10–20%, 20–50%, 50–90%, >90%): _____

Cryptogam colour: _____ Cryptogam wet/dry: _____

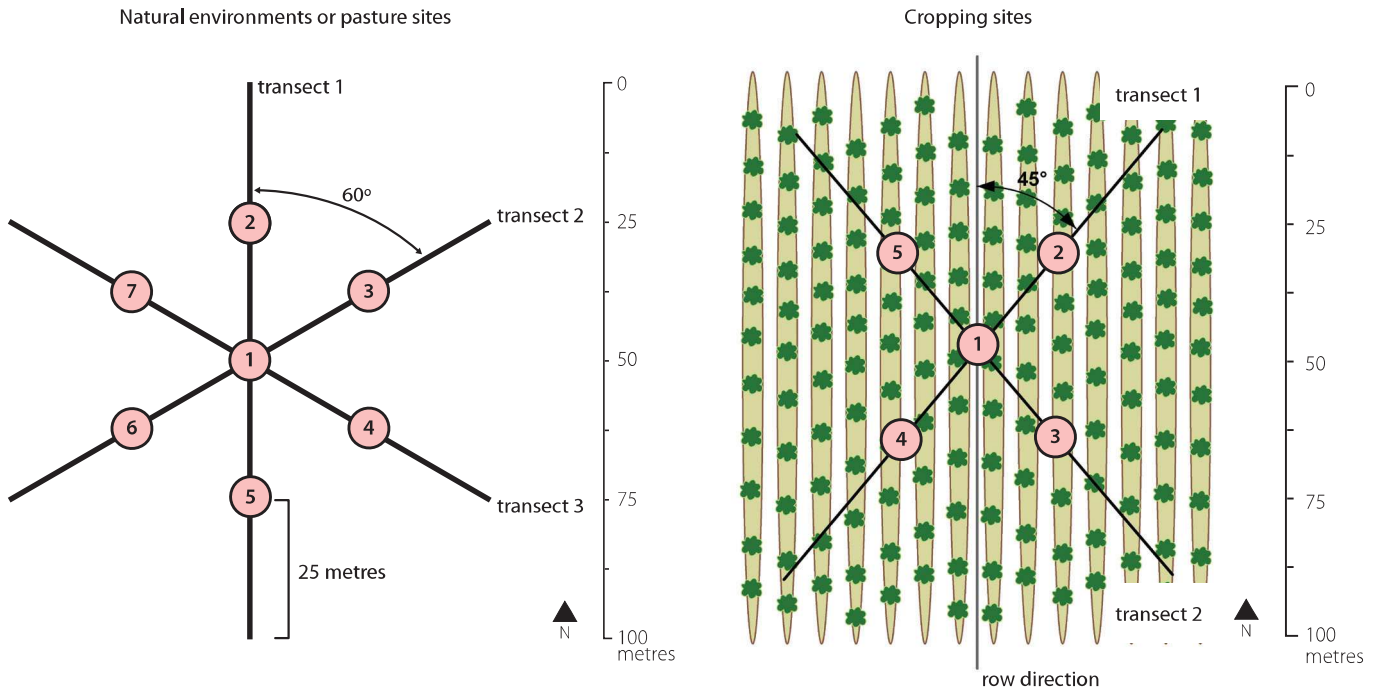
Rock/lag

Rock/lag abundance (0 none, 1 very few <2%, 2 few 2–10%, 3 common 10–20%, 4 many 20–50%, 5 abundant 50–90%, 6 very abundant >90%): _____

Average fragment size (1 fine gravelly 2–6 mm, 2 medium gravelly 6–20 mm, 3 coarse gravelly 20–60 mm, 4 cobbly 60–200 mm, 5 stony 200–600 mm, 6 bouldery 600–2000 mm, 7 large boulders >2000 mm): _____

Rock/lag colour	1st dominant	2nd dominant	3rd dominant
Rock/lag hue			
Rock/lag value			
Rock/lag chroma			

Field transect layout



The pink dots indicate the 7 positions to take tree basal area measurements in natural environments or pasture sites.

For all site photos stand at pink dot #1. Take photo of site centre looking down, then the remaining photos along the transect lines in the order numbered.

Transect 1 bearing: _____

Transect 1 bearing: _____

Transect 2 bearing: _____

Transect 2 bearing: _____

Transect 3 bearing: _____

Photo 1: _____

Photo 1: _____

Photo 2: _____

Photo 2: _____

Photo 3: _____

Photo 3: _____

Photo 4: _____

Photo 4: _____

Photo 5: _____

Photo 5: _____

Photo 6: _____

Photo 7: _____

Transect form

Field measurement of fractional ground cover

Site number: _____ Sheet number: 1 Date: _____

	crust	disturbed	rock	green leaf	dry leaf	litter	cryptogam	<2m green leaf	<2m dry leaf	<2m branch	in crown	>2m green leaf	>2m dry leaf	>2m branch	crust	disturbed	rock	green leaf	dry leaf	litter	cryptogam	<2m green leaf	<2m dry leaf	<2m branch	In crown	>2m green leaf	>2m dry leaf	>2m branch		
1														51																
2														52																
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Field measurement of fractional ground cover

Site number: _____ Sheet number: 2 Date: _____

	crust	disturbed	rock	green leaf	dry leaf	litter	cryptogam	<2m green leaf	<2m dry leaf	<2m branch	in crown	>2m green leaf	>2m dry leaf	>2m branch		crust	disturbed	rock	green leaf	dry leaf	litter	cryptogam	<2m green leaf	<2m dry leaf	<2m branch	in crown	>2m green leaf	>2m dry leaf	>2m branch
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Field measurement of fractional ground cover

Site number: _____ Sheet number: 3 Date: _____

	crust	disturbed	rock	green leaf	dry leaf	litter	cryptogam	<2m green leaf	<2m dry leaf	<2m branch	in crown	>2m green leaf	>2m dry leaf	>2m branch	crust	disturbed	rock	green leaf	dry leaf	litter	cryptogam	<2m green leaf	<2m dry leaf	<2m branch	In crown	>2m green leaf	>2m dry leaf	>2m branch		
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