











## What is landscape function?

 Landscape function analysis (LFA) is a monitoring procedure that uses rapidly acquired field-assessed indicators to assess the biogeochemical functioning of landscapes.....

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## Same soil type – different management



Higher organic matter – more stable, increased infiltration and nutrient cycling

Stability= 69.1Infiltration= 39.8Nutrient cycling= 31.7



Low organic matter – poor stability, low water infiltration and nutrient cycling

Stability	= 43.3
Infiltration	= 24.0
Nutrient cycling	= 11.5













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	۷	Vhat	the do	art hit ( e)	tick	Soil S 15cm oi	urface around art (tick ne)	Evic c (Co	dena han omp	ce of ge olete	Nearest perennial (complete all	grass )	N	Age eare renr	st		Base	al are	a	Observations
Throw number	Bare Soil	Litter No Decomp	Litter Slight Decomp	Litter Fungal Decomp	Perennial Grass Base	Capped soil surface	Covered	Annuals present	Soil Movement	Evidence of other animals, insects etc	Name of nearest perennial grass	Distance to nearest perennial grass (cm)	Seedling	Young	Mature	Distance to nearest perennial	Width nearest perennial grass	Breadth nearest perennial	Basal area nearest perennial	Species observed, oxidising litter in perennial grass, wood forbs increasing etc. Photos of litter in perennial bases, Estimated overall litter class
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2 1														-		-	-	+	+	
5	-													-		-	-	+	+	
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e	Variation to Landscape Goal	Possible Cause of Variation	Possible Corrective Action	Who/When
	Bare ground between grass plants – no raw litter present	<ol> <li>Litter not produced as perennial grass not fully recovered (look like an ungrazed plant and contains fresh litter) before grazing i.e. recoveries too short for growth rate.</li> </ol>	<ol> <li>Check increasing recovery between grazing's in a practice area. Usual cause is overstocked for seasonal growth. Determine where planning/ enterprise design has failed. Adjust stocking rate</li> </ol>	
		<ol> <li>Animals picking up litter as not being moved on gut fill.</li> </ol>	<ol> <li>Watch animals grazing to confirm. Usual cause is overstocked for seasonal growth. Determine where planning/ enterprise design has failed. Adjust stocking rate</li> </ol>	
	Raw litter present but not composting/ decomposing	<ol> <li>Litter not in contact with soil surface and not available to soil life.</li> </ol>	<ol> <li>Check increasing animal impact – confirm in trail area. Usual cause is low stock density or moving animals on too fast. Check animals are moved on gut fill.</li> </ol>	
	Perennial grass spacing increasing. Annual forbs and grasses increasing	<ol> <li>Perennial grass dying from recovery too short</li> </ol>	<ol> <li>Check increasing recovery – confirm in practice area. Usual cause is overstocked for seasonal growth. Determine where planning/ enterprise design has failed. Adjust stocking rate</li> </ol>	

Date									
Site	Variation to Landscape Goal	Possible Cause of Variation	Possible Corrective Action	Who/When					
	Seedlings not present	<ol> <li>Lack of animal impact/ disturbance to initiate germination of better perennial grasses.</li> </ol>	<ol> <li>Check increasing animal impact in a smaller paddock or changing animal behaviour.</li> </ol>						
		2. Lack of perennial grass recovery	<ol> <li>Check if seedlings present before grazing. If present and not establishing increase recovery. Usual cause is overstocked for seasonal growth.</li> <li>Determine where planning/ enterprise design has failed. Adjust stocking rate</li> </ol>						
	Decline in better perennial grasses	<ol> <li>Low utilisation and/ or lack of animal impact/ disturbance to initiate germination of better perennial grasses.</li> </ol>	<ol> <li>Check increasing utilisation in a smaller paddock Usual cause is low stock density or moving animals on too fast (light graze). Check animals are moved on gut fill.</li> </ol>						
	Grey oxidising grass noted as increasing	1. Perennial grass litter not cycling	<ol> <li>Check increasing animal impact through a smaller paddock or changing animal behaviour</li> </ol>						
		2. Paddock too large to allow even grazing	<ol> <li>Check if smaller paddocks have grey oxidising grass – confirm in a practice area. Plan required for profitable development of smaller paddocks</li> </ol>						
	Woody plants noted as increasing	<ol> <li>Perennial grass dying from not having growth points cleared.</li> </ol>	<ol> <li>Check increasing animal impact through a smaller paddock or changing animal behaviour</li> </ol>						
		2. Paddock too large to allow even grazing	<ol> <li>Check if smaller paddocks stops woody seedlings germinating – confirm in a practice area</li> </ol>						































