



LAND SYSTEM DESCRIPTIONS

Land System	Description
MOUNTAINS	
Allua 1 (AL-1)	Limestone mountain ridges and the rugged hills. Shallow and stony soils. Spinifex is found on the higher slopes and the lower slopes have Witchetty Bush, Casita Bush and occasionally Glycya and eucalypts. Oat grass, Curly Windmill grass, Silky Browntop and Kangaroo grass.
HILLS	
Bond Springs (Bs-1)	Rugged hills and ranges in the far northern part of the station. Soils undescrbed. Oat grass and Woollyoat grass with occasional Cotton grass, Kangaroo grass and Curly Windmill grass (Small Hills pasture type).
Gillen (Gi)	Lower hill slopes, wide valleys and creeks and northern parts of Undoolya. Shallow stony soils on lower hill slopes. Mulga, Witchetty Bush and low shrubby casias over spinifex, hard grasses (Woollybut, Kerosene grass) and forbs. Sandy valleys and creek banks with Mulga and Ironwood over perennial grasses.
Gillen 1 (Gi-1)	Lower hill slopes, wide valleys and creeks and northern parts of Undoolya. Shallow stony soils on lower hill slopes. Mulga, Witchetty Bush and low shrubby casias over spinifex, hard grasses (Woollybut, Kerosene grass) and forbs. Sandy valleys and creek banks with Mulga and Ironwood over perennial grasses.
Huckitta (Hu)	Limestone ranges, lower foothills and erosional slopes. This country flanks Ringwood land system. Calcareous soils. Lower slopes have calcareous soils, and carry Witchetty Bush and Glycya over Oat grass. Slooper rockler ranges have a low sparse line cover of Witchetty Bush and Casita Bush over spinifex, Kerosene grass, Woollyoat grass and forbs.
Middleton (Mi)	Sandstone hills and ranges in the central part of the station. Shallow stony soils and minor sandy slopes. Sandy slopes and watercourses grow Woollyoat grass, Woollybut, Kerosene grass and some palatable perennial grasses. Most of the unit has shallow stony soils and low grazing capacity.
Mountain (Mt)	The more rugged and generally inaccessible areas throughout the station. A variety of landforms and rock types are in this unit. Soils undescrbed. Spinifex and hard grasses. Minor areas with Mulga over mainly Oat grass and Mulga grass with some minor perennial grasses also present.
LOW HILLS	
Multer (Mu)	Low hills and gently undulating limestone country in the far south eastern corner of Undoolya. Calcareous soils. Witchetty Bush and occasional Whitewoods over Oat grass and Neveral. Minor areas with Mulga over mainly Oat grass and Mulga grass with some minor perennial grasses also present.
PLAINS	
Allua 2 (AL-2)	Extensive areas comprising erosional lower slopes at the foot of the Allua-One unit and associated alluvial plains and water courses. Brown calcareous soils, slightly alkaline and sandy loam to sandy clay loam in texture. Open tree cover of occ. Whitewoods, Glycya and Witchetty Bush over mainly Oat grass. Drainage basins may occur and these wetter alluvial areas should have perennial grasses, Umbrella grass, Silky Browntop, Desert Bluegrass in addition to Oat grass.
Bond Springs 2 (Bs-2)	Gently undulating country with broader valleys around Eight Mile Dam and the Homestead. Soils undescrbed. Oat and Woollyoat grasses are the dominant species with more perennial grasses than Bond Springs One.
Ewaninga (Ew)	Sandy area of country in the south west part of the station. Soils undescrbed. Spinifex, Woollybut and Kerosene grass growing under Mulga, Silver Wattle and occasional Desert Oaks.
Ringwood (Ri)	Extensive sandy calcareous plains formed as a result of the weathering of the ranges of Huckitta land system. Calcareous sandy loam to sandy clay loam soils. Open woodland of mainly Glycya with occ. Ironwood, Whitewood, Corkwood, Mulga and Pripky Wattle over Oat grass. Umbrella grass should be present in slightly wetter run-on areas and Curly Windmill grass is found near trees.
Todd 1 (Td-1)	Plains and the smaller alluvial basins of the Todd River system. Sandy clay loam soils. Tree cover of mainly Ironwood and Corkwood over Oat grass, Woollyoat grass and perennial grasses.
DUNE FIELDS	
Simpson (Si)	A very small area of low sand dunes to the south of Exell Bore. Soils undescrbed. The wide swales contain reasonable grasses.
DRAINAGE SYSTEMS	
Todd 2 (Td-2)	River course and the immediately adjacent clayey wooded floodouts. Silty clay alluvial soils on floodouts and sandy levees and main channels. Coolibah, River Red Gum, Cottonbush and Lignum on the floodouts. Levees and main channels have Coolibah, River Red Gum and Ironwood over a diversity of palatable perennial grasses and Kerosene grass.

Example of Land System Description

Map unit: Td-1
Land system: Todd 1

Landform Description: Plains and the smaller alluvial basins of the Todd River system. Sandy clay loam soils. Tree cover of mainly Ironwood and Corkwood over Oat grass, Woollyoat grass and perennial grasses.

Soil Description: Sandy clay loam soils. Tree cover of mainly Ironwood and Corkwood over Oat grass, Woollyoat grass and perennial grasses.

Vegetation description: Sandy clay loam soils. Tree cover of mainly Ironwood and Corkwood over Oat grass, Woollyoat grass and perennial grasses.

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Limitations of use
 Land Resource Information has been derived from aerial photograph interpretation and field data collection describing landform, soil and vegetation. Mapping has been collected at a nominal scale of between 1:100 000 and 1:250 000. Enlarging this map beyond this scale will not provide further detail and is not recommended.
 Final mapping is presented at a scale of 1:100 000.
 When assessing specific areas within the mapping it is recommended that a site inspection be undertaken to establish unmapped variations and to confirm the mapping accuracy on the ground.

Please Note:
 This report is generally not available. Access requests should be directed to Arid Zone Research Institute Library in Alice Springs.
 Email: azri.library@nt.gov.au

Bibliographic Reference:
 Bastin, G. & Masterman, J (1979) Range Condition assessment report: Undoolya Station Department of Primary Production, Alice Springs, Northern Territory.

GENERAL FEATURES

Land unit boundary	Water bore	Cyclops Bore
Limit of mapping	Well	Williams Well
Property boundary	Dam	Colleen Dam
Highway: sealed	Tank	Arumba Tank
Highway: unsealed	Trough	Arumba Trough
Main road: sealed	Stock Yard	New Yard
Main road: unsealed	Paddock name	Jessie Pk
Minor road: sealed	Building	
Minor road: unsealed	Landing ground	
Local road: track	Drainage	
Water pipeline	Lagoon / Waterhole	Waterhole
Fence	Relief feature	Mt Undoolya
Major Community	Range or Plain	TODD PLAIN
Family outstation	Spot height	742
Pastoral homestead	Relief ridge	

GENERAL FEATURES DATA SOURCES:
 Cadastral, roads, place names: Department of Infrastructure, Planning and Logistics, Northern Territory of Australia.
 Pastoral Infrastructure: Department of Environment, Parks and Water Security, Northern Territory of Australia.
 Hydro features: Commonwealth of Australia (Bureau of Meteorology) 2014
 Spot heights: Geoscience Australia, 2007. Geodata topo 250K. Series 3.

MAP LOCALITY

Cartography by:
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LAND RESOURCES OF UNDOOLYA STATION