

of south-western Queensland

# Watercourses without trees and shrubs



*Shallow desert  
watercourse near  
Birdsville (R. Jaensch,  
Wetlands International)*

## Landform and water regime

This wetland type occurs in minor channels and shallow valleys in gently undulating grassland country and in gibber country. The grassland watercourses may be only several metres wide whereas the gibber watercourses may be tens of metres wide. Soil types are varied.

Water supply is from stream flow and local rain storms. Inundation (flow) is temporary, for as little as a few hours or as much as several days. Water may lie in discontinuous pools within the watercourses for more than a week. Water normally is fresh (non-saline).

## Typical vegetation

This wetland type is characterised by lack of trees and woody shrubs. The watercourses may be lined with grasses and forbs (0.3 to 0.5 m high), many of them temporary, or may be mostly bare.

## Associated wetland types

- Wooded watercourses.
- Gibber and inter-dunal claypan aggregations.
- Bluebush swamps.

## Distribution in south-western Queensland

This wetland type is largely confined to the Mitchell Grass Downs and Channel Country biogeographic regions, possibly with minor occurrences in nearby regions. It is most prevalent in tree-less grassland and gibber country.

## Prominent examples of this type

- Widespread in grassland in Astrebla National Park.
- Many examples occur in gibber country on the road from Birdsville to Bedourie.

## Occurrence in protected areas

This wetland type occurs in only four national parks in south-western Queensland, principally in Astrebla, Diamantina and Bladensburg National Parks.

## Principal conservation values

- Probably important for fauna that prefer or depend on briefly inundated channel habitat. Otherwise, conservation values are not fully known.

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### Watercourses without trees and shrubs *cont...*



Watercourse in Mitchell grass downs near Longreach  
(R. Jaensch, Wetlands International)

#### Characteristic plant species

Occasional woody shrubs (eg. *Eremophila* or *Acacia* spp., northern bluebush *Chenopodium auricomum* or saltbush *Atriplex* spp.) may occur but are not a prominent feature. Commonly associated species are:

##### Grasses, sedges and forbs:

budda pea *Aeschynomene indica*  
sesbania pea *Sesbania campylocarpa*  
pepper grass *Panicum laevinode*  
Mitchell grass *Astrebla* spp.  
silky browntop *Eulalia aurea*  
downs nutgrass *Cyperus bifax*  
burr/poverty-bush *Sclerolaena* spp.  
soft roly-poly *Salsola kali*  
Murray lily *Crinum flaccidum*

#### Characteristic waterbird species

The following species occur in gibber watercourses:

grey teal *Anas gracilis*  
pink-eared duck *Malacorhynchus membranaceus*  
white-necked heron *Ardea pacifica*  
common greenshank *Tringa nebularia*  
sharp-tailed sandpiper *Calidris acuminata*  
black-winged stilt *Himantopus himantopus*  
red-capped plover *Charadrius ruficapillus*  
banded lapwing *Vanellus tricolor*  
Australian pratincole *Stiltia isabella*

#### Other fauna

Inundation probably is too brief or localised to provide substantial habitat for fishes. Several frog species probably occur, eg. *Cyclorana platycephala*. When dry this wetland type (grassland form) supports reptiles and mammals that inhabit deep-cracking clay.

#### Threats to the conservation values

- In grassland country, upstream stock dams may substantially reduce downstream flow in the watercourses.
- Invasion by exotic shrubs *Parkinsonia aculeata* and *Acacia nilotica* and by buffel grass *Cenchrus ciliaris*.
- Excessive grazing of livestock on watercourse vegetation during droughts.

#### Management responses required

- Avoid placement of stock dams on representative watercourses throughout the area of occurrence of this wetland type.
- Eradicate major weed infestations and manage grazing to ensure long-term viability of watercourse vegetation.

#### Gaps in knowledge

This wetland type is not well known in south-western Queensland and has largely been overlooked. There is little published information, partly because this type does not form large water bodies that meet criteria for national importance. Improvements are needed in the knowledge of hydrology, ecological processes, characteristic flora and fauna and conservation values.

#### For further information, contact:

Environmental Protection Agency, 160 Ann Street, Brisbane (Tel: 07-3227-8186), or regional offices of the Queensland Parks and Wildlife Service in Toowoomba and Rockhampton.