

of south-western Queensland

# Gibber and interdunal claypan aggregations



*Claypan aggregations  
between dunes, near  
Birdsville  
(R. Jaensch, Wetlands  
International)*

## Landform and water regime

This wetland type occurs in small basins, in gibber (stony) country and on clay flats between parallel sand dunes. Individual basins typically are several metres to tens of metres wide. Aggregations of tens or hundreds of small basins, some of them interconnected, are common. The soil of this wetland type tends to be hard-crusting clay rather than deep-cracking clay.

Water supply is from heavy local storms and runoff from immediate surrounding areas or in some cases via minor creeks. Inundation is temporary, normally lasting for only a few days or weeks after any one rain event. Depth of water is commonly less than 0.3 m. Water is fresh (non-saline) and turbid.

## Typical vegetation

This wetland type typically has areas of short, temporary vegetation that appears after heavy rain, interspersed with bare areas. The vegetation is dominated by low succulents and other forbs. Scattered taller grass tussocks or woody shrubs may occur as a minor component.

## Associated wetland types

- Watercourses without trees and shrubs.
- Bluebush swamps.

## Distribution in south-western Queensland

This wetland type is confined to the Channel Country and Simpson-Strzelecki Dunefields biogeographic regions. It is particularly common over several large areas in the Channel Country.

## Prominent examples of this type

- This wetland type is a major landscape feature in gibber country north and north-east of Birdsville.
- It is also extensive in dune country west of Birdsville and south-west of Noccundra towards Cameron Corner.

## Occurrence in protected areas

This wetland type occurs in only three national parks in south-western Queensland. However, many examples occur in Simpson Desert National Park and some occur in Diamantina National Park.



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### Gibber and interdunal claypan aggregations *cont...*

#### Principal conservation values

- Feeding and migration stop-over sites for migratory shorebirds, especially during northward migration (March – April).
- Other conservation values have not been adequately assessed.

#### Characteristic plant species

##### Trees and shrubs: (sparse)

emubush *Eremophila* spp.  
northern bluebush *Chenopodium auricomum*  
old man saltbush *Atriplex nummularia*

##### Grasses, sedges and forbs:

pepper grass *Panicum laevinode*  
brown beetle grass *Diplachne fusca*  
swamp canegrass *Eragrostis australasica*  
rat's tail couch *Sporobolus mitchellii*  
Mitchell grass *Astrelba* spp.  
downs nutgrass *Cyperus bifax*  
club-rush *Schoenoplectus dissachanthus*  
sesbania pea *Sesbania* spp.  
ruby saltbush *Enchylaena tomentosa*  
burr/poverty bush *Sclerolaena* spp.  
swamp bluebush *Maireana microcarpa*  
Murray lily *Crinum flaccidum*

#### Characteristic waterbird species

##### Migratory shorebirds:

common greenshank *Tringa nebularia*  
red-necked stint *Calidris ruficollis*  
sharp-tailed sandpiper *Calidris acuminata*  
little curlew *Numenius minutus* (occasional)

##### Some other species that occur:

grey teal *Anas gracilis*  
pink-eared duck *Malacorhynchus membranaceus*  
white-necked heron *Ardea pacifica*  
brolga *Grus rubicunda*  
black-winged stilt *Himantopus himantopus*  
red-necked avocet *Recurvirostra novaehollandiae*  
red-capped plover *Charadrius ruficapillus*  
banded lapwing *Vanellus tricolor*  
Australian pratincole *Stiltia isabella*  
gull-billed tern *Sterna nilotica*

#### Other fauna:

There is little information available about other fauna that use this wetland type. Few if any fishes would occur but frogs such as *Cyclorana platycephala* and *Notaden bennetti* probably occur. Invertebrates are likely to be well represented and to include phyllopodous crustaceans.



*Cyclorana platycephala*  
(Environmental Protection Agency)

#### Threats to the conservation values

- Excessive grazing by livestock during drought, especially where surroundings (eg. gibber) offer little stock feed.
- General degradation of surrounding dunes due to rabbits.

#### Management responses required

- Manage grazing in gibber wetlands to ensure long-term viability of wetland vegetation.
- Control rabbit populations.

#### Gaps in knowledge

The biodiversity and conservation values of this wetland type are not well known in south-western Queensland. Generally this wetland type has been overlooked, probably due to its short-lived inundation. Knowledge of hydrology, ecological processes and occurrence of wetland species (frogs, invertebrates) is inadequate.

#### 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.