



Herb rich saline shrublands in clay pans, Herb rich shrublands in clay pans, Dense shrublands on clay flats, and Shrublands on dry clay flats (floristic community types 7, 8, 9 and 10a as originally described in Gibson *et al.* (1994))

Summary description

The seasonal clay-based wetlands are the most floristically diverse of the Swan Coastal Plain wetlands. The deeper pools and wet flats are characterised by temporally overlapping suites of annual herbs and geophytes (plants that die down to bulbs, corms or tubers over summer) that flower and set seed as the pools dry through spring. Over summer, the clay substrates dry to impervious pans. At least 50% of the flora comprise annual or perennial herbs, many of which are endemic to the claypans.



Distribution

Occurring on the Swan Coastal Plain, each of the four clay pan community types individually span a range of between 200–300km. Floristic community type 7 is recorded from between Nambung to Ambergate, type 8 ranges from Bullsbrook to Capel, type 9 occurs between Moore River National Park and Dunsborough, and type 10a between Wattle Grove and Sabina River.

Department of Biodiversity, Conservation and Attractions (DBCA) Regions: South West, Swan, Midwest
DBCA Districts: Blackwood, Wellington, Perth Hills, Swan Coastal, Turquoise Coast

Local Government Authorities: City of Armadale, City of Bunbury, City of Busselton, City of Gosnells, City of Kalamunda, City of Rockingham, City of Swan, Shire of Capel, Shire of Dandaragan, Shire of Dardanup, Shire of Gingin, Shire of Harvey, Shire of Murray, Shire of Serpentine-Jarrahdale, Shire of Waroona

Habitat requirements

The clay pan communities occur where clay substrate is low in the landscape and forms an impermeable layer close to the surface. These communities are seasonally wet or inundated. The clay pan communities rely on rainfall and local surface drainage to fill and are unlikely to be connected to groundwater.

Indigenous interests

Traditional Owner groups: Pinjarup, Wardandi, Whadjuk and Yued Noongar

A register of Aboriginal cultural heritage sites kept by the Department of Planning, Lands and Heritage lists numerous sites of Aboriginal significance in the vicinity of these communities.

The area is covered by the Gnaala Karla Booja Indigenous Land Use Agreement (ILUA), South West Boojarah ILUA, Whadjuk People ILUA, and Yued ILUA as part of the South West Native Title Settlement, which formally recognises Noongar people as the Traditional Owners of the south-west region. The ILUA regions are supported by the Gnaala Karla Booja Aboriginal Corporation, Karri Karrak Aboriginal Corporation, Whadjuk Aboriginal Corporation, Yued Aboriginal Corporation and umbrella group, the South West Aboriginal Land and Sea Council.

Conservation status

State: All four community types are listed as endangered ecological communities under the *Biodiversity Conservation Act 2016*. Threatened ecological communities are declared environmentally sensitive areas under the *Environmental Protection Act 1986*.

National: The communities are components of the umbrella community 'Clay Pans of the Swan Coastal Plain', which is listed as critically endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

Threatening processes

Major threats to the communities include hydrological change, weed invasion, too frequent fire, and clearing.

Recovery plan

An interim recovery plan has been produced for these communities, outlining the recovery actions that are required to reduce threats and maintain or improve their overall condition. Recommended actions include monitoring and managing hydrology, monitoring flora, managing fire, fencing, controlling weeds, feral and grazing animals, and liaising with land managers to implement recovery.

Key references

Gibson, N., Keighery, B., Keighery, G., Burbidge, A., & Lyons, M. (1994). *A floristic survey of the Southern Swan Coastal Plain*. Unpublished report for the Australian Heritage Commission prepared by the Department of Conservation and Land Management and the Conservation Council of Western Australia (Inc.).

Department of Parks and Wildlife (2015). *Clay pans of the Swan Coastal Plain (Community types 7, 8, 9 and 10a – Gibson et al. 1994 and Clay pans with mid dense shrublands of Melaleuca lateritia over herbs): Interim Recovery Plan 2015–2020* (Interim Recovery Plan No. 354).

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