

Maningrida coastal habitats

Location and Description

This is a composite site near the community of Maningrida, 500 km east of Darwin on the North Central Arnhem Land coast. It includes the floodplains of the Liverpool and Tomkinson Rivers, Nungbalgarri Creek, the coastline from West Point to Goomadeer Point, and the islands adjacent to this stretch of coast, including Haul Round Island.

Tenure and Land Use

This site is Aboriginal freehold land and is part of the Arnhem Land Aboriginal Land Trust. The land mainly supports Indigenous uses, and other uses include recreation, tourism and commercial fisheries. The township Maningrida has a population of about 2070 people and numerous outstations are dotted throughout the site, but population is sparse. The site is within a proposed Indigenous Protected Area.



Significance Rating

International Significance

Ecological Values

The seasonal floodplains associated with the Liverpool and Tomkinson Rivers support large aggregations of waterbirds, including, at times, internationally significant numbers of Brolgas. Migratory shorebirds frequent the coastal areas of the site and significant numbers of Black-tailed Godwits have been reported around Nungbalgarri Creek. Small islands off the coast support large and significant colonies of nesting seabirds.

Management Issues

Management of feral animals, especially pig and Water Buffalo, is the highest priority at the site, but weed control and fire management are also ongoing issues.

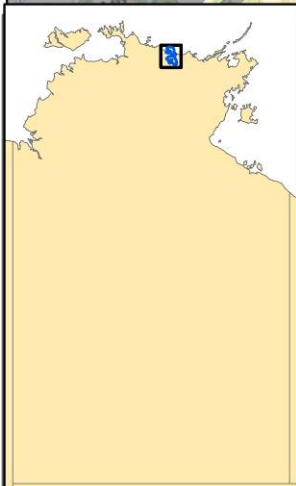
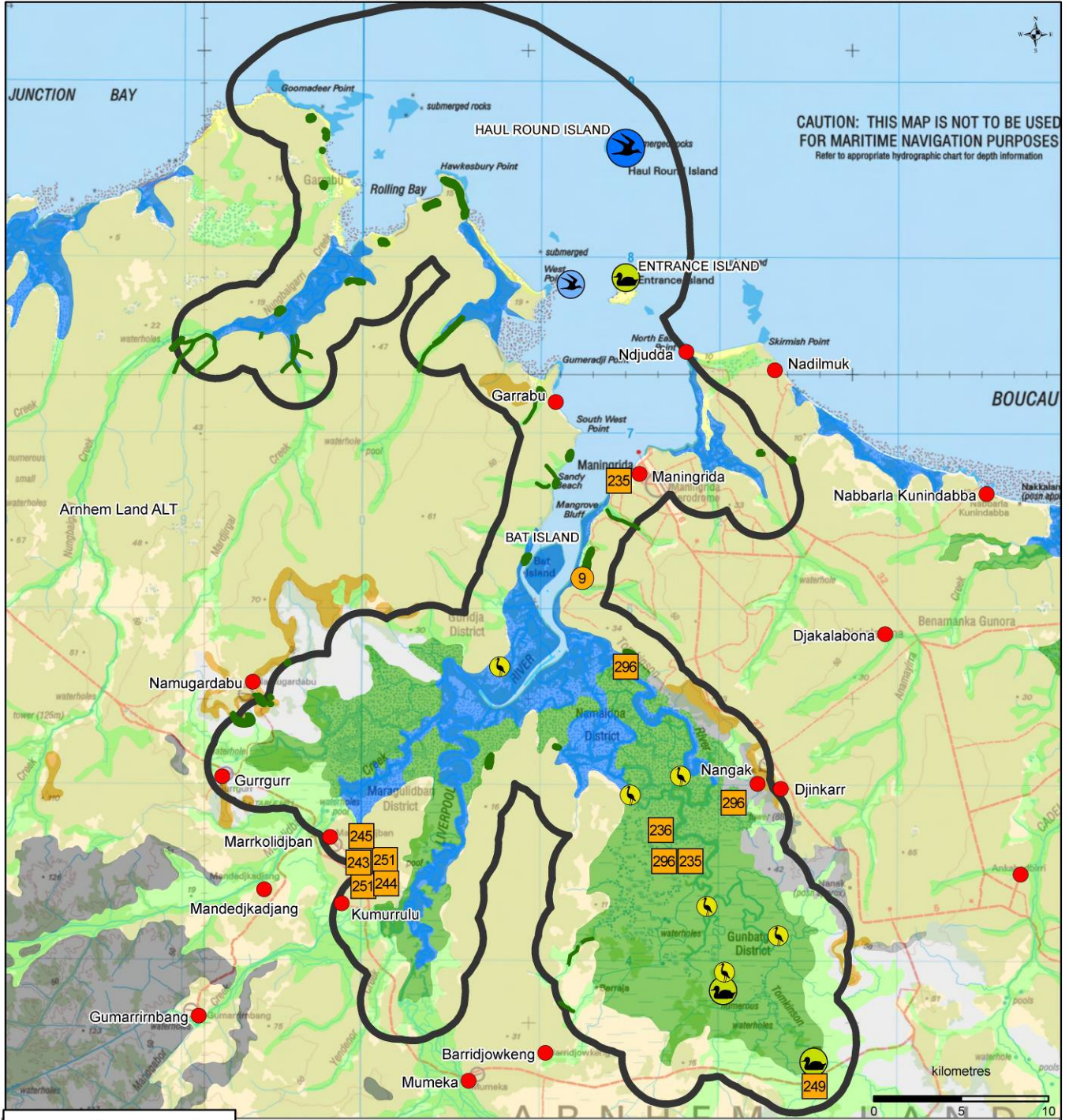
Condition

The floodplain is in good condition but feral animals are starting to cause some degradation. *Mimosa pigra* infestation has been successfully managed by Djelk Rangers and Traditional Owners.

Current Conservation Initiatives

Djelk rangers, based at Maningrida, are undertaking land management activities in the area including control of *Mimosa pigra* on the floodplain, fire management, flora and fauna surveys, and feral animal control.

MANINGRIDA COASTAL HABITATS SITE OF CONSERVATION SIGNIFICANCE



Fauna Critically Endangered	Partridge Pigeon	Rainforest
Fauna Endangered	Water mouse	alluvial floodplains
Fauna Vulnerable	White-throated Grasswren	basalt hills
Flora Critically Endangered	Yellow-spotted Monitor	basalt plains and rises
Flora Endangered	Important waterbird records	coastal dunes
Flora Vulnerable	Waterbird colony	coastal floodplains
<i>Arenga australasica</i>	International seabird colony	granite plains and rises
Australian Bustard	National seabird colony	lateritic plains
Emu	Site of Conservation Significance	lateritic plateaux
Mertens Water Monitor		rugged quartz sandstone plateaux and hills
Northern Shrike-tit		sandstone hills
		sandstone plains and rises
		tidal flats

MANINGRIDA COASTAL HABITATS - SITE OF CONSERVATION SIGNIFICANCE

LOCATION	SOCS Number	17 (Not listed in the NT Parks and Conservation Masterplan)
	Latitude/Longitude	12° 6' South, 134° 10' East (at centre)
	Bioregion	Arnhem Coast
	Description	<p>This site encompasses a terrestrial area of 900 km² and includes the coastal and alluvial floodplains associated with the Liverpool and Tomkinson rivers (350 km²), the tidal flats around Nungbalgarri Creek and the mouths of the Liverpool and Tomkinson rivers (121 km²), the coastline from West Point to Goomadeer Point, and the islands adjacent to this stretch of coast including Haul Round and Entrance islands.</p> <p>Boucaut Bay and its associated floodplains are adjacent to the site, and the West Arnhem Plateau is nearby, inland. There are also recognised as sites of high conservation significance in the NT.</p>
THREATENED SPECIES	Significance Rating	International Significance
	Threatened plants and animals (Listings at National/NT level CR - Critically Endangered, EN - Endangered, VU - Vulnerable, NT - Near Threatened, LC - Least Concern, DD - Data Deficient)	13 threatened species are reported from this site. Plants <ul style="list-style-type: none"> ▪ Australian arenga palm <i>Arenga australasica</i> (VU/DD) Vertebrates <ul style="list-style-type: none"> ▪ Australian Bustard <i>Ardeotis australis</i> (-/VU) ▪ Emu <i>Dromaius novaehollandiae</i> (-/VU) ▪ Gouldian Finch <i>Erythrura gouldiae</i> ((EN/EN) ▪ Northern (crested) Shrike-tit <i>Falcunculus (frontatus) whitei</i> (VU/VU) ▪ Partridge Pigeon <i>Geophaps smithii</i> (VU/VU) ▪ White-throated Grass-wren <i>Amytornis woodwardi</i> (-/VU) ▪ False Water-rat <i>Xeromys myoides</i> (VU/DD) ▪ Merten's Water Monitor <i>Varanus mertensi</i> (-/VU) ▪ Yellow-spotted Monitor <i>Varanus panoptes</i> (-/VU) ▪ Flatback Turtle <i>Natator depressus</i> (VU/DD) ▪ Leatherback Turtle <i>Dermochelys coriacea</i> (VU/VU) ▪ Olive Ridley Turtle <i>Lepidochelys olivacea</i> (EN/DD)
ENDEMIC SPECIES	Significance Rating	Not Significant
	Notes	Endemic to the NT: 43 plant species and two birds recorded in the site are endemic to the NT.
WILDLIFE AGGREGATIONS	Significance Rating	International Significance
	Marine turtles	Chatto and Baker (2008) report only occasional nesting of marine turtles on beaches in this site.
	Seabirds	Two seabird breeding colonies are reported from this site including a large and significant mixed-species colony on Haul Round Island (Chatto 2001). About 10 000 seabirds were reported in the Haul Round Island colony (S012) in 1994, including 5000 Bridled Terns and 5000 Roseate Terns (Chatto 2001). This count of Roseate Terns is internationally significant (>1% global population; Dutson in prep.). Smaller numbers of Roseate and Black-naped Terns are reported nesting in a colony (S119) on an island off West Point near Maningrida (Chatto 2001).
	Waterbirds	<p>Total numbers of waterbirds: The freshwater floodplains in this site, especially those associated with the Tomkinson River, support many thousands of waterbirds. Chatto (2006) reported about 15 000 birds during surveys of part of the site in 1995, and expects a more comprehensive survey would result in numbers in excess of 20 000 waterbirds.</p> <p>Counts of individual species: Maximum counts of two species on the Tomkinson River floodplain are internationally significant (> 1% global population; G. Dutson in prep.) and include: 3000 Brolga (Chatto 2006); and 1000 Pied Heron (R. Chatto, NRETAS unpubl.).</p> <p>Chatto (2006) reports nine important waterbird records for this site, including the significant counts identified above and high counts of other species, such as Magpie Geese and Black-necked Storks that are regionally important.</p> <p>Breeding records: Three small waterbird breeding colonies are reported from this site, including one dominated by Pied Cormorants in mangroves on Haul Round Island (Chatto 2000a).</p>
	Shorebirds	Chatto (2003) reports low numbers of shorebirds on tidal flats in this site, but a maximum count of 6350 Black-tailed Godwits recorded near the mouth of Nungbalgarri Creek is internationally significant (>1% East Asian-Australasian Flyway population; Bamford <i>et al.</i> 2008).
	Other aggregations	None known
WETLANDS	Significance Rating	National Significance (possible International)
	Ramsar criteria met	<p>This site has not been formally assessed against Ramsar criteria but is likely to satisfy at least waterbird-based criteria (criterion 5: important waterbird aggregation site with >20 000 waterbirds; criterion 6: regularly supports >1% of the individuals in a population) for listing as a wetland of international importance under the Ramsar Convention.</p> <p>Phillips (2002) acknowledged that the site does meet Ramsar criteria, although no further information could be located.</p>

MANINGRIDA COASTAL HABITATS - SITE OF CONSERVATION SIGNIFICANCE

	DIWA criteria met	This site has not been assessed against the criteria for listing as a wetland of national significance in the Directory of Important Wetlands in Australia (DIWA).
	Notes	The Liverpool and Tomkinson Rivers seasonally flood onto adjacent floodplains, and these are important wetlands. There are large mangrove areas at the mouths of the rivers and at the mouth of Nungbalgarri Creek.
	Rivers	Nungbalgarri Creek and the Tomkinson and Liverpool Rivers are small but important NT rivers. They drain the north side of the Arnhem Land Plateau and are strongly seasonal.
FLORA	Significance Rating	Regional Significance
	Notes	Rainforest: This site includes 530 ha of monsoon rainforest, most of which is dry rainforest occurring as small and scattered patches <10 ha (Russell-Smith 1991).
OTHER ENVIRONMENTAL VALUES		<p>Nungbalgarri Creek is identified as internationally important site for migratory shorebirds in the East Asian-Australasian Flyway (Bamford <i>et al.</i> 2008).</p> <p>Haul Round Island is proposed to be nominated by Birds Australia as an internationally-recognised Important Bird Area (G. Dutson in prep.) due to the occurrence of globally significant numbers of seabirds.</p> <p>Much of this site will be incorporated into the proposed Djelk Indigenous Protected Area.</p> <p>The Liverpool River supports high densities of Saltwater Crocodiles (Fukuda <i>et al.</i> 2007).</p> <p>33 species recorded from this site are listed under international conventions or bilateral agreements protecting migratory animals.</p> <p>The marine areas within this site are likely to encompass significant biodiversity values and these are currently being explored and collated in a project by the Marine Biodiversity Group of NRETAS (K. Edyvane, NRETAS, pers. comm.).</p>
MANAGEMENT ISSUES		<p>Fire: In the period 1993-2004, 100% of the site was burnt in fewer than three years.</p> <p>Feral animals: Increasing pig and Water Buffalo populations are causing degradation of floodplain habitats.</p> <p>Weeds: One Weed of National Significance (<i>Lantana camara</i>), seven declared Category B weeds (<i>Cenchrus echinatus</i>, <i>Hyptis suaveolens</i>, <i>Senna occidentalis</i>, <i>Sida acuta</i>, <i>Sida cordifolia</i>, <i>Stachytarpheta cayennensis</i>, <i>Tribulus cistoides</i>), and seven undeclared but problematic environmental weeds (high priority weeds: Smith 2001) (<i>Andropogon gayanus</i>, <i>Cenchrus ciliaris</i>, <i>Clitoria ternatea</i>, <i>Crotalaria goreensis</i>, <i>Gmelina arborea</i>, <i>Hibiscus sabdariffa</i>, <i>Ipomoea quamoclit</i>) are recorded from this site.</p> <p>Other: The impact of Traditional Owners collecting seabird eggs on Haul Round Island is unknown (Chatto 2001).</p> <p>All coastal floodplains in northern Australia are at risk of degradation from sea-level rise resulting from climate change (Hyder Consulting 2007).</p>
MANAGEMENT INFORMATION	NRM groups	Djelk Rangers (Maningrida) (Northern Land Council 2006).
	Protected areas	The site lies within the proposed Djelk Indigenous Protected Area.
	Current management plans	<p>Site-specific plans: None known.</p> <p>National recovery plans for threatened species: Northern Quoll (Hill and Ward in prep.); marine turtles (Environment Australia 2003); Partridge Pigeon and Northern Shrike-tit (Woinarski 2004a); Gouldian Finch (O'Malley 2006); False Water-rat (Qld, EPA in prep.).</p> <p>Other management plans: Australian Weeds Strategy (NRMMC 2007); Threat Abatement Plan for Predation, habitat degradation, competition and disease transmission by feral pigs (DEH 2005); FIREPLAN: Fire management for the savanna community (Russell-Smith <i>et al.</i> in prep.).</p>
	Monitoring programs and research projects	<p>Fire in the tropical savannas is mapped continuously under the North Australia Fire Information Project http://www.firenorth.org.au/nafi/app/init.jsp</p> <p>There are regular surveys of Saltwater Crocodiles in the Liverpool and Tomkinson Rivers (PWSNT 2005), with next surveys scheduled for mid 2008.</p>
	Management recommendations	Continue to work with Djelk Rangers and Bawinunga Corporation to resource and implement natural resource management programs, including feral animal control, weed and fire management. Monitor seabird nesting in significant colonies (G. Dutson in prep.).
KEY REFERENCES	Papers and reports	<p>Chatto, R. (2006). <i>The distribution and status of waterbirds around the coast and coastal wetlands of the Northern Territory</i>. Technical Report 76, Parks and Wildlife Commission of the Northern Territory, Palmerston. 254pp.</p> <p>Chatto, R. (2001). <i>The distribution and status of colonial breeding seabirds in the Northern Territory</i>. Technical Report 70, Parks and Wildlife Commission of the Northern Territory, Darwin. 206pp.</p> <p>Griffiths, T., Bowman, D., Cowie, I., and Fensham, R. (2001). <i>Vegetation of the Maningrida Region, North-Central Arnhem Land</i>. Technical Report 1. (Key Centre for Tropical Wildlife Management, Northern Territory University, Darwin.).</p>
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