

Bowling Green Bay

MAINLAND ISLAND CHARACTERISTICS

Jurisdiction	Queensland
NRM Region	Burdekin
LGAs	Burdekin Shire Townsville City
Size	149, 000 hectares
Dominant Type	Eucalypt woodlands
Land Tenure	Agriculture Crown Land National Park
Surrounding Issues	Land use Weed density Pest density



Overall Priority	Conservation Value	Threat Status
Very High	Very High	Very High

Key Biodiversity Values

Key biodiversity and conservation values of BOWLING GREEN BAY

- 25 threatened species
- 1 threatened community
- 26 migratory species
- Very high species richness
- Very high endemism
- Bowling Green Bay Ramsar wetland
- 7 nationally important aquatic ecosystems
- Native vegetation present
- Vertebrate pest species present

CONSERVATION VALUE

Categories	Ranks/Scores
1 Biodiversity values	Very High (16)
2 Uniqueness	Medium (2)
3 Representativeness	Low (1)
4 Adjacency	High (3)
5 Area to perimeter ratio	High (3)

THREAT STATUS

Categories	Ranks/Scores
1 Density of pest species	High (6)
2 Pest impact level	Very High (8)
3 Invasion fronts/range boundaries	High (3)
4 Land use risk	Very High (5)
5 Weed density	Very High (4)
6 Area without statutory protection	Medium (2)



Key Threats and Impacts

Pest Species Present or Potentially Present

<input checked="" type="checkbox"/>	Cane toad	<input checked="" type="checkbox"/>	Feral cat	<input checked="" type="checkbox"/>	Feral pig	<input checked="" type="checkbox"/>	Rodents
<input type="checkbox"/>	Carp, European carp	<input checked="" type="checkbox"/>	Feral deer	<input type="checkbox"/>	Feral water buffalo	<input checked="" type="checkbox"/>	Tilapia, Mozambique Tilapia
<input checked="" type="checkbox"/>	European red fox	<input checked="" type="checkbox"/>	Feral donkey	<input checked="" type="checkbox"/>	Indian Myna, Common Myna	<input type="checkbox"/>	Weather loach; Oriental weather loach
<input checked="" type="checkbox"/>	European wild rabbit	<input checked="" type="checkbox"/>	Feral goat	<input checked="" type="checkbox"/>	Mosquito fish, Plague Minnow	<input checked="" type="checkbox"/>	Wild dog
<input type="checkbox"/>	Feral camel	<input checked="" type="checkbox"/>	Feral horse	<input type="checkbox"/>	Red-eared slider turtle	<input type="checkbox"/>	Other

Potential impacts of pest species on matters of National Environmental Significance

Feral water buffalo <i>Crocodylus porosus</i>	European red fox <i>Caretta caretta</i> <i>Natator depressus</i> <i>Chelonia mydas</i> <i>Neochmia ruficauda ruficauda</i> <i>Dermochelys coriacea</i> <i>Numenius minutus</i> <i>Erythrotriorchis radiatus</i> <i>Rostratula australis</i> <i>Geophaps scripta scripta</i> <i>Sterna albifrons</i> <i>Merops ornatus</i> <i>Xeromys myoides</i>
Cane toad <i>Dasyurus hallucatus</i> <i>Merops ornatus</i> <i>Dasyurus maculatus gracilis</i>	Feral pig <i>Caretta caretta</i> <i>Eretmochelys imbricata</i> <i>Chelonia mydas</i> <i>Natator depressus</i> <i>Dermochelys coriacea</i> <i>Tylophora williamsii</i>
Feral cat <i>Apus pacificus</i> <i>Monarcha melanopsis</i> <i>Eretmochelys imbricata</i> <i>Neochmia ruficauda ruficauda</i> <i>Geophaps scripta scripta</i> <i>Xeromys myoides</i>	European wild rabbit <i>Geophaps scripta scripta</i> <i>Poephila cincta cincta</i>
Wild dog <i>Eretmochelys imbricata</i> <i>Natator depressus</i> <i>Merops ornatus</i> <i>Sterna albifrons</i>	

Other threatening processes

- Situated on pest invasion front / range boundary
- High risk land use
- High density of Weeds of National Significance

Highest priority biodiversity issues

Impacts of the European red fox

Pest management actions listed in recovery plans for marine turtles and *Poephila cincta cincta*

Integration of pest management with other threat abatement actions



CRITICAL SYNOPSIS OF VERTEBRATE PEST MANAGEMENT REGIME

Need for vertebrate pest management	<p>Management of vertebrate pests is required in order to protect and conserve the ecological character of the Bowling Green Bay Ramsar site in order to meet Australia's international obligations as a signatory nation to the Ramsar Convention on Wetlands. Management is further required to ensure Australian Ramsar management principles are met as prescribed under the <i>Environment Biodiversity and Conservation Act 1999</i>.</p> <p>Furthermore, the Bowling Green Bay mainland island provides key habitat for a number of migratory bird species recognised as species of national significance under the EPBC Act.</p>
Planning instruments	<p>The following planning instruments provide for the regional and local management of vertebrate pest species in the Bowling Green Bay mainland island;</p> <ul style="list-style-type: none"> ▪ <i>Land Protection (Pest and Stock Route) Management Act 2002</i> which obliges QPWS to control declared pests on land it manages (ie. National Parks) ▪ State Coastal Management Plan - Queensland Coastal Policy - August 2001 ▪ Bowling Green Bay National Park Management Plan 2000 (QPWS, 2000) ▪ Burdekin Shire Draft Pest Management Plan 2005 – 2009 ▪ QPWS has developed and adopted a statewide pest management system which guides planning and onground activities and encourages an integrated and long-term approach to managing all pests.
Management actions	<p>Trapping and opportunistic shooting of feral pigs, horses and foxes was identified as a management action in the Bowling Green Bay National Park Management Plan 2000. No information is currently available on status of this action.</p>
Monitoring regimes	<p>Monitoring of the impact of fox predation on turtle nesting was identified as a management action in the Bowling Green Bay National Park Management Plan 2000. No information is currently available on status of this action.</p>
Management responsibility	<p>Queensland Department of Environment Queensland Parks and Wildlife Service</p>
Cost-benefit analysis	<p>The Qld Pest Animal Strategy states that decisions regarding pest management must be made based on reliable information. The Strategy further indicates that part of the information gathering stage should include a cost/benefit analysis of various management options.</p>
Special features	<p>\$189, 700 Caring for Country grant awarded to Burdekin Solutions Ltd in 2008. The funding is to be used to improve biodiversity across the Burdekin floodplain through the protection, improved connectivity and rehabilitation of wetland habitats. Training of landholders, industry groups and the community in the latest knowledge about best management practice of wetlands also forms part of the project.</p>
Summary / comments	<p>The Information Sheet on Ramsar Wetlands (Australia, 1999) states that the most significant threats to the area are indirect impacts resulting from agricultural, urban and industrial developments in the catchment area external to the site. The prioritisation of pest management should be considered in this context.</p>

References:

Australia (1999) *Information Sheet on Ramsar Wetlands*. Report provided to the Ramsar Convention on Wetlands.
<http://www.wetlands.org/reports/ris/5AU042en.pdf>

Queensland Parks and Wildlife Service (2000) *Bowling Green Bay National Park Management Plan*. The State of Queensland. Brisbane.
http://www.epa.qld.gov.au/publications/p02439aa.pdf/Bowling_Green_Bay_National_Park_management_plan.pdf

Queensland Government (2002) *Queensland Pest Animal Strategy 2002-2006*, Queensland Government, Brisbane.

