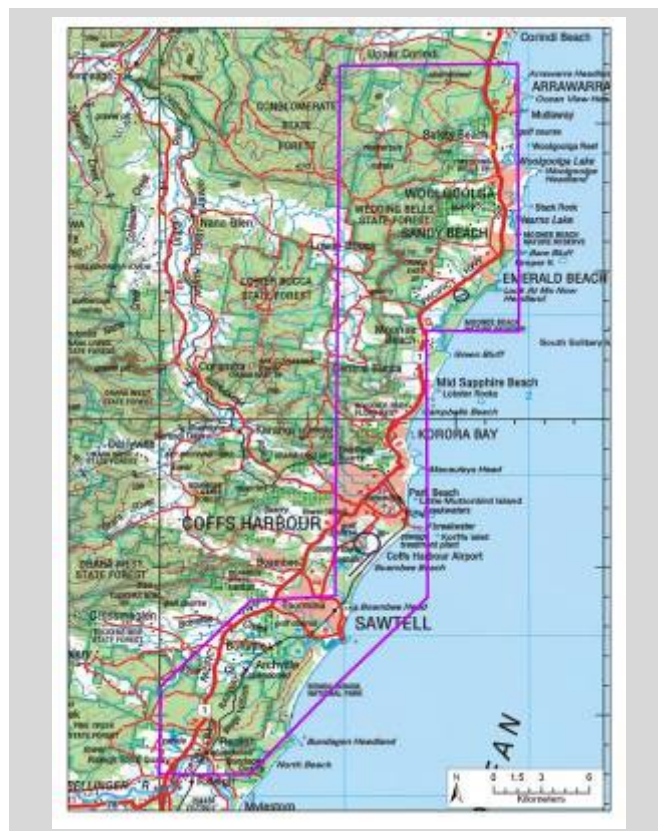


Coffs Harbour

MAINLAND ISLAND CHARACTERISTICS

Jurisdiction	New South Wales
NRM Region	Northern Rivers
LGAs	Bellingen Coffs Harbour
Size	33, 000 hectares
Dominant Type	Eucalypt tall open forests
Land Tenure	Agriculture National Park and State Forest
Surrounding Issues	Land use Pest density Weed density



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

Key Biodiversity Values

Key biodiversity and conservation values of COFFS HARBOUR

- 39 threatened species
- 1 threatened community
- 34 migratory species
- Very high species richness
- Very high endemism
- Native vegetation present
- Vertebrate pest species present

CONSERVATION VALUE

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

THREAT STATUS

Categories	Ranks/Scores
1 Density of pest species	High (6)
2 Pest impact level	Very High (8)
3 Invasion fronts/range boundaries	Very High (4)
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 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 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 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 checked="" type="checkbox"/>	Red-eared slider turtle	<input type="checkbox"/>	Other

Potential impacts of pest species on matters of National Environmental Significance

Feral cat		European red fox	
<i>Apus pacificus</i>	<i>Pterodroma leucoptera</i>	<i>Caretta caretta</i>	<i>Petrogale penicillata</i>
<i>Diomedea exulans</i>	<i>leucoptera</i>	<i>Chelonia mydas</i>	<i>Potorous tridactylus tridactylus</i>
<i>Litoria aurea</i>	<i>Puffinus griseus</i>	<i>Emydura signata</i>	<i>Pterodroma leucoptera leucoptera</i>
<i>Macronectes halli</i>	<i>Puffinus leucomelas</i>	<i>Gallinago hardwickii</i>	<i>Puffinus pacificus</i>
<i>Monarcha melanopsis</i>	<i>Puffinus pacificus</i>	<i>Litoria aurea</i>	<i>Puffinus tenuirostris</i>
<i>Petrogale penicillata</i>	<i>Puffinus tenuirostris</i>	<i>Merops ornatus</i>	<i>Sterna albifrons</i>
<i>Potorous tridactylus tridactylus</i>		Feral pig	
Feral deer		<i>Caretta caretta</i>	<i>Litoria longgburensis</i>
<i>Cynanchum elegans</i>		<i>Chelonia mydas</i>	<i>Phaius australis</i>
Wild dog		<i>Cynanchum elegans</i>	<i>Thalassarche steadi</i>
<i>Merops ornatus</i>	<i>Puffinus tenuirostris</i>	<i>Diomedea exulans</i>	
<i>Petrogale penicillata</i>	<i>Sterna albifrons</i>	European wild rabbit	
<i>Potorous tridactylus tridactylus</i>		<i>Cynanchum elegans</i>	<i>Pterodroma leucoptera leucoptera</i>
Mosquito fish, Plague Minnow		<i>Macronectes halli</i>	<i>Puffinus tenuirostris</i>
<i>Litoria aurea</i>	<i>Mixophyes balbus</i>	<i>Petrogale penicillata</i>	<i>Thesium australe</i>
<i>Litoria longgburensis</i>		<i>Puffinus griseus</i>	<i>Xanthomyza phrygia</i>

Other threatening processes

- Situated on pest invasion front / range boundary
- High risk land use
- High density of Weeds of National Significance
- Increased potential for edge effects

Highest priority biodiversity issues

Pest impacts on *Petrogale penicillata* and *Puffinus tenuirostris*

Pest management actions listed in recovery plans for marine turtles, albatross, *Litoria longgburensis* and *Xanthomyza phrygia*

Impacts from cats, foxes and other high priority pests



CRITICAL SYNOPSIS OF VERTEBRATE PEST MANAGEMENT REGIME

Need for vertebrate pest management	The NSW State Plan sets out natural resource management targets, one of which is that by 2015 there is a reduction in the impacts of invasive species. NSW Department of the Environment and Climate Change has a legal obligation to protect threatened species listed under the NSW <i>Threatened Species Act 1995</i> . Vertebrate pests can cause direct and indirect impacts to threatened plant and animals species located in the mainland island.
Planning instruments	The following management plans and strategies are relevant to the Coffs Harbour mainland island: <ul style="list-style-type: none"> ■ Bongil Bongil National Park Plan of Management 1999 (NSW NPWS, 1999) ■ Moonee Beach Nature Reserve Draft Plan of Management 2009 (NSW NPWS, 2009) ■ Draft Coffs Harbour Vertebrate Pest Management Strategy 2009 (Coffs Harbour City Council, 2009) ■ NPWS Regional Pest Management Strategy 2008 (DECC, 2008)
Management actions	Management actions identified to occur within the Coffs Harbour mainland island include; <ul style="list-style-type: none"> ■ Occasional baiting within the Bongil Bongil National Park for foxes. ■ Pest animal control programs will be undertaken as required using appropriate methods in collaboration with neighbours and council within the Moonee Beach Nature Reserve (NSW NPWS, 2009). ■ High priority species (feral pig, cane toad, red fox, feral cat, Indian myna, common starling) within the larger Coffs Harbour region are to be managed through a number of research, community education and planning actions as detailed in the Draft Coffs Harbour Vertebrate Pest Management Strategy (Coffs Harbour City Council, 2009)
Monitoring regimes	<ul style="list-style-type: none"> ■ Monitoring to protect the endangered <i>Acronychia littoralis</i> (EPBC Act and TSC Act) and Little Tern were identified as monitoring actions under the Bongil Bongil National Park Plan of Management (NSW NPWS, 1999) ■ The Draft Plan of Management for the Moonee Beach Nature Reserve states that monitoring sites should be established, particularly in headland areas, to measure the effectiveness of weed control programs on the recovery of threatened species (DECC, 2008). ■ The Draft Coffs Harbour Vertebrate Pest Management Plan states that monitoring should be carried out to continue and improve the effectiveness of the control programs undertaken (Coffs Harbour City Council, 2009)
Management responsibility	NSW National Parks and Wildlife Service Coffs Coast City Council Private landowners
Cost-benefit analysis	The NSW Invasive Species Plan highlights that pest management will be prioritized in areas where it provides the best cost to benefit ratio in protecting biodiversity, productivity and community most threatened by invasive species.
Special features	The Draft Coffs Harbour Vertebrate Pest Management Plan closed for public comments in late May 2009. The Draft Strategy aims to provide effective management and control of pest animal populations in order to protect ecological, economic and social values within the Coffs Harbour Local Government Area.
Summary / comments	Most areas within the Coffs Harbour mainland island are covered by site specific pest management plan / strategies. It is key that these management arrangements are integrated to ensure pest management is consistent and effective at a regional scale.

References:

NSW National Parks and Wildlife Service (1999) *Bongil Bongil National Park Plan of Management 1999*. NSW National Parks and Wildlife Service. <http://www.environment.nsw.gov.au/resources/parks/pomfinalbongil.pdf>

Coffs Harbour City Council (2009) *Draft Vertebrate Pest Management Strategy*. Coffs Harbour City Council. <http://www.coffsharbour.nsw.gov.au/www/html/4258-27-apr-09---pest-management-strategy-out-for-comment.asp>

NSW Department of Primary Industries (DPI) (2008) *NSW Invasive Species Plan 2008-1015*, NSW DPI, Orange. Available on-line at: <http://www.dpi.nsw.gov.au/agriculture/pests-weeds/nsw-invasive-species-plan>

