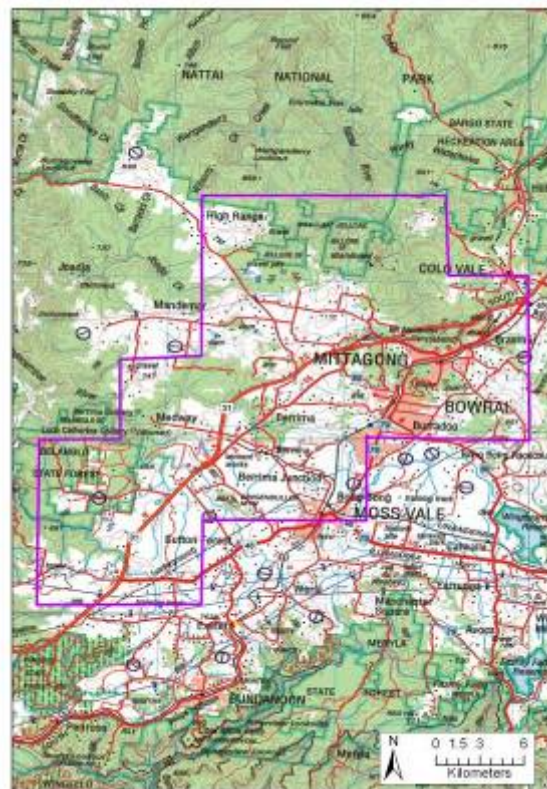


Bowral



MAINLAND ISLAND CHARACTERISTICS

Jurisdiction	New South Wales
NRM Region	Hawkesbury/Nepean
LGA	Wingecarribee
Size	45, 000 hectares
Dominant Type	Eucalypt woodlands
Land Tenure	Agriculture 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 BOWRAL

- 21 threatened species
- 1 threatened community
- 9 migratory species
- Very high species richness
- Very high endemism
- The Greater Blue Mountains World Heritage Area
- The Greater Blue Mountains Area National/Commonwealth Heritage Place
- 1 nationally important aquatic ecosystem
- Native vegetation present
- Vertebrate pest species present

CONSERVATION VALUE

Categories	Ranks/Scores
1 Biodiversity values	High (12)
2 Uniqueness	High (3)
3 Representativeness	Very High (4)
4 Adjacency	Medium (2)
5 Area to perimeter ratio	Medium (2)

THREAT STATUS

Categories	Ranks/Scores
1 Density of pest species	Very High (8)
2 Pest impact level	High (6)
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	High (3)



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 checked="" 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 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 checked="" type="checkbox"/>	Red-eared slider turtle	<input type="checkbox"/>	Other

Potential impacts of pest species on matters of National Environmental Significance

Feral cat		Mosquito fish, Plague Minnow	
<i>Apus pacificus</i>	<i>Monarcha melanopsis</i>	<i>Macquaria australasica</i>	<i>Mixophyes balbus</i>
<i>Heleioporus australiacus</i>	<i>Petrogale penicillata</i>	Feral goat	
<i>Isoodon obesulus obesulus</i>	<i>Potorous tridactylus tridactylus</i>	<i>Petrogale penicillata</i>	
Wild dog		Feral pig	
<i>Isoodon obesulus obesulus</i>	<i>Petrogale penicillata</i>	<i>Isoodon obesulus obesulus</i>	
<i>Merops ornatus</i>	<i>Potorous tridactylus tridactylus</i>	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	
European red fox		European wild rabbit	
<i>Gallinago hardwickii</i>	<i>Merops ornatus</i>	<i>Petrogale penicillata</i>	<i>Xanthomyza phrygia</i>
<i>Heleioporus australiacus</i>	<i>Petrogale penicillata</i>	<i>Thesium australe</i>	
<i>Isoodon obesulus obesulus</i>	<i>Potorous tridactylus tridactylus</i>		

Other threatening processes

- Situated on pest invasion front / range boundary
- High risk land use
- High density of Weeds of National Significance
- Lack of statutory protection
- Increased potential for edge effects
- Isolated from other high conservation value islands

Highest priority biodiversity issues

Pest impacts on *Petrogale penicillata*

Pest management actions listed in the recovery plan for *Xanthomyza phrygia*

Other threatening processes



CRITICAL SYNOPSIS OF VERTEBRATE PEST MANAGEMENT REGIME

Need for vertebrate pest management	<p>The Bowral mainland island has significant areas of State Forest along with private land holdings. Overall, 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.</p> <p>Pest animals have the potential to impact on plantation productivity, the natural environment and agricultural production in both State forest and adjoining lands by damaging crop trees and other vegetation, competing for food resources and directly preying on desired animal species. State forests also provide habitat for numerous species protected under the <i>Threatened Species Conservation Act 1995</i>.</p>
Planning instruments	<p>The following policy documents and legislation are relevant to the management of vertebrate pest species within the Bowral mainland island:</p> <ul style="list-style-type: none"> Ecologically Sustainable Forest Management. Monaro Region NSW (Forests NSW, 2008a) 1992 National Forest Policy Statement NSW <i>Forestry Act 1916</i>
Management actions	<p>The 1992 National Forest Policy Statement states that:</p> <ul style="list-style-type: none"> Forest management agencies, such as Forests NSW, will monitor and appropriately control the threat to publicly owned native forest ecosystems posed by feral animals, exotic plants, pests and diseases. Forest management agencies will cooperate with private landowners in developing and implementing measures to protect adjacent public and private forested lands from harmful diseases, weeds and feral animals. <p>Monaro Region coordinates with Native Forests Operations branch via their <i>Pest Animal Management Plan</i> to achieve requirements of the license under the <i>Threatened Species Conservation Act 1995</i> (Forests NSW, 2008).</p> <p>Forests NSW specifically contribute to control programs for foxes, dogs, goats, pigs, cattle (Forests NSW, 2008b)</p>
Monitoring regimes	<p>Forests NSW monitor activity around feral animal bait stations, baits taken and reports of predation on livestock (Forests NSW, 2008a).</p>
Management responsibility	<p>Forests NSW (a public trading enterprise within NSW Department of Primary Industries)</p> <p>Private landholders on their own properties</p>
Cost-benefit analysis	<p>The NSW Invasive Species Plan highlights that pest management will be prioritized in areas where it provides the best cost to benefit ration in protecting biodiversity, productivity and community most threatened by invasive species.</p>
Special features	<p>\$546, 194 spent on feral animal and weed control in the year 2007 -2008 (Forests NSW, 2008b).</p> <p>Forests NSW Environmental Management System is ISO 14001 certified. This system sets the framework for achieving and continually improving environmental performance by introducing a systematic approach to measuring and monitoring. Forests NSW is further certified to the Australian Forestry Standard - AS 4708:2007 (AFS).</p>
Summary / comments	<p>Forests NSW undertakes a regional approach to pest management by joining with the Rural Lands Protection Boards (RLPB), local government, other agencies and stakeholders to develop regional strategies to manage pest animals.</p>

References:

Commonwealth of Australia (1995) *National Forest Policy Statement. A New Focus for Australia's Forests*. Second Edition. Commonwealth of Australia.

Forests NSW (2008a) *Ecologically Sustainable Forest Management. Monaro Region NSW*. NSW Department of Primary Industries. Orange. http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0007/260188/forests-nsw-seeing-report-2007-08.pdf

Forests NSW (2008b) *Forests NSW Seeing Report 2007 -2008*. NSW Department of Primary Industries. Orange. http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0007/260188/forests-nsw-seeing-report-2007-08.pdf

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>

