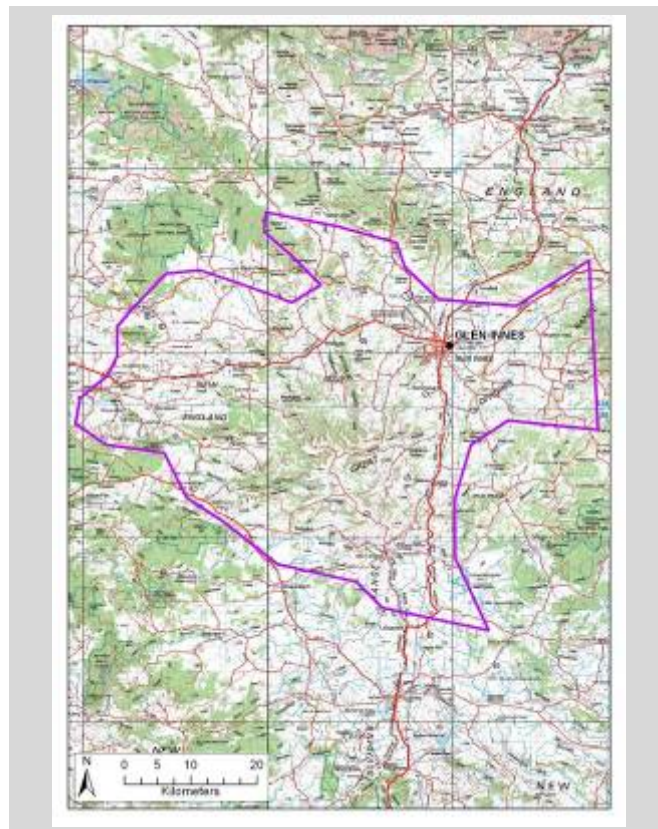


Glen Innes-Guyra Basalts

MAINLAND ISLAND CHARACTERISTICS

Jurisdiction	New South Wales
NRM Regions	Border Rivers/Gwydir Northern Rivers
LGAs	Glen Innes Severn Shire Guyra Inverell
Size	226, 000 hectares
Dominant Type	Cleared, non-native vegetation, buildings
Land Tenure	Agriculture
Surrounding Issues	Lack of native vegetation Land use Pest density



Overall Priority	Conservation Value	Threat Status
Very High	High	Very High

Key Biodiversity Values

Key biodiversity and conservation values of GLEN INNES-GUYRA BASALTS

- 33 threatened species
- 4 threatened communities
- 8 migratory species
- Very high species richness
- Very high endemism
- Little Llangothlin Nature Reserve Ramsar wetland
- 1 nationally important aquatic ecosystems
- Native vegetation present
- Vertebrate pest species present

CONSERVATION VALUE

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

THREAT STATUS

Categories	Ranks/Scores
1 Density of pest species	Very High (8)
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	Medium (2)
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 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 <i>Apus pacificus</i> <i>Potorous tridactylus tridactylus</i> <i>Monarcha melanopsis</i> <i>Pseudomys oralis</i> <i>Petrogale penicillata</i> <i>Underwoodisaurus sphyrurus</i> Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) & the Monaro Plateau (South Eastern Highlands Bioregion)	Mosquito fish, Plague Minnow <i>Litoria booroolongensis</i> <i>Mixophyes balbus</i>
Wild dog <i>Merops ornatus</i> <i>Potorous tridactylus tridactylus</i> <i>Petrogale penicillata</i>	Feral goat <i>Acacia pubifolia</i> <i>Petrogale penicillata</i> <i>Astrotricha roddii</i> <i>Underwoodisaurus sphyrurus</i> <i>Boronia granitica</i>
European red fox <i>Elseya belli</i> <i>Potorous tridactylus tridactylus</i> <i>Gallinago hardwickii</i> <i>Pseudomys oralis</i> <i>Merops ornatus</i> <i>Rostratula australis</i> <i>Petrogale penicillata</i> <i>Underwoodisaurus sphyrurus</i> Little Llangothlin Nature Reserve Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) & the Monaro Plateau (South Eastern Highlands Bioregion)	Feral pig <i>Astrotricha roddii</i> <i>Diuris sheaffiana</i> <i>Diuris pedunculata</i> <i>Mixophyes iteratus</i> White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland
	European wild rabbit <i>Dichanthium setosum</i> <i>Poephila cincta cincta</i> <i>Diuris sheaffiana</i> <i>Rutidosis heterogama</i> <i>Eucalyptus mckieana</i> <i>Thesium australe</i> <i>Petrogale penicillata</i> <i>Xanthomyza phrygia</i> Little Llangothlin Nature Reserve Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) & the Monaro Plateau (South Eastern Highlands Bioregion)

Other threatening processes

- Situated on pest invasion front / range boundary
- High risk land use
- Lack of statutory protection

Highest priority biodiversity issues

Pest impacts on *Petrogale penicillata*

Pest management actions listed in recovery plans for *Pseudomys oralis*, *Boronia granitica*, *Mixophyes iteratus*, *Xanthomyza phrygia* and *Poephila cincta cincta*

Impacts of foxes and rabbits



CRITICAL SYNOPSIS OF VERTEBRATE PEST MANAGEMENT REGIME

Need for vertebrate pest management	<p>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. Further legislative requirements exist to abate threats (including pests) to threatened species listed under the federal EPBC Act and the NSW Threatened Species Conservation and Fisheries Management Acts.</p> <p>The Little Llangothlin Nature Reserve is a very small Ramsar site that occurs in this mainland island. Therefore, management of vertebrate pests is required in order to protect and conserve the ecological character of the Coorong 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 Environment Biodiversity and Conservation Act 1999.</p>
Planning instruments	<p>There is no single planning instrument which covers pest management for the Glen Innes-Guyra Basalts mainland island. Pest management is coordinated under the NSW Invasive Species Plan 2008-2015.</p> <p>The Little Llangothlin Nature Reserve Plan is managed according to the Plan of Management (1998).</p> <p>Several recovery and threat abatement plans apply to species found within this island.</p>
Management actions	<p>Pest management actions listed in the Little Llangothlin Nature Reserve Plan of Management include:</p> <ul style="list-style-type: none"> Feral animal control will continue to be undertaken on an on-going basis and the effectiveness of the programme monitored, for example by track counts at bait stations. Rabbit-proof boundary fencing will be erected around the boundaries of the reserve <p>No information was available about pest management activities being undertaken in the broader Glen Innes-Guyra Basalts mainland island.</p>
Monitoring regimes	<p>Monitoring within the Little Llangothlin Nature Reserve as indicated above.</p> <p>Both the Border Rivers Gwydir CMA and Glen Innes Severn Shire Council are encouraging residents of the Glen Innes-Guyra Basalts mainland island to participate in the Rabbit Scan program, which aims to record data about rabbits from at least 5000 sites across Australia (http://www.rabbitscan.net.au/joomla/index.php).</p>
Management responsibility	<p>Pest management in NSW lies with a number of groups including several state agencies and land managers. management of the Little Llangothlin Nature Reserve lies with the NSW Department of Environment and Climate Change.</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>Within the Little Llangothlin Nature Reserve rabbit burrows cause special problems as soil mixing jeopardises the stratigraphic integrity of the profile. However, these important geomorphological and archaeological areas cannot be fenced with netting to exclude rabbits because the same areas are nesting sites for tortoises.</p>
Summary / comments	<p>Little Llangothlin Nature Reserve Plan of Management indicates that several pest species are a problem in the reserve and the above problem highlights the challenges of integrating pest management across several species.</p>

References:

NSW Department of Primary Industries (DPI) (2008) *NSW Invasive Species Plan 2008-2015*, NSW DPI, Orange.
Available on-line at: <http://www.dpi.nsw.gov.au/agriculture/pests-weeds/nsw-invasive-species-plan>

NSW National Parks and Wildlife Service (1998) *Little Llangothlin Nature Reserve Plan of Management*, NPWS, NSW.
Available on-line at: <http://www.environment.nsw.gov.au/resources/parks/pomfinalittlellangothlin.pdf>

