

# chapter 8

## prioritisation of high conservation status offshore islands

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**Gold Coast**  
PO Box 404  
West Burleigh Qld 4219  
P +61 7 5508 2046  
F +61 7 5508 2544

**Cairns**  
PO Box 1130  
Cairns Qld 4870  
P +61 7 4031 9599  
F +61 7 4031 9388

**Sydney**  
PO Box 880  
Surrey Hills NSW 2010  
P +61 2 9690 1295

admin@ecosure.com.au    www.ecosure.com.au

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# 8 General Comments & Recommendations

## 8.1 Biodiversity & feral species data management

The analysis presented in this report resulted in islands such as Fraser, French, Lord Howe, Phillip, Dorre, Bribie, Bernier, North Stradbroke, Macquarie and Melville being the most highly ranked for conservation status. This reflects their large size and high diversity of habitats, with corresponding numbers of threatened and other listed species. These islands generally also had moderate to high numbers of pest species impacting or potentially impacting on fauna and flora values.

The ranking system used to determine a priority list of islands will inevitably underrate some islands due to lack of information as opposed to some others which have high levels of information and more sightings of less common species, e.g. migrants and seabirds. For example some of the isolated northern islands near Cape York and across the Northern Territory have little survey data. Data for all islands can be updated in the future as they get surveyed, and also, as feral species continue to be eradicated.

### 8.1.1 Recommendations

We recommend that:

- The working dataset generated during this project is maintained and updated as additional information on threatened species and feral species presence on islands becomes available.
- DEWHA aligns its Seabird Breeding and Australian Islands Biodiversity databases to minimise ongoing duplication of data. This would facilitate updating these data and maximise benefits from national biodiversity assessment exercises such as the one reported here.
- State/territory threatened fauna and flora legislation is standardised and aligned with the EPBC Act.
- A Sites of Conservation Significance (SOCS) assessment is undertaken by the remaining Australian states and territory following the Northern Territory Government's methods and presentation of outcomes (NRETAS 2008j). The SOCs assessment clearly presents information for the site under consideration, such as:
  - geographical context, including a map, and general ecology
  - threatened fauna and flora, as well as restricted distribution/endemic species
  - seabird and shorebird breeding colonies

- turtle nesting sites
- other significant values; e.g. specific sites of national or international significance; Ramsar wetland status, etc
- management issues, including pest species (vertebrate, invertebrate and weeds)
- monitoring and management initiatives, and
- the site's overall significance as National Significance or International Significance.

## 8.2 Directing funds for feral species management

Removing pests from small islands (<200 ha) can sometimes provide greater advantages for biota than on larger islands. Fauna species capable of reaching high density populations (e.g. seabirds) may be more effectively managed on small islands (e.g. some islands in the Furneaux Group) where reinvasion issues and overall biosecurity may be better managed. Managing several small islands can sometimes offer better insurance against vertebrate pest reinvasion than, for instance, managing one or two larger islands where there may be greater risks of reinvasion.

Large islands (>200 ha) do however offer the best opportunities for managing viable populations of fauna groups requiring more diverse ecosystems than the simpler and often more modified habitats on smaller islands. More diverse gene pools are potentially able to be maintained on the larger islands (e.g. Groote Eylandt) than on smaller islands. Examples of this include single large islands which accommodate several threatened mammal species, such as the Northern Quoll.

Many small islands and some of the larger oceanic islands have a small suite of vertebrate pests which can be eradicated with minimal side effects or ripple effects. If they lack indigenous mammals, the removal of pests such as rodents, cats and livestock can be relatively straight forward (but see Chapter 7 – best practice). It is on larger islands near the mainland where native fauna can be very diverse, that significant logistic issues arise for eradications. Removing invasive rodents from islands which also contain small native mammals is an ongoing problem.

### 8.2.1 Recommendations

Managers of some of the high priority islands are faced with significant eradication issues (see recommendations provided within each island/island group profile, Chapter 4) and some of these are listed below:

- the use of anticoagulant poisons to remove exotic rodents and rabbits from islands on which native mammals occur (many islands)
- the use of poison baits for feral Cat and Red Fox removal when there are

native predators (many islands)

- removing the last Red Fox and Red Fox reinvasion (Phillip Island), and
- Cane Toad eradication and biosecurity (many northern islands).

We recommend that:

- Current research and adaptive management programs on the eradication issues highlighted above are supported.
- Islands where (re)introduction (i.e. conservation introduction) of particularly at risk species may be a viable option are identified; e.g. small mammals introduced to islands within the Shark Bay World Heritage Area, Western Australia.

## 8.3 Biosecurity

Ongoing biosecurity is critically important. Many islands currently have very few pests while others have had pests eradicated or have management plans in place that propose pest eradications in the future. Managers of these islands need to carry out risk assessments of potential invasions and implement effective quarantine and surveillance to minimise the chances of reinvasion or invasion; if invasion occurs there needs to be a contingency plan ready for removing invaders. Effective biosecurity needs to be in place before eradication programs commence, or be set up concurrently.

Many of the high priority islands are under multiple-ownership and are heavily utilised by the public, both as residents and as tourists (e.g. Fraser, Hinchinbrook, Lord Howe, North Stradbroke and Phillip Islands). There are correspondingly high reinvasion risks associated with high visitation rates. In some cases this can be used as incentive and leverage for more effective biosecurity. The tourism at these islands is often heavily dependent on the ongoing health of natural ecosystems and particularly threatened and sensitive species including colonies of Little Penguin and other seabirds.

There are a growing number of examples of Indigenous communities working towards protecting island biodiversity, e.g. rangers appointed for surveillance of Cane Toads and other potential invasive species. This approach has the potential to be very effective given the daily observations that locals can provide. It is likely to be most effective in partnership with state/territory authorities if the latter can provide ongoing practical advice and other support.

There are however many biosecurity challenges and others will undoubtedly emerge in the future. Current biosecurity issues include finding ways to detect and eliminate Cane Toads, rodents and invasive ants that arrive on islands. Cane Toads can colonise islands during flood events and they are also prone to be transported in freight. There is a need to develop generic surveillance and eradication techniques that can be effectively used against the Cane Toad on priority islands. Detailed contingency plans are needed in response to invasion by toads and some other feral species, e.g. rodents, feral cats and invertebrate groups, such as exotic ants.

### 8.3.1 Recommendations

We recommend that:

- Risk assessments for potential invasion/reinvasion rates are incorporated into island management plans and contingency plans are developed for implementation in the event that there is a need to remove invaders. Ideally, this would be done before commencement of eradication actions, or at least concurrently.
- Adjust relevant legislation/permit systems for accessing and utilising islands and their near coastal areas; e.g. restricting vehicle use on beaches where this currently occurs.
- Support programs which bring together the local community and state/territory agencies to monitor and manage biosecurity, such as education programs about how to appropriately sterilise equipment and/or how to identify pest species and who to contact if they are sighted.
- Develop and implement standardised surveillance and eradication techniques for Cane Toads on priority islands.