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Your ref

**A/Chief Executive**  
Goyder Centre  
25 Chung Wah Terrace, Palmerston  
**Postal address** PO Box 496  
PALMERSTON NT 0831  
**Tel** 08 8924 4135  
**Fax** 08 8999 3666  
**Email** matt.darcey@nt.gov.au

Ms Sophie Dunstone  
Committee Secretary  
Senate Standing Committee on Environment and Communications  
PO Box 6100  
Parliament House Canberra ACT 2600

By email: ec.sen@aph.gov.au

Dear Ms Dunstone

**Inquiry into the effectiveness of threatened species and ecological  
communities' protection in Australia**

In November you wrote to the Chief Minister of the Northern Territory inviting a submission in relation to the above inquiry.

The Department of Land Resource Management has primary responsibility for the conservation and management of threatened species in the Northern Territory, and I am pleased to provide the attached submission for consideration by the Environment and Communications References Committee.

Yours sincerely

MATT DARCEY

3 January 2013

## Senate Inquiry into the effectiveness of threatened species and ecological communities' protection in Australia

Submission from the Northern Territory Department of Land Resource Management.

December 2012

The conservation and management of threatened species in the Northern Territory (NT) is a responsibility of the Flora and Fauna Division within the Department of Land Resource Management. The principal legislation covering threatened species is the *Territory Parks and Wildlife Conservation Act* (TPWCA) and information on species listed as threatened under the TPWCA can be found on the DLRM website at <http://www.lrm.nt.gov.au/biodiversity-conservation/animals/home>.

A revised Classification of Wildlife (which establishes the NT threatened species list) was gazetted on the 18<sup>th</sup> December 2012 and includes 19 species listed as Extinct or Extinct in the Wild in the NT, and 181 species within threatened categories (15 Critically Endangered, 42 Endangered and 124 Vulnerable), including plants, invertebrates, one frog, reptiles, birds and mammals.

A further eight species of fish are considered threatened in the NT but are not covered by the TPWCA. Several species on the NT threatened species list are not included on the national list - under the *Environment Protection and Biodiversity Conservation Act* (EPBCA) - either because of regional differences in conservation status, or time lags between listing under the Territory legislation and listing under the EPBC Act.

The TPWCA does not include provision for listing threatened ecological communities (a provision to list "essential habitat" has never been used). One ecological community within the NT has been listed under the EPBCA.

Further information in relation to some of the topics within the terms of reference is provided below.

### (a) management of key threats to listed species and ecological communities

With a few exceptions, key threats to listed species within the NT are not gross habitat disturbance associated with agricultural land clearing, industrial development or urban expansion. Rather they are threatened by habitat modification at landscape scales resulting from inappropriate fire regime, spread of environmental weeds and excessive grazing pressure and disturbance from feral herbivores, pigs and stock; as well as threats posed by introduced predators and other pest animals such as cane toad. A review by Price et al. (2007) using published information on threats to NT species (Woinarski et al 2007) indicated that changed fire regimes was the most frequent threat (136 spp), followed by weeds (70 spp), feral herbivores (61 spp) and feral predators (58 spp).

The management of many key threats therefore reflects the 'standard' natural resource management triumvirate of fire, weeds and feral animals. The nature of these threats and management priorities within the NT are cogently described in the NT Integrated Natural Resource Management Plan (<http://www.territorynrm.org.au/inrm-plan/2010-2015-inrm-plan>). To a large extent, management of these threats is undertaken by land owners (primarily indigenous and pastoral, see (c) below), with support by government agencies such as DLRM and land management organisations. Effective management of landscape-scale threats within the NT is hampered by large land area, sparse

populations, remoteness and often low levels of resourcing and capacity. Australian Government funding programs (including the Natural Heritage Trust, caring for our Country and recently the Biodiversity Fund) are a significant contributor to the management of these threats. The development of carbon abatement methodologies under the Clean Energy Future program may also develop as an important mechanism for engaging landowners in threat abatement, and this is already being demonstrated through savanna fire management in northern NT. The West Arnhem Land Fire Management Agreement project has achieved considerable success in mitigating the key threat from frequent fire to the threatened "Arnhem Plateau sandstone shrubland complex".

The management of feral predators falls outside the standard NRM response, and managing the impacts of foxes and feral cats across broad landscapes is an intractable problem. Of particular concern in the northern NT (and elsewhere in northern Australia), is the recent decline of a range of small mammal species (Fitzsimons et al 2010: [http://www.feral.org.au/wp-content/uploads/2010/09/into\\_oblivion.pdf](http://www.feral.org.au/wp-content/uploads/2010/09/into_oblivion.pdf)), some of which are newly listed as threatened on the NT list. A number of factors have been implicated in this decline, particularly predation by feral cats enhanced by habitat simplification through burning and grazing. These factors are being further investigated by a number of research projects in northern Australia, including by DLRM scientists participating in the Northern Australian Hub of the National Environmental Research Program (<http://www.nerpnorthern.edu.au/research/theme-4>). While cat control is proven to be feasible in some situations (particularly islands or peninsulas), the development of cost-effective methods for controlling feral cats across broad scales remains an urgent priority.

#### **(b) development and implementation of recovery plans**

There is a long history of engagement between the Territory Government and Australian Government agencies in the national threatened species recovery planning process, and there is a continuing collaboration between DLRM and SEWPaC staff, as well as with equivalent State agencies. Thirty-two Northern Territory threatened species have national recovery plans; recovery plans for two species are in the late stages of development and several others are in development.

However, experience shows the current recovery plan model to be cumbersome and inefficient. The increasing number of threatened species being listed translates to a growing burden of writing, revising and reviewing plans (plans typically have a five-year life). With more than 500 current National Recovery Plans, on average at least 100 need to be reviewed and revised every year, representing a huge burden on government agencies, particularly on SEWPaC. In addition, new plans are required for species or ecological communities added to the threatened list each year.

Recovery plans set out the research and management actions necessary to stop the decline, and support the recovery, of listed threatened species, groups of species or threatened ecological communities. Typically these actions are given priority ratings and are costed for each year of the plan, with costs often totalling multiple millions of dollars over the life of the plan. However, the required quantum of funds is rarely (if ever) available for recovery actions, making the exercise largely academic.

It is clear that some form of planning for recovery of threatened species or communities is necessary, but the current recovery plan model needs improvement. A new model of national recovery plans was proposed by Dr John Woinarski (formerly a member of the NT Government and of the TSSC) to try to make the actions more management-oriented and with clearly measurable outcomes. The first recovery plan in this style has not yet been released, and ongoing work is required in this area.

In an attempt to overcome some of the load from dealing with the creation and review of recovery plans, SEWPaC has introduced Conservation Advice documents that outline the factors threatening species and management options. It is not yet clear whether these documents will provide sufficient information to guide recovery. They also do not satisfy the legislated requirements for recovery plans set out in the *EPBC Act*.

**(c) management of critical habitat across all land tenures**

The Territory has a very large land area, under a variety of tenure. Unlike southern States, where “critical habitats” are often remnant vegetation patches within fragmented landscapes, important habitat for threatened species within the Northern Territory is generally within relatively intact landscapes and often within the indigenous or pastoral estate.

DLRM has identified a suite of 67 Sites of Conservation Significance in the NT (<http://www.lrm.nt.gov.au/conservation>) based on a number of criteria including their importance as habitat of threatened species. This includes 25 sites primarily on Aboriginal lands, 24 on pastoral lands, 7 on national parks and 11 on a mix of tenures.

In the NT, some 47% of land is Indigenous owned or managed. The rapid expansion of Indigenous Protected Areas and the proliferation of indigenous ranger groups within the past decade has been a major feature of conservation land management within the NT. IPA Management Plans and ranger work programs vary in the extent to which they specifically address management of threatened species and habitat, but there has been a strong recent history of collaboration with DLRM (and other agencies and institutions) in joint inventory, monitoring and management programs, including training and capacity building. For example, the Island Ark program was a collaboration between the Territory Government and Gumurr Marthakal Rangers resulting in the translocation of northern quoll to two cane toad-free islands, and the establishment of populations of the endangered golden bandicoot on additional islands in the Wessel group. While many ranger groups receive some funding via the Australian Government IPA and Working on Country programs or project funding via Territory NRM, they are still poorly resourced to address fire, weed and feral animal management across large areas of land, let alone targeted management of threatened species.

About 45% of the NT is pastoral land. While management is focused on production, the NT’s *Pastoral Land Act* requires managers of pastoral lands to “take all reasonable measures to conserve and protect features of environmental, cultural, heritage or ecological significance” and various conservation agreements (both through the NT Government and Territory NRM) have been reached with managers to protect important wildlife habitat on pastoral lands. The TPWCA includes a provision (s74) for an agreement with land owners for the protection of wildlife, which acts as a covenant running with the title. One example is the agreement with Consolidated Pastoral Co. over the management of the internationally significant wetlands associated with Lake Woods. However, many landowners prefer a more flexible approach, such as via the Territory Conservation Agreements established by Territory NRM (<http://www.territorynrm.org.au/funding/tcas>). Pastoral managers play an important role in the management of landscape-scale threatening processes including weeds, fire and feral animals, and grant funding through programs such as Caring for our Country is important to support these activities.

Subdivision 5 of the *Territory Parks and Wildlife Conservation Act (TPWC Act)* covers “Areas of Essential Habitat” to protect species in imminent danger of extinction, although this provision has never been applied. Instead, effort has focussed on building relationships with landholders and reaching agreement on the appropriate management and protection of species confined to very small areas. One example of this in the NT is the participation of the owners of Wollgorang Station in the protection of the

nationally threatened carpentarian rock-rat, through the exclusion of stock and management of fire around key habitat areas for the species.

**(d) regulatory and funding arrangements at all levels of government**

The NT has well-developed provisions in the *TPWC Act* for listing threatened species. The assessment of species' status uses current IUCN criteria and categories, involves an expert scientific panel plus public comment periods, and is subject to regular review. There are no provisions for listing threatened ecological communities under NT legislation.

With a very large land area but a disproportionately small population, there is only a limited revenue base for land management activities generally, and threatened species management specifically, within the Northern Territory. In general, on-ground management of threatened species has relied heavily on funding support through Australian Government grant programs. There has been a substantial shift in the focus of such programs in the past 5-6 years, away from threatened species.

Previously, funding programs such as Natural Heritage Trust had specific provisions for projects targeting threatened species; the Australian Government supported the Threatened Species Network (TSN), which funded smaller-scale, community-based action on threatened species; there was support and participation in national recovery teams; and there was some funding available for basic research on threatened species. Priorities and targets under the current suite of programs (including Caring for our Country and the Land Sector Package) focus on building landscape resilience and, while this may include addressing threatening processes and include benefit to threatened species as an assessment criteria, a specific focus on threatened species has been lost. Additionally, the demise of the Threatened Species Network has meant that there is no funding avenue for projects limited in scope to local or regional priorities.

In the Northern Territory, many habitats are remote, access is difficult for many months each year, community capacity is very thin and unevenly spread, there is one small university with limited conservation research capacity, and there remains a poor understanding of the distribution, abundance and basic ecology of many of our plant and animal species. Without this knowledge the capacity to determine population trends in many species and establish their conservation status remains limited. National funding programs now have no provisions to support basic research and monitoring activities that are still needed to underpin threatened species management and recovery.

**(e) timeliness and risk management within the listings processes**

The NT threatened species list is formally reviewed every 4-6 years, which experience indicates is an appropriate period for real change in a species status to become apparent, or for sufficient new data to be collected to revise the status of poorly known species. Each review takes at least a year to complete as it includes a public call for nominations, review by an expert panel and public comment on proposed changes. Under an MOU with the Australian Government, the NT notifies SEWPaC of any changes in listings of species endemic to the NT and sends supporting information for each change. This may then be considered for change in the national threatened species list under the *EPBC Act*. Proposals around streamlining and standardising listing processes between all jurisdictions are currently under review.