



Investigation into

*ACT Lowland Native
Grasslands*

Belconnen Naval Transmitting Station

Comments by
RSPCA ACT &
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Preamble

The Belconnen Naval Transmitting Station (BNTS) is an enclosed area with a high fence that kangaroos are unable to scale. That means that the kangaroos are unable to move to new feeding grounds. The population of kangaroos is steadily increasing putting pressure on the endangered and threatened species. In poor seasons, such as during the past several years, there has been the likelihood of death by starvation of kangaroos.

Those species are the invertebrates Golden Sun Moth (*Synemon plana*), listed as endangered; the Perunga Grasshopper (*Perunga orchracea*) listed as vulnerable, and the Ginninderra Peppercress (*Lepidium ginninderrense*) also listed as endangered. The area is a Natural Temperate Grassland and it is also listed as endangered in the ACT.

Without intervention the endangered species will become extinct as they are only found in the ACT on two Department of Defence Sites and the Woden property in the Jerrabomberra Valley.

Up until now the general public has concentrated on the euthanasia of kangaroos and not paid much attention to the threatened species. Eastern Grey Kangaroos, the species, are not likely to become extinct as a result of thoughtful, well managed culling in the BNTS, and the benefits to the threatened ecological community is immense.

RSPCA's preferred method of controlling kangaroos, where a significant reduction in a given population has been demonstrated to be necessary, is by euthanasia occasioned by a direct gun shot to the head from a skilled marksman (in accordance with the requirements of the Australian Code of Practice for the Humane Shooting of Kangaroos). This is the most humane method of killing. Whilst some members of the public take issue with this approach, it is a long standing, proven humane method of killing and is preferable to death by tranquiliser followed by lethal injection. This method also presents a far higher welfare outcome than translocation, which has the potential to place kangaroos in severely compromised positions at varying levels of welfare at the time of capture, translocation and the time of release.

Answering the terms of reference:

Review existing management arrangements, and if necessary, identify comprehensive conservation management principles and immediate actions to ensure the protection and long-term sustainability of native lowland grasslands and their vulnerable ecosystems.

Existing management arrangements for the Belconnen site are as set out in the KAK document of 1997. In addition there has been experimental fertility control on the site which is still in its infancy as a tool for population control.

RSPCA believes the population of kangaroos at the BNTS to be approximately 510 animals. This represents an approximate density of 5 kangaroos per hectare.

It has been estimated that the carrying capacity of the area should be far less and the target is below 1 kangaroo per hectare (Interim Kangaroo Management Strategy, Belconnen Naval Transmitting Station, HLA 2007). It was suggested that 1 - 2 animals/ha would result in moderate/high impact and 2-3 animals/ha and above would result in high to very high impact.

1 kangaroo/ha at BNTS is considered to be a sustainable density and is a "safe target population density" to carry into a winter period. Should this density be achieved the benefits would be a large increase in average herbage mass. Increased herbage mass would result in a more secure habitat for threatened species such as the critically endangered species, the The Golden Sun Moth (*Synemon plana*) which feeds on the roots of *Austrodanthonia*. At least a 40% cover of *Austrodanthonia* species is optimal for the species (O'Dwyer 1999; O'Dwyer & Attiwill 1999) (Action Plan No. 7). An increase in natural grasses also decreases the likelihood of spread of weeds and soil erosion.

Ginninderra Peppercress (*Lepidium ginninderrense*) is recognised as a threatened species and as such has Special Protection Status. It is found only at the BNTS. (Draft Action Plan 24). Its existence is threatened by development of a new suburb of Lawson, should it go ahead, and also, currently, by the impact of grazing by kangaroos.

The Nature Conservation Act (1980) provides a mechanism to encourage the protection of native plants and animals, the identification of threatened species and communities, and the management of Public Land reserved for nature conservation purposes.

In addition the Land (Planning and Environment) Act 1991 is the primary authority for land planning and administration. It establishes the Territory Plan, which identifies nature reserves, national parks and wilderness areas within the Public Land estate. Places of natural heritage significance may be identified and conservation requirements specified.

RSPCA believes immediate action is required to reduce the kangaroo population at BNTS. This would best be in the form of culling excess kangaroos from the BNTS site which would then allow, over time, a flow through to the improvement in the health of the whole area.

Wildcare Queanbeyan (July 2007) recommended relocation of kangaroos and suggests that they can facilitate this action. However the RSPCA would suggest that it is likely that any

area that Wildcare would consider as good habitat for kangaroos is already fully stocked. Adding more kangaroos to an area would put additional stress on the food supply and change the social makeup of the kangaroo population causing further stress. Kangaroos from BNTS, because they are in an enclosed area, have no knowledge of predator avoidance. There is also a real danger that kangaroos that are relocated would die from the stress of capture (capture myopathy), thus contravening the ACT Animal Welfare Act 1982.

Additionally, tremendous welfare concerns potentially exist in a translocation scenario. There are three stages to a translocation:

- ◆ Capture
- ◆ Transfer
- ◆ Release

The capture stage presents numerous concerns which include kangaroos trying to evacuate the area of capture at the risk of injury and painful death. Kangaroos then need to be loaded onto vehicles for transfer, again an exercise which could cause injury.

The transfer stage is the lowest risk area as kangaroos are sedated, however a small risk exists around premature recovery if dosages of tranquilisers are not accurate or fully injected.

The release stage also presents risks with kangaroos recovering and becoming agitated by unfamiliar surrounds. Some of the issues of release can be controlled by using a soft release method over a hard release. However risks remain and questions must be asked about the release site and the impact the release of a large number of kangaroos would have on a chosen site.

RSPCA remains unconvinced at a scientific and animal welfare level that translocation of a large quantity of kangaroos is in the interests of animal welfare. We are aware of small numbers of kangaroos that have been moved as part of international zoological exhibits and minor mob management. However the scale at BTNS has never been tested. We feel the welfare outcomes for translocated kangaroos are likely to be severely compromised. Consequently, we see a humane cull as the most optimal outcome for overall land management at BTNS in the short-term, combined with the trialling of fertility control (as has already been commenced) as a means of long-term population management.

Identify the causes of the deterioration of lowland native grasslands. In doing this, the impact of eastern grey kangaroos, both in the long and short term, is to be explicitly addressed.

Lowland native grasslands in the ACT exist in only small areas. There are invertebrate and mammal species dependent on these grasslands. With continued, uncontrolled, grazing by kangaroos and urban development lowland native grasslands are becoming fragmented. There is, presumably, a level at which fragmentation must impact on other species that require food and shelter within the grasslands. In this case species that are threatened and

vulnerable require much more effort (and luck) finding suitable habitat in which to breed and live.

In BNTS the kangaroo population is far greater than is recommended for a sustainable level and the ground cover is becoming more sparse. The Golden Sun Moth is dependent on good ground cover of *Austrodanthonia* to enable it to feed on the roots. If the plants are eaten to ground level the amount of roots are diminished to a similar mass which leaves very little for the moth to feed upon. Similarly the ground cover needs to be substantial in mass and height for the Perunga Grasshopper to feed and shelter from predators.

Kangaroos in the BNTS are captive and as such are not able to move to "greener pastures". As a result of a far too high population density the lowland grasslands are threatened, causing fragmentation of critical habitat which in turn threatens the existence of the Golden Sun Moth and the Perunga Grasshopper. With continued grazing there is no time for species recovery and species will disappear.

Identify any impediments to implementing short and long-term management practice for conservation of lowland grasslands within the ACT. In doing this, identify any deficiencies (including development controls, data collection, monitoring and reporting programs) which need to be remedied to further protect native lowland grasslands, their vulnerable ecosystems and associated fauna adequately.

Adequate management practices must be identified and implemented as soon as possible. Unfortunately most research on kangaroos and their social makeup and habits has been carried out on Red Kangaroos and not Eastern Grey Kangaroos. The monitoring and documenting of the EGK population dynamics at BNTS is of prime importance and, until this is fully understood, it will be difficult to sensitively remove kangaroos and still leave social groups intact.

However it is extremely important that action be taken very soon before it is too late for the recovery of the critically endangered ecological communities comprising of lowland grassland, Golden Sun Moths, Perunga Grasshopper and the Ginninderra Peppercreess.

Identify ways for ensuring effective communication with stakeholders, whose actions potentially, indirectly or directly affect, threatened grasslands.

Each stakeholder has a different perception of the action that needs to be taken. BNTS is a Federal responsibility and the only Federal stakeholder is the Defence Department.

There has been much research by TAMS Scientific and Research Monitoring section and they have released a lot of information. The advantage of their research is that it is balanced and takes into account not just the kangaroo grazing and the obvious environment degradation but also the effect this has on other species.

Communication with stakeholders has improved over the last year with meetings set up with stakeholders, the Defence Department and with the ACT Territory and Municipal Services. The call for public consultation and submissions is also welcomed.

The crucial issue is the extinction of the threatened communities and from the perspective of the RSPCA it seems that there is a lot of talk, consultation and no action. Action needs to be taken to guard against an ecological and animal welfare disaster. All research, especially that done by the ACT Government's own agencies, highlights the negative impact of overgrazing by kangaroos and there are no positive impacts. It is clear that action is necessary and inaction will harm several species.

An important point is that, unfortunately, the Commonwealth (as owners of BNTS) is not subject to the Animal Welfare Act 1982 in the ACT. Whether this was a deliberate act of the drafters of the ACT Self Government Act or an oversight is not known.

Several questions remain unanswered given this knowledge:
Who, then, is responsible if the kangaroo population of BNTS crashes?
Will a crash be considered a natural occurrence?

Determine whether any policy/legislative changes are needed for the protection of threatened lowland native grasslands.

Australia is home to between 600,000 and 700,000 species, many of which are found nowhere else in the world. About 84 per cent of plants, 83 per cent of mammals, and 45 per cent of birds are endemic - that is, they are only found in Australia. (Chapman, A. 2005. Numbers of living species in Australia and the world)

Changes to the landscape and native habitat as a result of human activity have put many of these unique species at risk. Over the last two hundred years many species of plants and animals have become extinct. For the other species of plants and animals whose survival is threatened, a range of management and conservation measures are in place.

The Australian Government is working in partnership with state, territory and local governments, non-government organisations, tertiary institutions and community groups to ensure the protection of our native species. (Australian Government Department of Environment, Water, Heritage and the Arts Threatened Species and threatened ecological communities website page)

There has been outstanding effort during the 1990's and into this century creating Action Plans for all recognised threatened and endangered species in the ACT by ACT Government agencies. There are local ACT and Federal Recovery Plans for all the species mentioned in this paper.

It just remains that the recovery plans be implemented and that urban development does not overshadow the continued existence of these fast disappearing species.

To quote the Vision Statement of the Natural Resources Management Board:
By 2050 the Canberra Region community will be leading by example as the major urban centre in the Murray-Darling Basin where ecosystems are managed in balance with social and economic development. The ACT community and government will be working together on integrated, coordinated and knowledge-based management of the ACT's urban, rural

and natural landscapes consistent with our identity as the 'bush capital' in Ngunnawal country. We will also be working closely with our regional neighbours, tackling issues of common concern. In this way priorities will be addressed to protect, enhance and sustain our biodiversity, water quality and land condition.

Any variations to the Territory Plan require an environmental impact study if a species is to be affected by development or development will contribute to threatening processes.

Conclusion

Unless improved and immediate management of the BNTS is undertaken as a matter of urgency there is a distinct possibility that

- ◆ Kangaroos will die of starvation
- ◆ The Natural Temperate Grassland will be degraded to such an extent that it will not be a viable ecological community, and as a result
- ◆ Threatened species will become extinct.

The RSPCA recommends intervention at the earliest possible time to remove kangaroos from the BNTS in order to achieve a population density of less than one kangaroo per hectare, together with a long-term management plan to ensure that this beneficial state is maintained.

RSPCA requests that we continue to be consulted on any decisions made as a result of this investigation and in terms of the detail of any resultant management of the kangaroos at BNTS.