Department for Environment and Heritage

Management Plan Amendment

Innes National Park

2004

Government of South Australia

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OUR PARKS, OUR HERITAGE, OUR LEGACY

Cultural richness and diversity are the marks of a great society. It is these qualities that are basic to our humanity. They are the foundation of our value systems and drive our quest for purpose and contentment.

Cultural richness embodies morality, spiritual well-being, the rule of law, reverence for life, human achievement, creativity and talent, options for choice, a sense of belonging, personal worth and an acceptance of responsibility for the future.

Biological richness and diversity are, in turn, important to cultural richness and communities of people. When a community ceases to value and protect its natural landscapes, it erodes the richness and wholeness of its cultural foundation.

In South Australia, we are privileged to have a network of parks, reserves and protected areas that continue to serve as benchmarks against which we can measure progress and change brought about by our society. They are storehouses of nature's rich diversity, standing as precious biological and cultural treasures. It is important to realise that survival of species in 'island' reserves surrounded by agriculture or urban areas is uncertain, and that habitat links between reserves are essential for their long-term value as storehouses.

As a result of more than a century of conserving nature and cultural items, we possess a "legacy" which is worth passing on to future generations.

There are twelve essentials for the protection of our park environments:

- Recognition that a primary purpose of our national parks system is to conserve the wide diversity of South Australia's native plants and animals and to improve their chances of survival through active wildlife management.
- Recognition that all our parks also protect cultural legacy of relevance to both Indigenous and Non-indigenous people, and that Indigenous people have had cultural association with this land over many thousands of years.
- Freedom to improve our legacy by making additions to the park system -- enhancing existing protected areas and including landscapes and environments containing native plant and animal communities not already protected.
- Realisation that the continuance of our native species cannot be dependent upon island reserves alone but should be provided for in a regional landscape with linkages between natural areas to enhance the prospect of long-term survival.
- Recognition that there is potential for new and useful substances or genetic material to be found in native plant and animals.
- Recognition of economic and social benefits for local communities, which arise from the presence of national parks in their region and the consequent opportunities to offer service for visitors.
- Development of close relationships with the community, so that there is an understanding of the role of parks in conserving native wildlife, cultural items and in providing recreational opportunities.
- Promotion of community participation in making decisions on the management of parks, so that a sense of community ownership of the reserve system may be fostered, and so that parks and surrounding landscapes are managed in harmony.
- Appreciation that those qualities presented to visitors for their use and enjoyment in parks, should be the diversity of plants, animals and landscapes for which the parks were set aside.
- Understanding that development in a park should proceed where it :
  - contributes to the conservation of the environment;
  - provides for better appreciation of the need to conserve the diversity of plants and animals;
  - protects wildlife habitats and landscape (especially vulnerable and threatened species or communities); and
  - is necessary for management of the park.
- Reassurance, in support of our cultural character, that natural areas can survive even though those who care deeply for their survival may never visit them.
- Provision of valued natural areas for people to be at one with nature and for personal and spiritual refreshment.

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AMENDEMENTS

Section 3 : Management Context

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3.6 Management Philosophy and Strategic Directions

The role of reserves is predicated by the twin aims of the National Parks and Wildlife Act: to provide for public benefit and enjoyment and to conserve wildlife in a natural environment. Increasingly, the importance of biodiversity conservation is being recognised and the future use and management of reserves must address this issue. Proposed actions will need to be assessed for their ability to meet the primary objective of biodiversity conservation, which may result in public use becoming regulated to serve that aim.

The long-term vision for Innes National Park is to conserve, enhance and protect biodiversity and cultural values, while providing ecologically sustainable recreation activities for the local and broader community.

To achieve this vision, DEH will pursue the following strategies:

- Protect and conserve biodiversity by undertaking targeted monitoring, mapping and active management of natural resources and processes that threaten park values; assess progress in achieving objectives against appropriate performance measures.
- Conserve biodiversity and land system environmental stability, by providing for public use and enjoyment of the park at locations that are, as far as is possible, sustainably managed to limit impacts on park values.
- Conserve Indigenous and Non-Indigenous sites of cultural value in a manner that is consistent with legislation, community expectations and recognised best practice.
- Provide visitors with recreational settings, opportunities, facilities and information to enhance their experience and facilitate appreciation and understanding of management regimes being implemented.
- Adopt an improved approach to facility development, through producing and implementing a delegate visitor facilities and services plan that will outline strategies to establish and maintain a range of recreational settings and opportunities. These will include 'wilderness'/natural settings and improved, structured recreational sites and opportunities. The plan will also incorporate strategies to anticipate and reduce the potential for conflict between user groups.
- Maintain the Stenhouse Bay precinct as the gateway to Innes, with a modern, functional, aesthetic entrance, and appropriately located and designed infrastructure.

INSERT:

3.6 Management Philosophy

The role of reserves is predicated by the twin aims of the National Parks and Wildlife Act: to provide for public benefit and enjoyment and to conserve wildlife in a natural environment.

Innes National Park makes up 20% of the South Western Yorke Peninsula Large Remnant Area (LRA), as identified in the *Biodiversity Plan for the Northern Agricultural Districts of South Australia* (2001). This LRA is significant for the large areas of remaining vegetation and the habitat that this vegetation provides for fauna species, as outside of the LRA the native vegetation on Yorke Peninsula is predominantly on roadsides, coastal strips and small remnants.

Within Innes National Park the extensive coastal dune system incorporates a range of habitats from open areas of drifting sand to stabilised dunes covered with dense vegetation. Coastal heath dominates the cliff tops and merges further inland with extensive mallee woodlands, salinas and grasslands. These habitats support approximately 333 native plant species, including 115 of conservation significance.

The park provides specialised habitats for species of conservation significance including the Western Whipbird (*Psophodes nigrogularis*) and Malleefowl (*Leipoa ocellata*) and is one of only two sites in Australia where Blue-Green Algae stromatolite structures (living fossils) are actively growing within a saline environment.

The long-term vision for Innes National Park is to conserve, enhance and protect biodiversity and cultural values, while providing ecologically sustainable recreation activities for the local and broader community. To achieve this vision, DEH will pursue the following objectives within the park:

- Protection and restoration of the natural resources where practicable;
- Maximisation of wilderness quality;
- Conservation of the indigenous and non-indigenous cultural values and sites of significance;
- Minimisation of the threats to park values, sites, species and communities of conservation significance;
- Reintroduction of species that formerly occurred in the area;
- Provision of facilities that enhance the visitor experience whilst conserving park values.

4.2.4 Native Fauna

Mammals

DELETE:

Kangaroo populations have been monitored since the early 1970s. From 1978 to 1997, monthly spotlight surveys were conducted, at night, along a 15 km transect. The total number of kangaroos seen within 50m either side of the transect route were identified and recorded to estimate the total population for the park.

Although the 1978-97 survey data are not complete, the average density during this 20 year period was approximately 4 kangaroos per km2.

A number of trends were also demonstrated:

- The total number of kangaroos counted in the park per annum varied from approximately 150 to 600 animals.
- The variation of monthly counts ranged from 0 to 109 animals.
- Monthly averages, across all years, show a range of between 24 and 57 animals per month.
- Peak months for kangaroo sightings are May-June and October-November, while December to April usually record lower monthly sightings.
- In the years 1978, 1984/1988 and 1992/1993, the total population of kangaroos for the park was estimated at more than 400 animals.
- By comparison, in the year 1995 only 262 animals were recorded (9 month period).

Although inconclusive, results suggest that the kangaroo population in the park is cyclic, staying at comparatively high levels for 4-6 years then declining to half that number for 2-3 years, before returning to higher levels again.

This hypothesis should be tested using a transect of 150km completed over three days. The transect runs through several vegetation associations and will be conducted four times per year to measure seasonal variation. It remains unclear whether the observed changes in population numbers are the result of disease, cyclic drought, population movements or unknown factors.

In comparison to kangaroo population densities elsewhere in Australia for similar vegetation types, numbers appear to be within acceptable limits. However, DEH have observed that sites supporting more palatable vegetation seem to be subject to heavier grazing pressure. Research is required to assess the relative impact of kangaroo grazing on native vegetation and determine if population control is required.

In accordance with section 38 (10a) of the *National Parks and Wildlife Act*, if research and monitoring determine that the existing kangaroo population impact considerably on native vegetation and threaten species of conservation significance, kangaroo population control by culling will be considered. The monthly kangaroo survey results from 1977-1997 are included in Appendix F.

Actions

- Encourage appropriate volunteer groups and individuals to conduct fauna surveys and population monitoring.
- Record on a database with GIS capability, animal species and habitats, including opportunistic sightings of rare and endangered fauna. Monitor populations of species of conservation significance and, where necessary, develop and implement management plans to ensure their conservation.
- Comply with and contribute to the National Recovery Plan for Malleefowl, as required under the *Environment Protection and Biodiversity Conservation Act 1999*.
- Continue to monitor kangaroo numbers, assess population trends and endeavour to understand their contribution to the total grazing pressure on vegetation in the park.
- Contribute to an integrated regional kangaroo management program, culling if necessary, to maintain a sustainable population that is considered natural for the vegetation types of the park.

INSERT:

Kangaroo numbers across the southern Yorke Peninsula are generally higher than in pre-European times. This rise in abundance is attributed to agricultural and pastoral practices, with the clearing of forests and woodlands providing kangaroos with an abundance of food. More importantly though, the development of artificial water sources (farm dams and tanks), across what was once a predominantly dry landscape, has meant that the effects of minor droughts no longer act to regulate kangaroo numbers. This situation has been further exacerbated by the removal of the kangaroo's primary predator, the dingo. DEH regularly issues destruction permits for kangaroos to land holders in the area.

Kangaroo populations have been monitored since the early 1970s. From 1978 to 1997, monthly spotlight surveys were conducted, at night, along a 15km transect. The total number of kangaroos seen within 50m either side of the transect route were identified and recorded to estimate the total population for the park. The average density during this 20 year period was approximately 4 kangaroos per km^2.

A number of trends were also demonstrated:

- The total number of kangaroos counted in the park per annum varied from approximately 150 to 600 animals.
- The variation of monthly counts ranged from 0 to 109 animals.
- Monthly averages, across all years, show a range of between 24 and 57 animals per month.
- Peak months for kangaroo sightings are May-June and October-November, while December to April usually record lower monthly sightings.
- In the years 1978, 1984-1988 and 1992-1993, the total population of kangaroos for the park was estimated at more than 400 animals.
- By comparison, in the year 1995 only 262 animals were recorded (9 month period).

Although inconclusive, results suggest that the kangaroo population in the park is cyclic, staying at comparatively high levels for 4-6 years then declining to half that number for 2-3 years, before returning to higher levels again.

In comparison to kangaroo population densities elsewhere in Australia for similar vegetation types, numbers within the park appear to be within acceptable limits. However DEH has observed that the boundaries of the park and sites within the park where water and more palatable vegetation occur seem to be subject to heavier grazing pressure. A project is in place to assess the relative impact of kangaroo grazing on native vegetation to determine if population control is required.

There is little scope to regulate water supply as an option for managing kangaroo populations on Innes National Park. While other techniques can and will continue to be investigated, culling is considered the most practical and humane method of controlling kangaroo populations.

Failure to manage the total grazing pressure allows processes that impoverish the park environment to continue, resulting in increased problems with introduced species and restricting the potential improvement of biodiversity in the area. If research and monitoring determine that the kangaroo population impacts considerably on native vegetation and threatens species and communities of conservation significance, kangaroo population control by culling will be implemented in accordance with section 38 (10a) of the *National Parks and Wildlife Act 1972*.

Actions

- Encourage appropriate volunteer groups and individuals to conduct fauna surveys and population monitoring.
- Monitor populations of species of conservation significance and, where necessary, develop and implement management plans to ensure their conservation.
- Comply with and contribute to national recovery plans, as required under the *Environment Protection and Biodiversity Conservation Act 1999*.
- Monitor total grazing pressure and its effects on the flora and fauna within the park.
- Maintain a sustainable population of kangaroos by culling if required.

Insert New Section

Add the following new section after 4.2.6 Introduced Animals.

INSERT:

4.2.7 Species Reintroduction

Several species that previously occurred in Innes National Park are now locally extinct. Many species disappeared before their habitats were known in detail, thus the precise causes of extinction remain unclear although their extinction probably resulted from a combination of habitat destruction, predation by the Red Fox and Cat, competition from and grazing by introduced grazers (rabbits, cattle and sheep) and hunting. Several of these species, although extinct in Innes National Park, currently survive elsewhere.

Reintroducing any of these species could have substantial conservation and educational benefits to other conservation and habitat rehabilitation programs, making the conservation status of the species more secure. A major prerequisite will be areas of sufficient size that have adequate long-term fox control. The large areas of remaining vegetation in the South Western Yorke Peninsula Large Remnant Area provide such an opportunity.

There have been a number of successful reintroductions of native animals to South Australia including; Greater Bilbies to Thistle Island; Brush-tailed Bettongs and Greater Bilbies to Venus Bay Conservation Park; Malleefowl to Lincoln National Park and Burrowing Bettongs, Western Barred Bandicoots and Greater Bilbies to the Arid Zone Recovery Program near Roxby Downs.

Reintroductions will only be considered by DEH as part of a recovery plan for species which are endangered or threatened and only after the appropriate risk assessments are conducted against the values of the area through the preparation of a full translocation planning proposal involving community consultation.

The potential exists for the reintroduction of the South Australian Mainland Tammar Wallaby (*Macropus eugenii eugenii*) to Innes National Park. The park is within the former range of this species and has been identified as the preferred location for a reintroduction. The Mainland Tammar, extinct in the wild in South Australia, was found to persist in New Zealand as a feral population, introduced in 1870 by Sir George Grey, a former Governor of South Australia. The species has since been repatriated from New Zealand to re-establish the Mainland Tammar population in South Australia. Reintroduction of the Mainland Tammar to Innes National Park will require predator control, population monitoring, and management of total grazing pressure, details of which are outlined in the *Translocation Proposal: Reintroduction of the Mainland SA Tammar Wallaby (Macropus eugenii eugenii) to Innes National Park* (2004).

In the future, the reintroduction of other species may be considered.

Objective

Recovery of threatened species and ecological communities within the park where practicable.

Strategies

Protection and restoration of habitat.

Reintroduction of locally extinct flora and fauna.

Actions

- Investigate the potential for reintroducing locally extinct flora and fauna species into the park if this is identified as a priority for species recovery efforts.
- Undertake reintroductions based on an approved translocation proposal and associated community consultation.

DELETE:

4.4 Fire Management

Background

Bushfires

The management of bushfires is primarily aimed at preserving life and property. Fire suppression and prevention strategies should be addressed in a bushfire prevention plan for the park.

No significant bushfires have occurred in the park since it was proclaimed in 1970. A number of small fires have occurred, usually resulting from poorly managed campfires. Mallee vegetation can be subject to extensive wildfires and, although the recorded incidence of fire within the park is low, there is the potential for an intense bushfire.

Given that Innes National Park conserves the majority of biodiversity on Yorke Peninsula, it is particularly important that large areas are not burnt at any one time. Consequently to avoid critical loss of habitat, bushfires should be suppressed as quickly as possible.

Existing roads and tracks are thought to be adequate to provide practical boundaries within which to contain bushfires.

Campfires and Firewood

Campfires are prohibited within Innes National Park during the fire danger season, generally from 1 November to 30 April. At other times, solid fuel (wood) fires are permitted in designated campfire sites only. While it is acknowledged that campfires form an important part of the camping experience, DEH is concerned that firewood collection in areas immediately surrounding campsites and along tracks damages wildlife habitat.

Despite the provision of firewood for sale, visitors continue to utilise local fuel. Habitat damage will be monitored and, while DEH will continue to provide and encourage the use of alternative fuel, the total ban of wood fires may be necessary.

Objectives

Protect lives and property and limit the spread of bushfire within the park.

Strategies

Develop and implement a bushfire prevention plan in association with local CFS officers and in conjunction with regional initiatives.

Utilise best practice land management and fire suppression techniques to ensure minimal damage to the natural and cultural values of the park during any fire suppression activities.

Ensure that campfires do not have a deleterious impact on campsites or park values.

Actions

- Comply with provisions of the *Country Fires Act 1989*.
- Develop and regularly update a bushfire prevention plan for the park, in association with local CFS officers and neighbouring landowners.
- Establish and regularly review a park visitor protection and evacuation plan to be implemented in the event of a serious bushfire.
- Maintain existing fire access tracks and only create new tracks if there is no alternative means to prevent the loss of life or property.
- Maintain water points, windmills, tanks and other water sources necessary for bushfire suppression.
- Ensure visitors comply with fire restrictions during the fire danger season.
- Provide well defined campfire sites within camping areas.
- Prohibit the collection of local firewood and provide interpretive material to explain its importance to wildlife.
- Encourage visitors to supply their own fuel and continue to make alternative fuel available for sale.
- Monitor the impact of campfires and in the event that damage to biodiversity, habitat or visual amenity becomes significant, implement a more sustainable regime.

INSERT:

4.4 Fire Management

Prior to proclamation of the park in 1970, the incidence of fire is poorly recorded. Since 1970, only a number of small fires have occurred, mostly the result of poorly managed campfires. Although no significant fires have occurred at Innes National Park, there is sufficient fuel in some vegetation communities to carry fire.

Innes National Park is dominated by mallee woodlands (in particular Coastal White Mallee, *Eucalyptus diversifolia* and Kingscote Mallee, *Eucalyptus rugosa*). There are a range of other communities including coastal heaths, acacia shrublands, native pines and she-oak woodlands. With the long absence of fire in many of these vegetation communities, there is the potential for a significant fire to occur. DEH intend to use planned fires, where appropriate, to reduce fuel hazards with the aim of protecting life and property.

Given that Innes National Park conserves the majority of biodiversity on the Yorke Peninsula, it is particularly important that large areas are not burnt at any one time. The minimum and maximum fire thresholds required to maintain biodiversity in these vegetation communities are not well understood. A comprehensive fire management plan will be developed to incorporate the use of fire as an ecological management tool. This process will provide an opportunity to collate considerable background information on the structure of current vegetation communities, fuel loadings, distribution of threatened species and key habitats, and predictions of the impacts of fire.

Campfires and Firewood

Campfires are prohibited within Innes National Park during the fire danger season, generally from 1 November to 30 April. At other times, solid fuel (wood) fires are permitted in designated campfire sites only.

While it is acknowledged that campfires form an important part of the camping experience, DEH is concerned that firewood collection in areas immediately surrounding campsites and along tracks damages wildlife habitat. DEH encourage the use of alternative fuel and despite the provision of firewood for sale, visitors continue to utilise local fuel. DEH will monitor habitat damage and if necessary, may ban solid fuel (wood) fires year round.

Objective

Manage fire to ensure the protection of life and property, the maintenance of biodiversity and the protection of natural, cultural and built values.

Strategies

Fire management planning will be undertaken in consultation with key stakeholders and the community. Fire management planning will :

- identify natural and cultural heritage values and built assets;
- provide a framework for the management of wildfire suppression, including identification of strategic access and control lines;
- provide a framework for prescribed burning for ecological management and fuel reduction purposes; and
- identify performance indicators.

Use planned fires, where appropriate, to reduce fuel hazards with the aim of protecting life and property.

Ensure that campfires do not adversely impact park values.

Actions

- Develop, implement and review fire management plans in association with CFS and other stakeholders.
- Until a fire management plan is developed :
  - maintain existing fire access tracks and only create new tracks if there is no alternative means to prevent the loss of life, property or biodiversity assets;
  - undertake strategic hazard reduction burning in order to protect life and property.
- Prohibit the collection of local firewood and encourage the use of alternative fuel sources.
- Monitor the impact of campfires and close designated campfire sites if used inappropriately.