

**YANUNUNBEYAN NATIONAL PARK,  
NATURE RESERVE AND  
STATE CONSERVATION AREA  
PLAN OF MANAGEMENT**

**NSW National Parks and Wildlife Service**

**Part of the Department of Environment and Conservation (NSW)**

**May, 2005**

**This plan of management was adopted by the Minister for the Environment on 12 May 2005.**

## **Acknowledgments**

This plan of management is based on a draft prepared by the National Parks and Wildlife Service Queanbeyan Area, South West Slopes Region.

Valuable information and comments were provided by Service specialists and members of the public.

The National Parks and Wildlife Service would like to thank all those who attended a public meeting about the draft plan of management and who submitted information and comments regarding the park. All comments and concerns were considered in the preparation of this draft plan of management.

Cover photograph: Ribbon Gums on the slopes of Mount Foxlow by Nicki Endt, NPWS.

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**Department of Environment and Conservation (NSW)**

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## FOREWORD

Yanununbeyan National Park, Yanununbeyan Nature Reserve and Yanununbeyan State Conservation Area are located 25 kilometres south-east of Queanbeyan and 5 kilometres north-west of Captains Flat. The national park (3,500 hectares) and nature reserve (40 hectares) were gazetted in 2001, and the state conservation area (4,135 hectares) was gazetted in 2003.

The national park, nature reserve and state conservation area contain a range of relatively undisturbed eucalypt forests with links to surrounding areas, and vegetation species that are common east of the park and on the coast but not further west. A diverse range of native animals occurs in Yanununbeyan National Park, Nature Reserve and State Conservation Area, including species listed under the *Threatened Species Conservation Act, 1995*.

A range of Aboriginal and historic sites are present in the national park, nature reserve and state conservation area. Foxlow Flat is considered to have high local cultural significance as it contains one of the largest artefact scatters recorded within the Captains Flat region, as well as ruins of a shepherd's hut and other signs of past European grazing such as old fences and yards.

The New South Wales *National Parks and Wildlife Act 1974* requires that a plan of management be prepared for each national park, nature reserve and state conservation area. A plan of management is a legal document that outlines how an area will be managed in the years ahead.

A draft plan of management for Yanununbeyan National Park, Nature Reserve and State Conservation Area was placed on public exhibition for three months from 3 October 2003 until 5 January 2004. The exhibition of the plan of management attracted 15 submissions that raised 6 issues. All submissions received were carefully considered before adopting this plan of management.

This plan of management provides for the protection of significant vegetation communities and habitats, and the protection and interpretation of cultural values. Low key facilities for visitors will be provided in existing clearings and there are opportunities for a range of recreational opportunities.

This plan of management establishes the scheme of operations for Yanununbeyan National Park, Yanununbeyan Nature Reserve and Yanununbeyan State Conservation Area. In accordance with section 73B of the *National Parks and Wildlife Act 1974*, this plan of management is hereby adopted.

**BOB DEBUS**  
**Minister for the Environment**

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## 1. INTRODUCTION

### 1.1 LOCATION, GAZETTAL AND REGIONAL SETTING

Yanununbeyan National Park, Yanununbeyan Nature Reserve and Yanununbeyan State Conservation Area (herein referred to as “the park”) are located 25 kilometres southeast of Queanbeyan and 5 kilometres northwest of Captains Flat. The National Parks and Wildlife Service (“the Service”) gazetted the national park and nature reserve in 2001 and the state conservation area was gazetted in 2003. The park has a total area of 7,675 hectares, made up of 3,500 hectares of national park, 40 hectares of nature reserve and 4,135 hectares of state conservation area.

The name Yanununbeyan is taken from the local parish name. It is of Aboriginal origin, but its meaning is not known.

Prior to gazettal the park was Crown land, almost wholly covered by Permissive Occupancy grazing licences administered by the then Department of Land and Water Conservation. Three small freehold inholdings were purchased by the Service in 2001 and 2002 and added to the national park. Yanununbeyan State Conservation Area was a Crown Reserve from 2001 to 2003 dedicated under the *Crown Lands Act*, but with management vested in the Service.

The park is largely timbered and mountainous, surrounded by cleared land that has been modified by agriculture and mining. Cattle and sheep grazing, rural residential and small-scale forestry constitutes the main land uses in the surrounding area in Eastern Capital City Regional (formerly Yarrowlumla) Local Government Area. The park is in the vicinity of other conservation reserves, namely; Tinderry Nature Reserve, Tallaganda National Park and State Conservation Area and Googong Foreshores (managed by the ACT Government).

### 1.2 LANDSCAPE

Natural and cultural heritage and on-going use are strongly inter-related and together form the landscape of an area. Much of the Australian environment has been influenced by past Aboriginal and non-Aboriginal land use practices and the activities of modern day Australians continue to influence bushland through recreational use, cultural practices, the presence of introduced plants and animals and in some cases air and water pollution.

The park protects an area of moderately steep mountains, with the broad Mount Foxlow dominating. Lying just outside the park to the north is Rutledge Sugarloaf, to the south is Harrisons Peak and to the southeast is Horseshoe Hill. The park provides part of the catchment of both the Queanbeyan and Molonglo Rivers, which eventually drain into the Murrumbidgee River. Creeks rising in the park include Foxlow, Antills and Primrose Valley Creeks. The Queanbeyan River and Tinderry Creek form much of the western boundary of the park.

The landforms, climate and plant and animal communities of the park, plus their location, have determined how humans have used it. The park contains a number of recorded Aboriginal sites, especially in the vicinity of permanent water. It is likely Aboriginal people used the area to obtain food and materials and engage in ceremony and ritual. Limited sheep and cattle grazing and associated uses guided European use of the park area. The light feed offered by the forests acted as a supplement to surrounding cleared lowlands and improved pastures. Physical remnants from this grazing era include trails, fences, exotic trees and the yards and the hut ruins found at Foxlow Flat. The park currently receives limited recreational use.

Both Aboriginal and non-Aboriginal people place cultural values on natural areas, including aesthetic, social, spiritual, recreational and other values. Cultural values may be attached to the landscape as a whole or to individual components, for example to plant and animal species used by Aboriginal people. This plan of management aims to conserve both natural and cultural values. For reasons of clarity and to document usefulness natural and cultural heritage, non-human threats and on-going use are dealt with individually, but their inter-relationships are recognised.

## 2. MANAGEMENT CONTEXT

### 2.1 LEGISLATIVE AND POLICY FRAMEWORK

The management of national parks, nature reserves and state conservation areas in NSW are in the context of the legislative and policy framework, primarily the *National Parks and Wildlife Act 1974*, the *Threatened Species Conservation Act 1995* and the Service's policies. The policies arise from the legislative background, the corporate goals of the Service and internationally accepted principles of park management. They relate to nature conservation, Aboriginal and historic heritage conservation, recreation, commercial use, research and communication. Other legislation, international agreements and charters may also apply to management of the area.

### 2.2 MANAGEMENT OBJECTIVES

#### Objectives for National Parks

The following general objectives apply to the management of national parks in NSW:

- conserve biodiversity, maintain ecosystem functions, protect geological and geomorphological features and natural phenomena and maintain natural landscapes;
- conserve places, objects, features and landscapes of cultural value;
- protect the ecological integrity of one or more ecosystems for present and future generations;
- promote public appreciation and understanding of the park's natural and cultural values;
- provide for sustainable visitor use and enjoyment that is compatible with conservation of natural and cultural values;
- provide for sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to conservation of natural and cultural values; and
- provide for appropriate research and monitoring.

#### Objectives for Nature Reserves

The following general objectives apply to the management of nature reserves in NSW:

- conserve biodiversity, maintain ecosystem functions, and protect geological and geomorphological features and natural phenomena;

- conserve places, objects, features and landscapes of cultural value;
- promote public appreciation, enjoyment and understanding of the reserve's natural and cultural values; and
- provide for appropriate research and monitoring.

### **Objectives for State Conservation Areas**

The following general objectives apply to the management of state conservation areas in NSW:

- conserve biodiversity, maintain ecosystem functions, protect natural phenomena and maintain natural landscapes;
- conserve places, objects and features of cultural value;
- provide for the undertaking of uses permitted under other provisions of the National Parks and Wildlife Act (including uses permitted under section 47J such as mineral exploration and mining), having regard to the conservation of the natural and cultural values of the state conservation area;
- provide for sustainable visitor use and enjoyment that is compatible with conservation of the area's natural and cultural values and with uses permitted in the area;
- provide for sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to conservation of the area's natural and cultural values and with other uses permitted in the area; and
- provide for appropriate research and monitoring.

### **Regional Forest Agreements**

Regional Forest Agreements are one of the principle means of implementing the National Forest Policy Statement of 1992. Under this Statement Commonwealth, State and Territory governments agreed to work towards a shared vision for Australia's forests. This aimed to maintain native forest estate, manage it in an ecologically sustainable manner and develop sustainable forest-based industries. The Statement provided for joint comprehensive assessments of the natural, cultural, economic and social values of forests. These assessments formed the basis for negotiation of Regional Forest Agreements that provide, amongst other things, for Ecologically Sustainable Forest Management (see section 7).

The Southern Region Regional Forest Agreement of 2000 (Southern RFA) covers the southeast region of NSW. The process leading up to the Southern RFA provided for major additions to the reserve system, including the establishment of Yanununbeyan National Park, Nature Reserve and State Conservation Area.



### 3. KEY VALUES AND MANAGEMENT DIRECTIONS

#### 3.1 VALUES OF THE AREA

Yanununbeyan National Park, Nature Reserve and State Conservation Area are of regional significance for their natural, cultural and recreational values.

Key natural values include:

- A range of relatively undisturbed eucalypt forests found throughout the park with links to surrounding areas.
- Vegetation communities that are potential habitat for threatened fauna species. Threatened species recorded in or near the park include the Speckled Warbler *Pyrrholaemus sagittatus*, Diamond Firetail *Stagonopleura guttata*, Powerful Owl *Ninox strenua*, Barking Owl *Ninox connivens*, Brown Treecreeper *Climacteris picumnus*, Rosenberg's Monitor *Varanus rosenbergi*, Eastern False Pipistrelle *Falistrorellus tasmaniensis*, Koala *Phascolarctos cinereus*, Spot-tailed Quoll *Dasyurus maculatus*, Squirrel Glider *Petaurus norfolcensis* and Yellow-bellied Glider *Petaurus australis*.
- Vegetation species that are common east of the park and on the coast, but that are at the westernmost limit of their distribution in the park:
  - Silvertop Ash *Eucalyptus sieberi* open forest is restricted to quartzite outcrops in the extreme north of the park.
  - A high altitude natural clearing fringed by small stands of Black Gum *Eucalyptus aggregata*.
  - An open woodland of Black Oak *Allocasuarina littoralis* on the southeastern and western slopes of Harrisons Peak.
- A large population of a subspecies of Argyle Apple *Eucalyptus cinerea* ssp. *triplex* occurs in the dry forests of Yanununbeyan State Conservation Area. This species is considered endemic to the ACT and the Mount Foxlow area in NSW.
- A rare shrub in NSW; *Pomaderris phyllicifolia* var. *phyllicifolia* occurs scattered through eucalypt forests on Harrisons Peak.

Significant scenic values include:

- The park is an undulating area of timbered mountains providing a scenic backdrop to the low-lying and largely cleared areas of the Molonglo River plain and Urialla.
- The Queanbeyan River corridor in the Corner Hill area which is rugged and relatively remote.

The key cultural heritage values include:

- Recorded Aboriginal sites, and potential for more Aboriginal sites, showing past use of the area by Aboriginal people and contributing towards the understanding of Aboriginal culture.
- Foxlow Flat, where both the Aboriginal and historic past is well represented. There are the ruins of a shepherd's hut and other signs of the European grazing past such as old fences and yards.

Key recreation values include:

- A network of management trails that provide for passive and low-key recreation activities such as horseriding, cycling, bushwalking and birdwatching.
- Remote stretches of the Queanbeyan River which provide opportunities for scenic viewing, and remote angling and swimming.

### **3.2 MANAGEMENT DIRECTIONS**

Management of the park will focus on the protection of significant vegetation communities and habitats, the protection of threatened fauna populations, the maintenance of core wild areas, the protection of Aboriginal heritage sites and significant European heritage sites, and the provision of low-key, passive recreation opportunities and day-use facilities.

Major strategies to achieve the management objectives are:

- Protection of significant vegetation communities and habitats;
- Protection and interpretation of cultural values in consultation with the local community including the Aboriginal community;
- Provision of low key facilities at existing clearings;
- Co-operate with the NSW Rural Fire Service and local community on fire management and suppression in the park;
- Provision of opportunities on selected trails for horse riding, cycling, bushwalking and vehicle touring; and
- Maintenance of core wild areas by limiting the establishment of any new tracks and trails.

## 4. CONSERVATION OF NATURAL AND CULTURAL HERITAGE

### 4.1 GEOLOGY AND LANDFORM

Yanununbeyan National Park, Nature Reserve and State Conservation Area lie in an area dominated by Ordovician (430 million years ago) sediments, in a geological region known as the Foxlow Beds. These deposits comprise alternating layers of greywacke shale, slate and chert. A slightly younger area of Silurian (350 million years ago) sediments runs along the western boundary of Yanununbeyan State Conservation Area near Corner Hill. Soils are generally skeletal with deeper soils occurring at Foxlow Flat and some creek beds. Quartz veins occur throughout the sediments in the park and there are steep quartzite ridges near Rutledge Ridge, just inside the northern portion of the park. The main geological variation in the area is found in the large outcrop of Devonian (320 million years ago) granite around Harrisons Peak, in the southeastern portion of the national park (Jenkins, 1993).

The park comprises part of a north-south orientated mountainous area with its highest point at Mount Foxlow at about 1200 metres above sea level, and lowest point at about 800 metres along the park's northern, western and eastern edges. Due to their geological age the topography is generally worn and undulating. The landscape surrounding the Queanbeyan River varies from being open, to having steep slopes and small rocky cliffs. Creeks rising in the park have formed deep incisions and gullies in parts. The creeks are Foxlow, Antills and Primrose Valley Creeks. The Service has unofficially attributed names to three prominent west flowing creeks; Deep Creek, Spring Creek and Middle Creek.

The park is a scenic area, providing a mountainous and timbered backdrop to the low-lying areas of the Molonglo River plain and Urialla. The Queanbeyan River corridor in the Corner Hill area is relatively rugged and remote. A grassy clearing and level valley known as Foxlow Flat permits a scenic appreciation of the eucalypt forests found in the park and views of Harrisons Peak. Apple Box Flat is a natural grass clearing featuring an uncommonly large and old Apple Box *Eucalyptus bridgesiana*.

#### **Desired Outcome**

- The scenic and aesthetic values of the park and in particular Foxlow Flat are protected.

#### **Strategy**

- Ensure development of visitor facilities do not compromise aesthetic and scenic values.

## 4.2 NATIVE PLANTS

A combination of environmental factors such as climate, geology, topography and land use has resulted in a variety of vegetation communities and some significant plants and associations in Yanununbeyan National Park, Nature Reserve and State Conservation Area.

Past land uses have affected vegetation in the park in a relatively insignificant way. The main uses were sheep grazing, clearing and timber cutting for firewood and fencing. Areas of dry forest that were cleared have reverted to an immature and dense form of the original forest. Red Box *Eucalyptus polyanthemos*, found on the fringes of broad clear valleys, was the target for timber cutting. As a result there are few mature trees remaining. Past bushfire events may also have had some effect on vegetation.

Taws (1998) found six vegetation types within the park, which are described below:

1. Wet sclerophyll forest. This type is rare and restricted to gullies and sheltered aspects on granite soils in the extreme southeast of the national park. It is more abundant to the east of the park in Tallaganda National Park and State Conservation Area and Tallaganda State Forest. Trees of this forest are typically tall and dominated by Narrow-leaved Peppermint *Eucalyptus robertsonii* and Ribbon Gum *E. viminalis*. The understorey consists of scattered small trees such as Blackwood *Acacia melanoxylon* and tall shrubs such as Pomaderris. Brown Barrel *E. fastigata* occurs on the highest granite knolls of Harrisons Peak just outside the national park.
2. Intermediate sclerophyll forest. The understorey is usually open and grassy with a sparse shrub layer containing species from both wet and dry sclerophyll forests. The main community consists of montane species such as Mountain Gum *E. dalrympleana*, Snow Gum *E. pauciflora* and Ribbon Gum *E. viminalis*. Other trees include Silver Wattle *Acacia dealbata*. Depending on environmental factors such as altitude and aspect these species may also be associated with dry sclerophyll species such as Broad-leaved Peppermint *E. dives*, Apple Box *E. bridgesiana* and Candlebark *E. rubida*.
3. Dry sclerophyll forest and woodland. It is the most common vegetation type in the park. It occurs solely on sedimentary-based soils with trees ranging from 6 to 20 metres in height. The community consists of varying associations of Brittle Gum *E. mannifera*, Scribbly Gum *E. rossii*, Broad-leaved Peppermint *E. dives*, Red Stringybark *E. macrorhyncha*, Apple Box *E. bridgesiana* and Candlebark *E. rubida*. Other trees include Green Wattle *Acacia mearnsii*. A ground layer of tussock grass known as Red-anther Wallaby Grass *Joycea pallida* dominates the understorey with scattered forbs. Typical dry forest shrubs such as Bitter Pea *Daviesia mimisoides*, Dogwood *Cassinia* sp., Urn Heath *Melichrus urceolatus* and Bush Pea *Pultenaea procumbens* are sparsely distributed throughout the understorey.

4. Grassy woodland. The structure of this vegetation type is characteristically open with an understorey that is dominated by grasses and forbs. Trees can be large with spreading crowns. In the park it occurs on footslopes bordering broad valleys and backing dry sclerophyll forest. Communities comprise Apple Box *E. bridgesiana*, Candlebark *E. rubida*, Yellow Box *E. melliodora* and Red Box *E. polyanthemos*. Black Sallee *E. stellulata* occurs along broad flat gullies at lower altitudes where cold air drainage in winter causes severe frosts.
5. Heathland. One heath community is found in Yanununbeyan National Park. It is a treeless community occurring on high altitude drainage lines on granite substrate on the western footslopes of Harrisons Peak. The heath shrubs consist of Mountain Baeckia *Baeckia utilis*, *Epacris microphylla* and Small-fruited Hakea *Hakea microcarpa*.
6. Riparian. This community occurs along the Queanbeyan River and is dominated by Ribbon Gum *E. viminalis* and Burgan *Kunzea ericoides* as well as the exotic willow *Salix* sp. Grassy flats along the river are often heavily infested by the weed Serrated Tussock *Nassella trichotoma*.

Significant vegetation in the park is detailed below:

- Species that are common east of the park and on the coast, but that are at the westernmost limit of their distribution in the park:
  - Silvertop Ash *Eucalyptus sieberi* open forest is restricted to quartzite outcrops around Rutledge Ridge in the extreme north of the park.
  - Small stands of Black Gum *Eucalyptus aggregata* found at Foxlow Flat.
  - An open woodland of Black Oak *Allocasuarina littoralis* occurs on the southeastern and western slopes of Harrisons Peak and on Rutledge Ridge.
- A large population of a subspecies of Argyle Apple *Eucalyptus cinerea* ssp. *triplex* occurs in the dry forests of Yanununbeyan State Conservation Area. This species is considered endemic to the ACT and the Mount Foxlow area in NSW.
- A shrub, considered rare in NSW, *Pomaderris phyllicifolia* var. *phyllicifolia* occurs scattered through eucalypt forests on Harrisons Peak.
- A pure stand of Ribbon Gum *E. viminalis* is found on the western slopes of Mount Foxlow. It is the largest of its type in Yanununbeyan National Park.

There are no recorded plants in the park currently listed under the *Threatened Species Conservation Act 1995* (TSC Act). However, occurrences of Yellow Box *Eucalyptus melliodora* in the park is regarded as a component of the White Box-Yellow Box-Blakely's Red Gum Woodland listed as an Endangered Ecological Community under the TSC Act.

Under the provisions of the TSC Act, recovery plans must be prepared for all threatened species and communities. These are progressively being prepared and will be used to guide management of any threatened species or communities in the area.

The invasion of native plant communities by exotic perennial grasses is listed as a Key Threatening Process under the TSC Act. Serrated Tussock *Nassella trichotoma* is a serious and invasive weed in the park and adjoining areas. Control strategies and monitoring are required to control Serrated Tussock, as well as preventing invasion of other serious weed species such as African Lovegrass *Eragrostis curvula*. Weed control is discussed in more detail under 5.3.

High frequency fire resulting in disruption of life cycle processes in plants and animals and loss of vegetation structure and composition is listed as a Key Threatening Process under the TSC Act. The prevention of frequent fire and protection of threatened and significant vegetation from fire are key objectives in the park.

The forests of the park are linked through vegetation corridors and the Queanbeyan River corridor to forest areas found in Tallaganda National Park and State Conservation Area and Tallaganda State Forest to the east, Tinderry Nature Reserve to the south and the Queanbeyan Fault Escarpment, partially protected in Googong Foreshores, to the west. The management of vegetation in the park should be considered in a broader context and not in isolation.

### **Desired Outcomes**

- The full range of native plant species found in the park is conserved.
- Vegetation structural diversity and habitat values are conserved.
- Threatened and significant plant communities are conserved.
- The habitat and populations of all significant plant species are protected.

### **Strategies**

- Identify and protect the habitats of threatened and biogeographically significant vegetation species from visitor impacts, the effects of introduced species and inappropriate fire regimes.
- Implement recovery plans for threatened species and communities.
- Enhance the value of the park by promoting the concept of the value of remnant vegetation through liaison with neighbours, the community, and local council and appropriate government agencies.
- Encourage and facilitate research of the park's vegetation.

### 4.3 NATIVE ANIMALS

A diverse range of native animals occurs in Yanununbeyan National Park, Nature Reserve and State Conservation Area utilising its range of habitats (Taws, 1998, NSW NPWS Wildlife Atlas, 2002, Mills & Reside, 2003 and NPWS field surveys).

Native mammals recorded in the park include:

Common Name	Scientific Name
Eastern Grey Kangaroo	<i>Macropus giganteus</i>
Red-necked Wallaby	<i>M. rufogriseus</i>
Wallaroo	<i>M. robustus</i>
Swamp Wallaby	<i>Wallabia bicolor</i>
Common Wombat	<i>Vombatus ursinus</i>
Brush-tailed Possum	<i>Trichosurus vulpecula</i>
Feathertail Glider	<i>Acrobates pygmaeus</i>
Ringtail Possum	<i>Pseudocheirus peregrinus</i>
Sugar Glider	<i>Petaurus breviceps</i>
Echidna	<i>Tachyglossus aculeatus</i>
Gould's Wattle Bat	<i>Chalinolobus gouldii</i>
Chocolate Wattled Bat	<i>C. morio</i>
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>
White-striped Mastiff Bat	<i>Nyctinomus australis</i>
Lesser Long-eared Bat	<i>Nyctophilus geoffroyi</i>
Large Forest Bat	<i>Vespadelus darlingtoni</i>
Southern Forest Bat	<i>V. regulus</i>
Little Forest Eptesicus	<i>V. vulturinus</i>

The Yellow-bellied Glider *Petaurus australis* was identified in a fox scat found on Mount Foxlow in Yanununbeyan National Park (Taws, 1998) and a probable record from callback in Yanununbeyan State Conservation Area (Mills & Reside, 2003). In addition the Eastern False Pipistrelle *Falsistrellus tasmaniensis* was recorded. These species are listed as threatened under the TSC Act. Other threatened mammal species with a high probability of occurring in the park include:

Common Name	Scientific Name	TSC Act Status
Yellow-bellied Glider	<i>Petaurus australis</i>	Vulnerable
Squirrel Glider	<i>P. norfolcensis</i>	Vulnerable
Eastern Pygmy Possum	<i>Cercartetus nanus</i>	Vulnerable
Koala	<i>Phascolarctos cinereus</i>	Vulnerable
Spot-tailed Quoll	<i>Dasyurus maculatus</i>	Vulnerable
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>	Vulnerable
Large-footed Myotis	<i>Myotis adversus</i>	Vulnerable

Over 100 species of native birds have been recorded in the park, including the Wedge-tailed Eagle *Aquila audax*, Gang Gang Cockatoo *Callocephalon fimbriatum*, Yellow-tailed Black-cockatoo *Calyptorhynchus funereus*, Australian Owlet-nightjar *Aegotheles cristatus*, Spotted Quail-thrush *Cinlosoma punctatum*, Eastern Whipbird *Psophodes olivaceus*, Superb Lyrebird *Menura novaehollandiae* and Dusky Woodswallow *Artamus cyanopterus*. A complete bird list is at Appendix A. The Powerful Owl *Ninox strenua*, Barking Owl *Ninox connivens* and Brown Treecreeper *Climacteris picumnus* were recorded in Yanununbeyan National Park in 2004. These birds were listed under the TSC Act.

Threatened bird species with a high probability of occurring in the park include:

Common Name	Scientific Name	TSC Act Status
Powerful Owl	<i>Ninox strenua</i>	Vulnerable
Barking Owl	<i>Ninox connivens</i>	Vulnerable
Brown Treecreeper	<i>Climacteris picumnus</i>	Vulnerable
Speckled Warbler	<i>Pyrrholaemus sagittatus</i>	Vulnerable
Diamond Firetail	<i>Stagonopleura guttata</i>	Vulnerable

Reptiles and amphibians recorded in the park include:

Common Name	Scientific Name
Eastern Sign-bearing Froglet	<i>Crinia parinsignifera</i>
Common Eastern Froglet	<i>C. signifera</i>
Bullfrog	<i>Limnodynastes dumerilii</i>
Spotted Grass Frog	<i>L. tasmaniensis</i>
Whistling Tree Frog	<i>Litoria ewingii</i>
Leseur's Frog	<i>L. leseuri</i>
Peron's Tree Frog	<i>L. peronii</i>
Verreaux's Tree Frog	<i>L. verreauxii verreauxii</i>
Brown Toadlet	<i>Pseudophryne bibronii</i>
Smooth Toadlet	<i>Uperoleia laevigata</i>
Eastern Water Dragon	<i>Physignathus leseuri</i>
Eastern Blue-tongued Lizard	<i>Tiliqua scincoides</i>
Red-throated Cool-skink	<i>Bassiana platynota</i>
Copper-tailed Ctenotus	<i>Ctenotus taeniolatus</i>
Cunningham's Spiny-tailed Skink	<i>Egernia cunninghami</i>
White's Skink	<i>E. whitii</i>
Southern Water-skink	<i>Eulamprus heatwolei</i>
Cool-temperate Water-skink	<i>E. tympanum</i>
Three-toed Earless Skink	<i>Hemiergis decresiensis</i>
Dark-flecked Garden Sunskink	<i>Lampropholis delicata</i>
Pale-flecked Garden Sunskink	<i>L. guichenoti</i>
Long-necked Tortoise	<i>Chelodina longicollis</i>
Highlands Copperhead	<i>Austrelaps ramsayi</i>
White-lipped Snake	<i>Drysdalia coronoides</i>
Eastern Tiger Snake	<i>Notechis scutatus</i>
Red-bellied Snake	<i>Pseudechis porphyriacus</i>
Eastern Brown Snake	<i>Pseudonaja textilis</i>
Small-eyed Snake	<i>Rhinoplocephalus nigrescens</i>

The Green and Golden Bell Frog *Litoria aurea* was recorded at a location about 500 metres from Yanununbeyan Nature Reserve in 1979. This species is listed as endangered under the TSC Act. Threatened reptiles and amphibians with a high probability of occurring in the park include:

Common Name	Scientific Name	TSC Act Status
Green and Golden Bell Frog	<i>Litoria aurea</i>	Endangered
Rosenberg's Monitor	<i>Varanus rosenbergi</i>	Vulnerable

Wet sclerophyll forest and stands of Ribbon Gum *Eucalyptus viminalis* found in Yanununbeyan National Park and State Conservation Area provide high quality habitat for larger threatened arboreal mammals such as the Koala *Phascolarctus cinereus* and Yellow-bellied Glider *Petaurus australis*. These environments are



usually associated with gullies and the Queanbeyan River corridor in the park. The montane, dry and intermediate forests in the park provide suitable habitat for the Squirrel Glider *Petaurus norfolcensis*, Eastern False Pipistrelle *Falistrellus tasmaniensis*, Powerful Owl *Ninox strenua* and Rosenberg's Monitor *Varanus rosenbergi*. The woodlands are particularly important for the Speckled Warbler *Pyrrholaemus sagittatus* and Diamond Firetail *Stagonopleura guttata*. Ponds along creeks with bullrushes such as Foxlow Creek and downstream of Foxlow Flat provide habitat for the endangered Green and Golden Bell Frog *Litoria aurea*. There is suitable habitat in the park for the Spotted-tailed Quoll *Dasyurus maculatus*, which has been recorded nearby to the east in Tallaganda National Park and State Conservation Area and Tallaganda State Forest.

A Service fauna survey undertaken in the park in 2003 found that important habitats for fauna are areas containing Ribbon Gum *Eucalyptus viminalis*, Foxlow Flat with its permanent water source and grasslands, and the Apple Box *E. bridgesiana* – Candlebark *E. rubida* community (especially with an understorey containing *Acacia* sp.) found throughout Yanununbeyan State Conservation Area.

Under the provisions of the TSC Act, recovery plans must be prepared for all threatened species. These are progressively being prepared and will be used to guide management of threatened species in the area.

Predation of fauna by the fox and feral cat are listed as Key Threatening Processes under the TSC Act. The control of these introduced predators is addressed in section 5.3.

All records of native animals are collected and stored on the NSW Wildlife Atlas, a state-wide data base established by the Service. Information is built up about locality, habitat and breeding records and used to assist management of native wildlife.

### **Desired Outcomes**

- The full range of native animal species (and their habitats) found in the park is conserved.
- The habitat and populations of all threatened fauna species and biogeographically significant species are protected and maintained.

### **Strategies**

- Identify and protect the habitats of threatened and biogeographically significant fauna species from visitor impacts, the effects of introduced species and inappropriate fire regimes.
- Record the distribution of threatened and significant fauna species through opportunistic sightings and organised fauna surveys.
- Implement recovery plans.
- Encourage and facilitate research of the park's native animals.

#### 4.4 ABORIGINAL HERITAGE

Yanununbeyan National Park, Nature Reserve and State Conservation Area is located in an area that was occupied by the Ngarigo people. These were speakers of the Ngarigo language. Neighbouring people included the Walgalu, Ngunawal and Walbanga (Tindale, 1974). In 1844 George Augustus Robinson, Chief Protector of Aborigines, took the names of a group of Aboriginal people from what he described as the 'Molongler tribe', of the Molonglo Plains and upper Molonglo River (Jackson-Nakano, 2001). It is likely that these people were familiar with what is now the park area.

Yanununbeyan is of Aboriginal origin and is the name of the local parish. Although its meaning is unknown to the Service, it contains the ending 'beyan' which is a component of Aboriginal place names in the region, for example Queanbeyan and Kybean.

European explorers first entered the region in the early 1820s. Diseases and viruses, such as smallpox and influenza, brought by Europeans had a disastrous effect on local Aboriginal populations causing a drastic reduction in the population.

Aboriginal site surveys were undertaken in the park by Dearling (2002) and Service staff in 2002. Dearling recorded a number of sites in the park. Aboriginal activity in the park is not surprising considering there are areas of level ground, natural clearings, permanent spring water and food resources from forests. Foxlow Flat is considered to have high local archaeological significance as it contains one of the largest artefact scatters recorded in the park, and within the Captains Flat region (Dearling, 2002).

The presence of dark grey chert, black chert and quartz artefacts support an assumption that much of the stone used by Aboriginal people to manufacture these stone tools was acquired locally but to date no quarry site has been found.

All Aboriginal objects are protected under the *National Parks and Wildlife Act 1974*, and may only be destroyed/removed with consent from the Service and Aboriginal community. The main threat to Aboriginal heritage in the park is the use of heavy machinery, especially in emergency situations.

The strong attachment of Aboriginal people to the land is acknowledged. They may have cultural links with the whole landscape and specific locations. Individual places of significance may include living places, art sites, ceremonial sites, spiritual places and contact sites. Aboriginal sites and places are also important to non-Aboriginal people as they provide information about the past lifestyles of all humans.

While the Service presently has legal responsibility for the protection of Aboriginal sites and places, it acknowledges the right of Aboriginal people to make decisions about their own heritage. It is therefore policy that Aboriginal communities be consulted and involved in the management of Aboriginal sites, places and related issues and the promotion and presentation of Aboriginal culture and history. The park is within the area of the Ngunnawal and Mogo Local Aboriginal Land Councils.

The Buru Ngunawal Aboriginal Corporation is a native title claimant and a recognised elders group that also has an interest in the area. The Service's Southern Aboriginal Heritage Unit will advise park managers of other Aboriginal community organisations and individuals with an interest in use and management of the park.

### **Desired Outcomes**

- Aboriginal sites and places are protected from damage by human activities.
- Aboriginal people are involved in management of Aboriginal cultural values in the park.

### **Strategies**

- Aboriginal heritage management and key management activities are carried out in consultation with the Ngunawal and Mogo Local Aboriginal Land Councils and Buru Ngunawal Aboriginal Corporation.
- Undertake site surveys and cultural assessments prior to any activities with the potential to impact on Aboriginal sites and places. Ensure that all sites that may be damaged are clearly marked on site and on operational maps and that works supervisors and fire ground managers are fully aware of the location of these sites.
- Record any open rock deposits containing dark grey chert, black chert and quartz and protect from disturbance by human activity.

## **4.5 HISTORIC HERITAGE**

Yanununbeyan National Park and Nature Reserve was gazetted in 2001. Yanununbeyan State Conservation Area was gazetted in 2003. Prior to gazettal the park was Crown land almost wholly covered by Permissive Occupancy (PO) grazing licences, administered by the then Department of Land and Water Conservation. Three small freehold inholdings were purchased by the Service in 2001 and 2002 and added to the park. According to interviews held with PO holders by the Service grazing by sheep and cattle was limited.

Various European explorers entered the Queanbeyan area in the early 1820s. Their primary goal was economic - to open up new grazing lands. Following the early explorers, in 1824 the botanist Allan Cunningham travelled from Lake George to the Molonglo River. He was the first European to see the Molonglo Plains to the north and east of the park area. Settlers quickly followed European exploration. In 1824, Owen Bowen and a number of workers occupied 1000 acres in the vicinity of "Carwoola", a short distance northeast of the park (Pearson & O'Keeffe, 1999). In 1829 the park was within the County of Murray, the southernmost of the Nineteen Counties authorised for occupation and acquisition of land. Surveyor Robert Dixon prepared a map of the colony of NSW in 1835, clearly showing surveyed lots in the park area bearing the name Antill. Major Henry Colden Antill owned a number of allotments in the Molonglo Valley and in the Primrose Valley, immediately northwest of the park (Pearson & O'Keeffe, 1999). "The Springs", an inholding in Yanununbeyan State Conservation Area, originally known as "Queanbeyan Flat", was settled in the 1860s by Fred Schardt.

The park is situated within the parishes of Yanununbeyan and Bullongong. Within both parishes settlers took up a small number of areas initially as Conditional Purchases or Conditional Leases. Jim McFarlane lived on the property “Grose Meadows”, just north of the national park on Foxlow Creek. He is said to have had leases over much of the park area through the early to mid-1900s. Other leaseholders of note in the park area include Tully, Strudwicke, Harrison, Blinksell, Hutchinson, Lewis, Donnolly and Edmunds (Dearling, 2002).

The landscape of the park, as a result of post-1770 European settlement and use, remains largely unmodified. The main use of the park area was for sheep and cattle grazing. The rocky and skeletal soils, combined with heavy vegetative cover, allowed only marginal use, mainly as a substitute to the flat, open areas found outside the park. Limited areas of the park have been cleared to facilitate grazing. Timber used for local buildings, fences and for firewood, was taken mostly on the margins of frost hollows and other open country.

European physical remains in the park include fences, trails, survey markers, road foundations and trig stations. The original trails in the park were bridle trails before developing into bush tracks. For a period up to the 1930s part of a horse and buggy trail existed along the rough alignment of Woolcara Trail in Yanununbeyan State Conservation Area that was used as a wool route between “Tinderry Station” and Bungendore. Hand-built road foundations exist on Woolcara Trail near “The Springs” dating to the early 1920s. The main extensions and improvements of the trails occurred as a result of a large bushfire in about 1960. Original survey markers in the form of rock spits on the ground date to around 1912 on the Yanununbeyan Nature Reserve boundary. Trig stations are situated on Mount Foxlow and Corner Hill. They are in the form of stone cairns surmounted with timber poles and metal trig discs. They date to 1893. A similar trig is on Horseshoe Hill, to the south of the park. A single room schoolhouse (now completely gone) existed on the Yanununbeyan State Conservation Area inholding known as “The Murdering Shed Flat”, that was in operation in the 1930s.

Other land uses in the area outside the park included mining around Captains Flat, but also on a smaller scale in the Primrose Valley Creek.

### **Foxlow Flat**

Foxlow Flat (Portion 73, Parish Yanununbeyan) is an area of obvious historical interest located in the southern portion of the park. Henry Follett originally took it up in 1876, no doubt attracted by its spring that provides a permanent water source. Follett is believed to be the son of William Follett, one time owner of Carwoola Station, to the north of the park. The Service purchased the block from Eric Mawson in 2001 and added it to the park.

Foxlow Flat contains a complex of historical sites, including stockyard remains, hut ruins, old fences, an old track, a large old pine tree, a possible cultivated patch, a well, and bric-a-brac such as an old truck/trailer tray. The hut predates 1940 and could date from as early as the 1880s. Other items, such as the pine tree postdate 1944. The original hut was a one-room pole framed and timber slab with bark roof

and no windows. It was later extended by one room and new materials such as corrugated iron were used. In 2003 it is almost wholly collapsed.

The main entrance to Foxlow Flat was probably from a track to the south, currently Beverly Hill Trail, and southeast, currently Spring Creek Trail. A second building was located to the west of the ruined hut, part of which is now near the old pine tree.

Foxlow Flat illustrates the changing land use of the park. It is considered to have high heritage significance on a local level and low significance on a State level. Individually the components of the site may not have high significance, but when treated as a complex its significance increases. Its main attributes are its aesthetic value and its educational value. The area is also important for its contemporary social value to the people in the surrounding region, notably those in the Captains Flat area (Dearling, 2002).

Key threats to the historic heritage of Foxlow Flat include the movement of vehicles, fire, level of visitation and strong wind. It is intended to limit use of the Foxlow Flat to day use only. Vehicle and horse movement will be restricted, and foot traffic only will be permitted throughout much of the site. The site will be managed and interpreted to promote both its historic and Aboriginal heritage values. The site should be protected as a priority during a wildfire event.

### **Desired Outcome**

- Historic features are appropriately conserved and managed.

### **Strategies**

- Implement measures as necessary to protect the cultural values of Foxlow Flat.
- Record the Foxlow Flat hut and stabilise it.
- Record other historic places, assess their significance and develop appropriate management strategies.

## 5. PARK PROTECTION

### 5.1 SOIL EROSION

The geology of Yanununbeyan National Park, Nature Reserve and State Conservation Area is largely made up of metasediments of the Foxlow Beds, consisting of greywacke shale, slate and chert. The main geological variation in the area is found in the large outcrop of granite around Harrisons Peak, in the southeastern portion of the national park.

Dominant topsoil materials are made up of brown gravelly loams with over 50 per cent rock fragments of various sizes, consisting of coarse gravels and cobbles of shale and slate. Quartz coarse gravels are also present. Subsoils consist of clays and loams with an increase in percentage of rock fragments. Lower slopes and drainage lines contain soils of mixed origin with colluvial and alluvial processes occurring. Soil characteristics in the park can be described as stony, highly erodible, strongly acidic, with a low fertility and water holding capacity (Jenkins, 1993).

Minor soil erosion and the potential for gradual erosion occurs on a number of creeks in the park. These areas will need to be identified and monitored. Remedial action and rehabilitation to arrest erosion may be required to prevent soil erosion. However, it is realised that erosion may be a natural and acceptable process in most situations.

#### **Tracks, Trails and Boundary Breaks**

The soil characteristics in the park limit earthworks. It is difficult to divert water or borrow material due to steep slopes and shallow stony soils. There is a good system of management trails in the park. All existing management trails will be regularly monitored and carefully maintained to dry weather 4WD standard to prevent any unnecessary erosion. By limiting public vehicle use throughout much of the park, the incidence of erosion and the need for frequent trail works should be lessened. Public vehicle use and private property access is permitted on Woolcara Trail north of "Tinnenburra" and Spring Creek Trail. Consequently these trails will require more regular maintenance. Recreational activities such as cycling and horseriding will be restricted to management trails to prevent damage to vegetation and erosion off-trail.

Existing dormant trails in the park will be left in a dormant state and ground cover vegetation growth promoted. Existing boundary breaks will be kept clear of trees to allow management traffic, with the ground cover vegetation retained. New boundary breaks may be developed (and existing breaks maintained) along the park's boundary by clearing of trees and other woody vegetation (either by hand or machinery), leaving ground layer shrubs and grasses in situ, and to a maximum width of six metres. Any earthworks on dormant trails and boundary breaks during a bushfire event should be rehabilitated as soon as possible after the event. No new vehicle management trails will be developed in the park. Only three walking tracks are proposed, one within Foxlow Flat and two departing Apple Box Flat for the Queanbeyan River and Corner Hill. The two tracks from Apple Box Flat will mostly follow existing dormant trails.

### **Desired Outcome**

- Human induced soil erosion in the park is minimised.

### **Strategies**

- Undertake all works with minimal impact on soils and water quality.
- Design and undertake appropriate maintenance of management trails to ensure minimal soil erosion.
- Maintain existing network of management trails (see map) to dry weather 4WD standard. Prohibit the development of new management trails in the park.
- Close all unnecessary informal tracks and trails to a dormant stage and allow for natural regeneration.
- Keep existing boundary breaks clear, and develop new boundary breaks, by clearing of trees, and other woody vegetation, and leaving ground layer shrubs and grasses in situ.
- Identify any areas of erosion. Monitor areas of erosion and treat if found to be extending in conjunction with soil conservation specialists.

## **5.2 WATER QUALITY AND CATCHMENT MANAGEMENT**

All creeks in Yanununbeyan National Park, Nature Reserve and State Conservation Area flow in a northerly, westerly and easterly direction from the park, draining into the Queanbeyan and Molonglo Rivers, which in turn drain into the Murrumbidgee River. Creeks that drain into the Queanbeyan River do so upstream of Googong Dam, which supplies domestic water to Queanbeyan and Canberra. Maintenance of the park's catchment values is important to contribute to water quality downstream. Creeks are non-perennial, although springs at Foxlow Flat provide a near-permanent water source.

No rainfall stations are found in the area. However, it is predicted that average annual rainfall is 650-750mm, with greater falls on the highest peaks due to orographic effects (Taws, 1998).

The *Catchment Management Act 1989* provides a framework for achieving cleaner water, less soil erosion, improved vegetation cover, the maintenance of ecological processes and a balanced and healthier environment. It also provides a focus to balance conservation needs and development pressures and encourages a more aware and involved community. An important means of achieving these aims is the formation and support of catchment management authorities at a local level. The park is within the area of the Murrumbidgee Catchment Management Authority and the Service has a representative on this authority.

### **Desired Outcome**

- The park's catchment values and the water quality and health of park's streams are maintained.

## Strategies

- Design and undertake all works in a manner that minimises water pollution.
- Liaise with local government and other authorities, including the Murrumbidgee Catchment Management Authority, as needed to maintain the water quality of the park's catchments.

### 5.3 INTRODUCED SPECIES

An introduced species is defined in this plan as any plant or animal species not native to Australia. Introduced species within Yanunubeyan National Park, Nature Reserve and State Conservation Area and on adjoining land are of concern because they have the potential to have detrimental effects on ecological values and can spread to and from neighbouring land. In addition, the *Noxious Weeds Act 1993* places an obligation upon public authorities to control noxious weeds on land that they occupy to the extent necessary to prevent such weeds spreading to adjoining lands.

The Service aims to manage populations of introduced plants and animals to minimise adverse impacts by employing best practice methods. There is a clear recognition that the eradication of introduced species is generally not feasible. Pest management will be undertaken in accordance with strategies and recommendations outlined in the NPWS South West Slopes Region Pest Management Strategy (2003) and relevant Threat Abatement Plans.

#### Introduced Plants

Serrated Tussock *Nassella trichotoma* and Blackberry *Rubus fruticosus* are the most serious introduced plant species identified in the park. Both are listed as noxious weeds for the area. Control of these weeds is a high priority.

*Serrated Tussock.* This introduced grass is highly invasive and pervasive among native grasses and forest floors on lower slopes, including along the Queanbeyan River. It occurs in limited areas in the national park, but more extensively and in dense infestations throughout the state conservation area. The invasion of native plant communities by exotic perennial grasses, such as Serrated Tussock, is listed as a Key Threatening Process under the TSC Act. A treatment program will be implemented in co-operation with adjoining landholders and Eastern Capital City Regional Council.

*Blackberry.* This weed occurs in small infestations in creeks such as Foxlow Creek and Antills Creek and is highly invasive. A treatment program will be implemented in co-operation with adjoining landholders and Eastern Capital City Regional Council.

Sweet Briar *Rosa rubiginosa*, pine wildings *Pinus sp.*, Broom *Cytisus sp.*, Hawthorn *Crataegus monogyna* and willows *Salix sp.* are other weeds identified in the park. Due to their limited distribution and small size of population, these weeds are a lower priority, but will be treated progressively throughout the park.



There is the possibility of the spread of other serious weeds from surrounding lands into the park (which are not yet identified in the park), including St Johns Wort *Hypericum perforatum*, Viper's Bugloss *Echium vulgare* and African Lovegrass *Eragrostis curvula*. Monitoring for these species will take place and any outbreaks in the park will be treated immediately.

Foxlow Flat contains a large pine tree identified with the cultural significance of the area. This tree will be preserved until its natural death. All other exotic trees, including seedlings from the original pine tree in Foxlow Flat, are of low cultural value and will be removed.

By limiting public vehicle use throughout much of the park, the possibility of weed seeds being brought into the park should be minimised.

### **Introduced Animals**

The feral pig *Sus scrofa* and fox *Vulpes vulpes* are the most serious introduced animals identified in the park. Control of these pest animals is a high priority.

*Feral pig.* Pigs are found throughout the park area and on surrounding lands. Pigs cause environmental damage by rooting which results in damage to native plant species, the introduction of weeds and incidences of erosion, and predation on frogs, reptiles, ground nesting birds and small mammals. In addition, the presence of pigs in the park contributes to other problems such as illegal hunting and potential damage to culturally significant sites. A control strategy, including research and monitoring program, will be implemented. Acceptable control methods include trapping and shooting, shooting (ground and aerial) and poisoning with Warfarin or 1080. Co-operative programs will be implemented with adjoining landholders and the Braidwood and Cooma Rural Lands Protection Boards.

*Fox.* Foxes are found throughout the park area and on surrounding lands. Predation by the fox is listed as a key threatening process under the TSC Act. Fox predation is a major threat to native animal populations. The Service has produced a Fox Threat Abatement Plan, which provides strategies and recommendations on fox control. A control and monitoring program will be implemented. The control method will include the use of poison baits (1080/sodium mono-fluoroacetate) buried at least ten centimetres deep. This method is designed to have minimal impact on native non-target species, especially the threatened Spot-tailed Quoll *Dasyurus maculatus*. The method of aerial 1080 baiting is under review by the Service, and may be used if approved by the Service and subject to an environmental assessment. Co-operative programs will be implemented with adjoining landholders and the Braidwood and Cooma Rural Lands Protection Boards.

The rabbit *Oryctolagus cuniculus*, feral goat *Capra hirtus*, feral cat *Felis cattus*, feral deer *Dama dama/cervus*, wild dog *Canis* sp. and straying sheep and cattle are other pest animals of a less serious nature identified in the park. These pest animals are a lower priority and will be controlled through specific programs as necessary.

The Service will erect a boundary fence around Yanununbeyan Nature Reserve to prevent stock intrusion. There is currently no fence around this reserve.

## Desired Outcome

- The impact of introduced species on native plants and animals is minimised.

## Strategies

- Control introduced species and eradicate them where practicable in accordance with best management practice, to deliver optimal biodiversity outcomes.
- Give priority for the control of the introduced species Serrated Tussock, Blackberry, pigs and foxes.
- Avoid unnecessary environmental disturbances. Where disturbance is inevitable or is planned, consider the likely impact of the activity in terms of introduced species and put in place controls or programs to reduce any such impact.
- Seek the cooperation of neighbours in implementing weed and pest animal control programs. Undertake control in cooperation with the Braidwood and Cooma Rural Lands Protection Boards and Eastern Capital City Regional Council.
- Encourage maintenance of effective fencing of boundaries with grazing properties to prevent domestic stock from entering the park. Provide fencing assistance where possible and appropriate and in accordance with the Service policy. Erect a boundary fence around Yanununbeyan Nature Reserve.

## 5.4 FIRE MANAGEMENT

Fire is a natural feature of the environment and is essential to the survival of some plant and animal communities. Inappropriate fire, however, can damage natural and cultural heritage and endanger park visitors and neighbours. Management of bushfire in the park is a complex issue. Management must aim to achieve both long-term conservation of native plant and animal communities and ongoing protection of life and property within and adjacent to the park.

### Ecological Requirements

Bushfire regimes are a major determinant of the distribution and abundance of plants and animals in the park. They also affect nutrient cycles, erosion patterns and hydrological regimes. Ecological research suggests the following requirements for biodiversity conservation:

- Variability of fire intervals and area burnt is important to conserve floristic diversity and provide diversity of habitat for animals; fire at regular intervals will lead to loss of species;
- Most plant species and communities require infrequent fires of moderate to high intensity to achieve regeneration but patchy burns are better for fauna as they retain shelter and food refuges;
- Fires during the breeding season are the most damaging to fauna communities because of direct killing of young and increased exposure;
- A fire frequency of between 5 and 30 years is generally appropriate for the park's vegetation communities; species decline is predicted if successive fires occur less than 5 years apart or there are no fires for more than 30 years.

High frequency fire is listed as a key threatening process under the *Threatened Species Conservation Act 1995*. High frequency fire can result in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition.

Fire can also damage some types of Aboriginal sites and historic places. Features such as scarred trees and old buildings can be permanently damaged or lost by wildfire. Other sites can be damaged by use of heavy machinery for fire suppression activities. Wildfire should be suppressed/excluded in the Foxlow Flat historic area.

### **Protection of Life and Property**

A key objective of the Service is to prevent the spread of fire from the park to surrounding lands and inholdings. Fire management in the park aims to reduce the hazard so that ignition is less likely to occur and that fires are more easily controlled.

Hazard reduction through controlled burning and other methods will be applied strategically with caution exercised so as not to cause long term damage to the vegetation and result in erosion on steep slopes. Hazard reduction can include slashing, spraying, removal of combustible materials from around particular sites, and controlled burning.

There is an adequate network of strategic management trails (or fire trails) in the park that will be maintained to a good 4WD dry weather standard, clear of impeding vegetation and signposted with fire trail names. Strategic boundary breaks (and the development of any new breaks) will be kept clear of impeding vegetation, leaving ground layer vegetation in situ. All existing dams will be maintained to ensure effectiveness as water filling points for fire vehicles. Management trails and boundary breaks can be used for strategic fire fighting as well as for fire detection, fuel sampling and fuel reduction.

The Service will react promptly, where possible with direct attack, to bushfire ignitions in co-operation with the NSW Rural Fire Service.

Small sub-divisions to the north and northwest of the park, as well as properties to the west of the park, are a potential source of unplanned fire that is likely to spread into the park. Strategies are needed to protect these areas of the park and reduce the opportunity for unplanned fire. Properties to the east and south of the park and the properties of "Tinnenburra", "Kanchenjunga" and the inholdings of "The Springs" and "The Murdering Shed" are at risk from fire starting in the park. A Fire Management Strategy will be prepared for the park, which will address protection of these areas from fire.

## **Fire History**

The pre-European fire history for the park area is not known. Aborigines are, however, likely to have had burning regimes designed to support game and enhance movement.

In the period 1957 to 2003 there have been numerous fires of varying intensity and size. The general area was burned in 1957 by an extensive fire started by eucalyptus oil distillers in the nearby Tinderry Range. In 1985 the area was also extensively burnt. Fire history will be researched as part of the Fire Management Strategy for the park. Since the land was transferred to the Service in 2001 there has been two small fires in the park, one caused by lightning and one caused by an escaped campfire.

## **Strategies and Co-operative Arrangements**

Under the *Rural Fires Act 1997* the Service is a fire authority and is responsible for controlling fires on the park and ensuring that they do not cause damage to other land or property. An important part of the Service's fire management is participation in local co-operative fire management arrangements, including implementation of Bush Fire Risk Management Plans and Bush Fire Operational Plans developed by District Bush Fire Management Committees. The Service is a member of the Eastern Capital City Regional Bush Fire Management Committee. The park is situated within an area covered by the Burra, Captains Flat, Hoskinstown and Stony Creek Volunteer Rural Fire Service Brigades.

A Fire Operations Map has been prepared for the park. This map clearly shows important features needed for effective fire fighting, including park boundaries, park neighbours, environmental and cultural features, management trails, watering points and helipads. This map is intended for distribution to key fire fighters for use at fires. It will be reviewed and refined annually as further information becomes available.

The Fire Management Strategy for the park will identify the bushfire threat, requirements for the conservation of native plants and animals and community protection measures in areas where it is identified that fire is a threat to property. Management will aim to maintain biodiversity by restricting fires to only part of the distribution of a vegetation community at any one time and ensuring that the fire thresholds are not exceeded. A variety of fire management strategies will be developed including fuel reduction, trail maintenance, fire detection and co-operative arrangements. Some, or at times all, of these will be applied where appropriate to best protect life, property and natural and cultural assets. Close to boundary areas, fuel reduction programs and trail maintenance will be designed and implemented in cooperation with neighbours.

## **Desired Outcomes**

- Fire regimes are appropriate for long-term maintenance of the park's plant and animal communities.
- Human caused unplanned bushfires are minimised.
- The potential for spread of bushfires on, from, or into the park is minimised.

- Persons and property on, or immediately adjacent to the park are protected from bushfires.
- Aboriginal sites, historic places and culturally significant features are protected from damage by bushfires.

### **Strategies**

- Carry out research to establish fire history, fire fuel levels and fire management requirements for input into a Fire Management Strategy.
- Prepare a Fire Management Strategy for the park by 2006.
- Use prescribed fire to achieve a variety of fire regimes that maintain fire thresholds for each vegetation community in accordance with the Fire Management Strategy.
- Seek to avoid use of heavy machinery for fire suppression in areas of rare plants, Aboriginal sites and historic places.
- Maintain all management trails, boundary breaks and dams to a standard that permits effective fire control. Install trail name signs.
- Rehabilitate areas disturbed by fire suppression operations as soon as practical after the fire.
- Continue to actively participate in the Eastern Capital City Regional Bush Fire Management Committee. Maintain close contact and cooperation with Rural Fire Service officers and the volunteer bush fire brigades of Burra, Captains Flat, Hoskinstown and Stony Creek.
- Where appropriate, carry out fuel management in cooperation with neighbours for mutual protection.
- Consider closing the park to public use during periods of extreme fire danger.

## 6. VISITOR OPPORTUNITIES AND EDUCATION

### 6.1 INFORMATION PROVISION

Yanununbeyan National Park, Nature Reserve and State Conservation Area are low-key areas where promotion for visitor use will be minimal. Woolcara Lane represents the only legal developed public access to Yanununbeyan State Conservation Area and there is no suitable legal formed public access to Yanununbeyan National Park.

Park facilities and services provide opportunities to enjoy, appreciate and understand the value of our natural and cultural heritage. Only areas that can sustain use are promoted in this way. Information provision at such places and about the area in general assists the protection of natural and cultural heritage, promotes support for conservation and increases the enjoyment and satisfaction of visitors.

Low-key visitor facilities are planned for Foxlow Flat and Apple Box Flat. These are key areas for promoting the park's natural and cultural values. Foxlow Flat contains items of cultural interest, such as the ruins of a hut pre-dating the 1940s. It also provides fine views over a natural clearing to the surrounding forests and Harrison's Peak. Apple Box Flat contains items of natural and cultural interest. It is planned to be the trackhead for two walking tracks leading to Corner Hill and the Queanbeyan River where numerous aspects of natural and cultural interest are encountered. These features will be promoted and interpreted to visitors in a manner which protects their special values and encourages appropriate use. Provision of facilities at Foxlow Flat and Apple Box Flat are discussed in section 6.2.

Provision of information for the park will involve three levels:

- Promotion to increase community awareness of the existence of the park, its conservation importance, management and visitor opportunities;
- Orientation and regulatory to enable visitors to find their way around the park, introduce them to its landscape and advise them about use restrictions; and
- Interpretation of individual components of the park's environment in order to increase visitor understanding of the park's values and of the environment in general, and provision of minimal impact use information.

#### **Desired Outcomes**

- Low-key promotion of the recreational opportunities in the park will be undertaken.
- There is community understanding and appreciation of the park's natural and cultural values.
- Visitors are aware of the park's recreation opportunities.

#### **Strategies**

- Emphasise natural and cultural values of the park in interpretation.
- Prepare an information brochure.

- Place interpretive signs at Foxlow Flat, Apple Box Flat, and at a public entry point to Yanununbeyan National Park if established.
- Involve the local Aboriginal community in development of material and programs for interpretation of Aboriginal culture.
- Support and assist educational use of the park by schools, community groups and individuals through provision of information.

## **6.2 RECREATION OPPORTUNITIES**

Visitor opportunities provided in national parks are generally those at the low-key end of the spectrum, in natural and undeveloped settings. Recreational uses which are ecologically sustainable and which directly contribute to the visitor's understanding and appreciation of the park is considered appropriate.

Management of visitor use to be ecologically sustainable requires placing limits on the number of access points, design of facilities to ensure that numbers of visitors and the style of use is appropriate for the site, and promotion of minimal impact use. The provisions below are designed to maintain the low key, scenic, natural settings which are the special feature of the park and to provide for future use in a manner which protects ecological integrity and cultural heritage values.

Yanununbeyan National Park and State Conservation Area currently receive low numbers of visitors. This is largely due to the fact that public access is very difficult. There is no legal developed public access route to Yanununbeyan National Park. Woolcara Lane represents the only legal developed public access to Yanununbeyan State Conservation Area. For this reason, the bulk of the visitors tend to be from the surrounding local community and enter the park via private property and/or Woolcara Lane. The Service will investigate the possible acquisition of land or some other measure which will allow development of a legal public entry point for visitors to Yanununbeyan National Park.

Provision for visitor use of the park has been considered in a regional context. Public land managed by the Service and other authorities in the region include Googong Foreshores, Tallaganda National Park and State Conservation Area and Tallaganda State Forest. These areas in conjunction provide a range of opportunities for four-wheel driving, fishing, horseriding, birdwatching, overnight bushwalking and camping, picnicking and registered trailbike use.

Yanununbeyan National Park and State Conservation Area offers visitors an opportunity to enjoy passive recreation in a quiet environment.

The primary purposes of nature reserves are conservation of wildlife and natural environments and to provide opportunities for education and scientific research into these resources. For this reason recreational use of Yanununbeyan Nature Reserve is not encouraged.

Vehicle touring and registered trailbikes are permitted only when drivers keep to Woolcara Trail, north of "Tinnenburra" and Spring Creek Trail. Driving off Woolcara Trail and Spring Creek Trail and in Yanununbeyan National Park is not permitted.

Horse riding is permitted in the park in accordance with the Service's Recreational Horse Riding Policy. Horse riding is day-use only and horses must keep to existing management trails. Overnight camping with horses in the park is not permitted.

Cycling is permitted only when riders keep to existing management trails. Riding off-trail or on walking trails is not permitted.

Apart from walking tracks within Foxlow Flat and departing Apple Box Flat for Corner Hill and the Queanbeyan River, the development of walking tracks, or tracks for any other purpose, is not permitted in the park. This will preserve core wild areas and increase biodiversity conservation and recreational experience.

Visitors will be encouraged to adopt minimal impact practices, including the use of fuel stoves. The park may be subject to a solid fuel ban during the fire season.

Overnight bush camping is permitted in Yanununbeyan National Park and State Conservation Area provided that it is at least 200 metres from management trails and Foxlow Flat or Apple Box Flat.

Commercial and community group visits and activities will be permitted in the national park and state conservation area, and educational group visits will be permitted in the nature reserve although commercial activities are not permitted in nature reserves, subject to conditions specified by the Service in a consent or licence. Each application for a consent or licence will be assessed on details such as location, amount of use, potential impacts, conflicts with other users, group sizes, partnerships and licensing. The Service reserves the right to refuse any commercial or group visit.

Illegal pig hunting is a relatively common activity in the park. Illegal fishing methods are reported to have been used on the Queanbeyan River bordering the state conservation area. The Service will continue with law enforcement patrols and to work with neighbours and law enforcement agencies such as the NSW Police and NSW Fisheries to prevent illegal activities in the park. The Service will prevent illegal access by installing and locking gates to some areas of the park.

### **Foxlow Flat**

Foxlow Flat will be developed for day use with low-key and basic facilities. Any development at Foxlow Flat will be guided by the need to protect the natural and cultural heritage of the area. Infrastructure and facilities will include an interpretive sign and trail, timber fencing to control visitor movement and picnic tables.

### **Apple Box Flat**

Apple Box Flat will be developed for day use with low-key and basic facilities. Any development at Apple Box Flat will take into account the need to protect the natural and cultural heritage of the area. Infrastructure and facilities will include an interpretive sign, timber fencing to control visitor movement, a small carpark (holding up to 20 cars), two walking tracks to the Queanbeyan River and Corner Hill (following



existing dormant trails) and picnic tables. Apple Box Flat is defined as the area just north of “The Murdering Shed Flat” inholding, but may include the inholding area if ever acquired by the Service.

### **Desired Outcomes**

- Visitor use is compatible with the purposes of national parks and state conservation areas and is ecologically sustainable.
- A variety of low key visitor opportunities are available that encourage appreciation of the natural environment.
- Facilities at Foxlow Flat and Apple Box Flat (including the walking tracks) are designed and managed to provide a satisfying visitor experience and minimise impacts.
- A suitable and legal public access is established to Yanununbeyan National Park.

### **Strategies**

- Encourage use of minimal impact recreation practices throughout the park, including the use of fuel stoves in preference to fires. Allow overnight bush camping more than 200m from management trails and from Foxlow Flat or Apple Box Flat.
- Allow horse riding and cycling on existing management trails. Overnight camping with horses is not permitted.
- Prohibit vehicle touring and trailbike riding, except on Woolcara Trail north of “Tinnenburra” and Spring Creek Trail.
- Permit commercial and community group tours and activities subject to Service approval and conditions.
- Prepare and implement a plan for basic facilities and walking tracks at Apple Box Flat.
- Prepare and implement a plan for basic facilities at Foxlow Flat if there is a need.
- Work with police and fisheries to restrict illegal activities.
- Investigate any measure that will allow development of a legal public entry point for visitors to Yanununbeyan National Park.

## 7. RESEARCH AND MONITORING

The purpose of scientific study in the Yanununbeyan National Park, Nature Reserve and State Conservation Area is to improve understanding of its natural and cultural heritage and the processes that affect them. Research also establishes the requirements for management of particular species.

Service research efforts must be directed towards the areas of greatest need and will concentrate on fire management toward preparation of a Fire Management Plan, and significant vegetation and threatened fauna.

Under the Southern Regional Forest Agreement (RFA) all forest managers including State Forests of NSW, Dept Land & Water Conservation and the Service must demonstrate ecologically sustainable forest management (ESFM). ESFM aims to maintain or increase the full suite of forest values for present and future generations across the NSW native forest estate, including:

- ecosystem biodiversity, health, vitality, productive capacity and functional processes;
- soil and water productive capacity and functional processes;
- long term social and economic benefit; and
- natural and cultural heritage values.

ESFM is an over-riding management principle and will be applied to all ecosystem types, not just forests. It will be implemented primarily through monitoring to provide feedback on management programs and directions for future adaptive management. Performance indicators of ecologically sustainable forest management have been identified. Monitoring programs will be developed using the indicators to demonstrate the impact of management actions on ecological functions. Remedial management actions will then be undertaken as required.

Research programs will be considered where they complement ESFM criteria and indicators. The results of research and monitoring will be used to guide management programs.

Research by other organisations and students may provide valuable information for management. A prospectus will be prepared to encourage involvement of other organisations in priority research areas. Some important research topics have been mentioned in earlier sections of this plan.

### **Desired Outcomes**

- Research is undertaken that enhances the information base and assists management of the park.
- Research causes minimal environmental impact.
- Monitoring programs are in place to detect any changes in the status of park's resources.

## Strategies

- Use the principles of Ecologically Sustainable Forest Management to guide management operations. Work with other authorities and stakeholders in implementing ESFM principles across the landscape.
- Undertake research to provide information about the park's natural and cultural heritage in order to facilitate management.
- Require any research structures and long term markers to be placed in locations that will minimise their visual impact and require their removal upon completion of the research.
- Encourage appropriate research by other organisations and individuals and promote research that is directly useful for management purposes. Prepare a prospectus as a guide to preferred research projects in the park. Preferred topics will be those of direct relevance to management and will include fire management, significant vegetation and threatened fauna.
- Encourage groups, such as bird watchers, to pass on information gathered in the park.

## 8. OTHER USES

Access is required through Yanununbeyan State Conservation Area to the neighbouring properties of “Kanchenjunga” and “Tinnenburra” and the inholdings of “The Springs” and “The Murdering Shed Flat”. This is available along Woolcara Trail and Spring Creek Trail, which are general public access trails. The Service will maintain these trails to a dry weather 4WD standard, consistent with other key trails in the park. Other than those listed above, no other properties bordering the park require access through the park.

### **Desired Outcome**

- The identified properties may use Woolcara Trail and Spring Creek Trail through Yanununbeyan State Conservation Area to access their properties.

### **Strategy**

- Maintain Woolcara Trail and Spring Creek Trail to a dry weather 4WD standard.

## 9. MANAGEMENT FACILITIES AND OPERATIONS

The Service will endeavour to maintain good relations with park neighbours on matters of mutual concern, such as pest control, fire management, boundary fencing and access through private property by Service staff to the park.

### **Desired Outcomes**

- Management facilities adequately serve the needs of park management and have acceptable environmental impact.
- A good relationship is maintained with park neighbours.

### **Strategies**

- Maintain close liaison with park neighbours to deal with matters of mutual concern.
- Maintain the management trails shown on the map. Close any other trails and allow to rehabilitate (refer section 5.1).

## 10. PLAN IMPLEMENTATION

This plan of management establishes a scheme of operations for the Yanununbeyan National Park, Nature Reserve and State Conservation Area. The plan is part of a system of management developed by the Service. The system includes the *National Parks and Wildlife Act*, management policies, established conservation and recreation philosophies, and strategic planning at corporate, directorate and regional levels. The latter may include development of related plans such as regional recreation plans, species recovery plans, fire management plans and conservation plans.

Section 81 of the Act requires that this plan of management shall be carried out and given effect to, and that no operations shall be undertaken in relation to the park unless they are in accordance with the plan.

Implementation of this plan will be undertaken within the annual programs of the Service's South West Slopes Region, Queanbeyan Area. The actions identified in the plan are those to which priority will be given in the foreseeable future. Other management actions may be developed consistent with the plan objectives and strategies.

Relative priorities for identified activities are set out in the table below. These priorities are determined in the context of directorate and regional strategic planning, and are subject to the availability of necessary staff and funds and to any special requirements of the Director-General or Minister. The implementation of the plan will be monitored and its success in achieving the identified objectives will be assessed.

The environmental impact of proposed activities will be assessed at all stages in accordance with established environmental assessment procedures. Where impacts are found to be unacceptable, activities will be modified in accordance with the plan policies.

This plan of management does not have a specific term and will stay in force until amended or replaced in accordance with section 73B of the Act. The plan applies both to the land currently reserved and to any future additions. Where management strategies or works are proposed for additions (or the existing area) that are not consistent with the plan, an amendment to the plan will be required.

### **Strategies**

- Undertaken an annual review of progress in implementing this plan of management.
- Undertake an assessment after 5 years of the effectiveness of managing the park in accordance with this plan and of the degree of success in achieving the plan's objectives and desired outcomes. Base the evaluation on the monitoring programs set out in this plan and any others that may be developed.

### Implementation Table

Priority	Activity	Plan Reference
<b>High</b>		
	Prepare a vegetation map.	4.2
	Distribute the Fire Operations Map to fire ground managers and volunteer brigade captains.	4.4
	Prepare and implement management trail maintenance programs to minimise soil erosion.	5.1
	Prepare and implement a control strategy and monitoring program for Serrated Tussock and Blackberry.	5.3
	Prepare and implement a control strategy, including research and monitoring program for the feral pig.	5.3
	Prepare and implement a control strategy and monitoring program for the fox.	5.3
	Erect a boundary fence around Yanununbeyan Nature Reserve.	5.3
	Participate in Eastern Capital City Regional BFMC meetings.	5.4
	Sponsor research into fire history, fire fuel levels and fire management.	5.4
	Prepare a Fire Management Strategy by 2006.	5.4
	Prepare and implement a plan for basic facilities and walking tracks at Apple Box Flat.	6.2
	Install a locked boom gate on Grose Trail to prevent unauthorised vehicle access beyond that point.	6.2
<b>Medium</b>		
	Implement recovery plans for threatened species.	4.2
	Identify and map critical habitat of threatened fauna based on wildlife records.	4.3
	Implement measures as necessary to protect the cultural values of Foxlow Flat.	4.5
	Record the Foxlow Flat hut and stabilise it.	4.5
	Identify and map all unnecessary trails and tracks and close to a dormant stage.	5.1
	Identify areas of erosion outside of trails. Monitor and treat if necessary.	5.1
	Seek the co-operation of neighbours and other stakeholders in implementing weed and pest animal control programs.	5.3
	Review introduced weed and pest animal control programs annually.	5.3
	Amend/update Fire Operations Map annually.	5.4
	Maintain close contact with RFS volunteer fire brigades through organisation of, and participation in Fire Field Days	5.4
	Install and maintain management trail name signs.	5.4

<b>Medium</b>	<b>(continued)</b>	
	Prepare an information brochure.	6.1
	Carry out regular law enforcement, targeting pig hunting, firewood collection and bushrock removal.	6.2
<b>Low</b>		
	Organise fauna surveys targeting threatened and significant species. Encourage surveys by research institutions.	4.3
	For essential trail work requirements and where there are no other options available, prepare a consent to destroy/salvage of Aboriginal sites on management trails.	4.4
	Record and assess historic heritage places in the park, other than Foxlow Flat.	4.5
	Maintain existing boundary breaks by keeping them clear of impeding trees.	5.1
	Prepare and implement a plan for basic facilities at Foxlow Flat if there is a need.	6.2
	Investigate any measure that will allow development of a legal public entry point for visitors to Yanununbeyan National Park.	6.2
	Implement any ESFM monitoring recommendations as prepared by the Service.	7
	Prepare a research prospectus.	7

### Legend

**High** priority activities are those imperative to achievement of the objectives and desired outcomes. They must be undertaken in the near future to avoid significant deterioration in natural, cultural or management resources.

**Medium** priority activities are those that are necessary to achieve the objectives and desired outcomes but are not urgent.

**Low** priority activities are desirable to achieve management objectives and desired outcomes but can wait until resources become available.

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**APPENDIX A – Birds Recorded in Yanununbeyan National Park, Nature Reserve and State Conservation Area.**

<b>Common Name</b>	<b>Scientific Name</b>
Pacific Black Duck	<i>Anas superciliosa</i>
Hardhead	<i>Aythya australis</i>
Australian Wood Duck	<i>Chenonetta jubata</i>
Australasian Grebe	<i>Tachybaptus novaehollandiae</i>
Great Cormorant	<i>Phalacrocorax carbo</i>
White-necked Heron	<i>Ardea pacifica</i>
White-faced Heron	<i>Egretta novaehollandiae</i>
Australian White Ibis	<i>Threskiornis molucca</i>
Brown Goshawk	<i>Accipiter fasciatus</i>
Wedge-tailed Eagle	<i>Aquila audax</i>
Brown Falcon	<i>Falco berigora</i>
Nankeen Kestrel	<i>Falco cenchroides</i>
Eurasian Coot	<i>Fulica atra</i>
Dusky Moorhen	<i>Gallinula tenebrosa</i>
Painted Button-quail	<i>Turnix varia</i>
Black-fronted Dotterel	<i>Elseyonornis melanops</i>
Masked Lapwing	<i>Vanellus miles</i>
Wonga Pigeon	<i>Leucosarcia melanoleuca</i>
Crested Pigeon	<i>Ocyphaps lophotes</i>
Common Bronzewing	<i>Phaps chalcoptera</i>
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>
Yellow-tailed Black-cockatoo	<i>Calyptorhynchus funereus</i>
Galah	<i>Eolophus roseicapillus</i>
Eastern Rosella	<i>Platycercus adscitus eximius</i>
Crimson Rosella	<i>P. elegans</i>
Red-rumped Parrot	<i>Psephotus haematonotus</i>
Fan-tailed Cuckoo	<i>Cacomantis flabelliformis</i>
Horsfield's Bronze Cuckoo	<i>Chalcites basalis</i>
Shining Bronze Cuckoo	<i>C. lucidus</i>
Pallid Cuckoo	<i>Cuculus pallidus</i>
Australian Owlet-Nightjar	<i>Aegotheles cristatus</i>
Southern Boobook	<i>Ninox novaehollandiae</i>
Powerful Owl	<i>N. strenua</i>
Barking Owl	<i>N. connivens</i>
Tawny Frog-mouth	<i>Podargus strigoides</i>
White-throated Needletail	<i>Hirundapus caudacutus</i>
Kookaburra	<i>Dacelo novaeguineae</i>
Sacred Kingfisher	<i>Todiramphus sanctus</i>
Rainbow Bee-eater	<i>Merops ornatus</i>
Superb Lyrebird	<i>Menura novaehollandiae</i>
White-throated Treecreeper	<i>Cormobates leucophaeus</i>
Brown Treecreeper	<i>Climacteris picumnus</i>
Superb Fairy-wren	<i>Malurus cyaneus</i>
Spotted Pardalote	<i>Pardalotus punctatus</i>
Striated Pardalote	<i>P. striatus</i>
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>
Striated Thornbill	<i>A. lineata</i>
Brown Thornbill	<i>A. pusilla</i>
Buff-rumped Thornbill	<i>A. reguloides</i>
White-throated Gerygone	<i>Gerygone olivacea</i>
White-browed Scrubwren	<i>Sericornis frontalis</i>
Weebill	<i>Smicornis brevirostris</i>

Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>
Red Wattlebird	<i>Anthochaera carunculata</i>
Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>
Fuscous Honeyeater	<i>L. fuscus</i>
White-eared Honeyeater	<i>L. leucotis</i>
Yellow-tufted Honeyeater	<i>L. melanops</i>
White-plumed Honeyeater	<i>L. penicillatus</i>
Noisy Miner	<i>Manorina melanocephala</i>
Brown-headed Honeyeater	<i>Melithreptus brevirostris</i>
White-naped Honeyeater	<i>M. lunatus</i>
Noisy Friarbird	<i>Philemon corniculatus</i>
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>
Mistletoebird	<i>Dicaeum hirundinaceum</i>
Eastern Yellow Robin	<i>Eopsaltria australis</i>
Scarlet Robin	<i>Petroica boodang</i>
Flame Robin	<i>P. phoenicea</i>
Spotted Quail-thrush	<i>Cinclosoma punctatum</i>
Eastern Whipbird	<i>Psophodes olivaceus</i>
Grey Shrike-thrush	<i>Colluricincla harmonica</i>
Rufous Whistler	<i>Pachycephala rufiventris</i>
Magpie-lark	<i>Grallina cyanoleuca</i>
Restless Flycatcher	<i>Myiagra inquieta</i>
Leaden Flycatcher	<i>M. rubecula</i>
Grey Fantail	<i>Rhipidura albiscapa</i>
Willie Wagtail	<i>R. leucophrys</i>
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>
Dusky Woodswallow	<i>Artamus cyanopterus</i>
Australian Magpie	<i>Gymnorhina tibicen</i>
Pied Currawong	<i>Strepera graculina</i>
Grey Currawong	<i>S. versicolor</i>
Australian Raven	<i>Corvus coronoides</i>
White-winged Chough	<i>Corcorax melanorhamphos</i>
Welcome Swallow	<i>Hirundo neoxena</i>
Silvereye	<i>Zosterops lateralis</i>

# Yanununbeyan National Park, Nature Reserve, & State Conservation Area

