

Edition 2

'South Australia's Mallee Parks are hidden from the major highways in the area. However, for those wishing to experience a uniquely Australian environment, the mallee is well worth a visit.'

This unique and very special part of our state has a network of more than a dozen stunning parks. These protected areas range in size from the huge 270 000 hectare Ngarkat Conservation Park to smaller areas such as the 3500 hectare Karte Conservation Park. This network combines with numerous privately owned patches of natural bushland to help conserve the ecologically rich mallee ecosystems.

South Australia's mallee region has a diverse range of fascinating and unique wildlife, from the secretive pygmy-possums living in the banksia heaths to the rare Malleefowl.

Ngarkat is home to more than thirty rare and endangered plant species. These plants help to produce a magnificent display of native wildflowers, particularly in spring.

The mallee region is steeped in history. The Ngarkat (pronounced Narr-kat) Aboriginal people originally inhabited the area, and evidence of their occupation still exists. The remnants of early attempts to graze stock in Ngarkat can also be found throughout the park. Among the intriguing historical sites are several ruins such as Box Flat and Bucks Camp. The restored wood-lined

Nanam Well highlights the difficulties of obtaining water in this area. Opportunities to explore this region are endless. Those who take the time to experience the sights and sounds of this special place will discover 'the secrets of the mallee'.

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Keeping our Future Alive

Protecting our Mallee

Much of our remaining mallee vegetation grows on fragile sandy soil. The plant cover helps stabilise the sandy soils. Damage to this vegetation can lead to shifting sands, eventually creating large blowouts. Please tread lightly on sandy tracks and trails.

Motorcycles

Trail bikes are an exciting way to travel through the mallee. However, for the benefit of the parks and your own safety the following guidelines apply:

- all bikes must be registered
- stay on the clearly marked tracks to avoid damage to vegetation
- avoid riding near campgrounds so that you do not disturb other park users.

We ask your cooperation in observing park regulations, which have been designed to ensure that you enjoy your visit while helping to conserve our natural environment.

Information is provided in all parks.



4 wd

Four-wheel Driving

Looking after your parks

The parks of the mallee provide opportunities for people to enjoy peaceful and remote places. Remember to carefully plan your trip so that your visit will be a safe and enjoyable experience. We recommend that you visit the mallee parks in the cooler months. During this time the temperature is much more comfortable, the fire danger is lower and the wildflowers are in bloom.

Driving in sand

You can help protect the environment by reducing tyre pressure as soon as you enter the park. You will also find it easier to drive in sand with tyres deflated to approximately 15-18 psi (105-120 kpa). Please remember to reinflate tyres prior to leaving the park.

The Border Track

From the north-east corner of Ngarkat Conservation Park, the Border Track is restricted to one-way access. You can only travel from north to south. At the junction of the Border Track and the Centre Track (approximately 29 km down the Border Track), the track reverts to a two-way system. The one-way system has been implemented to protect the sand dunes, track surface and vegetation.

The Border Track presents extremely difficult driving conditions. If you are not fully prepared, and supported by other vehicles, don't go. Due to the high fire danger and lack of emergency vehicle access, the Border Track is closed throughout the fire season. Please use an alternative route if travelling through the park during this time.

Moderate amounts of rain can flood the track for a number of days. To avoid damage to the track do not use it after heavy rain.

Soil conservation

As you travel through the mallee parks you will see a number of tracks that have restricted access. Some of these are for emergency access during fires. The soil on these tracks is fragile, and easily eroded. Damage to these tracks will affect the safety of emergency personnel and volunteers. Please stay on clearly marked tracks.

Keeping our Future Alive

Fire Restrictions



FIRE DANGER SEASON: Usually 1 November to 30 April (Check CFS hotline 1300 362 361)

Wood fires are not permitted throughout the fire danger season.

Total Fire Bans are broadcast as necessary from 6 pm during the fire danger season and apply for 24 hours, from midnight to midnight the following day. They are broadcast on radio and television and are printed in the morning press. Be aware that if extreme weather conditions develop suddenly, such as high winds and high temperatures a 'Total Fire Ban' could be announced as late as 7 am on the morning of the ban.

The Border Track is closed throughout the fire season. Please use an alternative route if travelling through the park during this time.

NON-FIRE DANGER SEASON:



Usually 1 May to 31 October

(Check CFS hotline 1300 362 361)

When lighting a camp fire please

remember:

- conserve fallen timber as this is important habitat for wildlife
- bring your own firewood or restrict collection of firewood to the firebreaks that run along the edge of some tracks
- do not cut standing trees
- use fire rings where provided
- always construct your camp fire at least four metres away from existing vegetation
- when a fire is alight you must stay with it, and ensure that you have enough water to put it out
- ensure fires are completely extinguished before leaving your camp site.

Fire Ban Districts

Upper South East

- Kelvin Powrie Conservation Park
- Southern part of Ngarkat Conservation Park
- Harding Springs Conservation Park

Riverland

Bakara Conservation Park

Murraylands

- Northern part of Ngarkat Conservation Park
- Carcuma Conservation Park
- Karte Conservation Park
- Peebinga Conservation Park
- Billiatt Conservation Park
- Lowan Conservation Park
- Swan Reach Conservation Park
- Marne Valley Conservation Park
- Ferries-McDonald Conservation Park
- Monarto Conservation Park
- Ridley Conservation Park
- Long Island Recreation Park

The National Parks Code

Help protect your national parks by following these guidelines:

- leave your pets at home
- take your rubbish with you
- observe fire restrictions, usually 1 November to 30 April. Check CFS hotline 1300 362 361.
 Gas fires only during this period except on days of declared Total Fire Ban. The parks are covered by the Riverland, Murraylands and Upper South East fire ban districts.
- conserve native habitat by using liquid fuel or gas stoves
- · camp only in designated areas
- respect geological and heritage sites
- keep our wildlife wild do not feed or disturb animals, or remove native plants
- keep to defined vehicle tracks and walking trails
- be considerate of other park users
- · generators and firearms are not permitted
- maximum speed limit in parks is 40 km per hour.

Thank you for leaving the bush in its natural state for the enjoyment of others.

The Honeydrippers

The banksias that grow throughout much of Ngarkat Conservation Park produce large amounts of nectar.

For many years the area has been the winter home of honeybees. A number of apiarists (beekeepers) place hives among the banksias for a few months each year.

As you travel around Ngarkat you may notice numerous unmarked tracks. These tracks are for servicing the beehives, and are not for public access.

The network of tracks is complex, and it is very easy to become disorientated. Apart from becoming lost you will probably disturb the bees and damage vegetation as you try to find your way out.



Watching Wildlife



The mallee holds a rich variety of wildlife from a myriad of insects through to the large Emus and Western Grey Kangaroos.

While much of the wildlife can be hard to see there are a few techniques that will assist you to view some of these elusive animals:

Always remember to:

- stay on the trail
- put the animals' welfare first
- move slowly and quietly
- observe from a distance
- use binoculars for a close-up view.

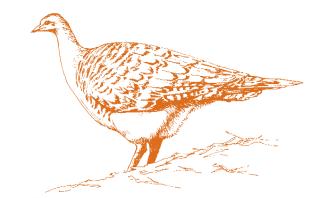
Home of the Malleefowl

Malleefowl, as the name suggests, live in the mallee areas of Australia and are rated as nationally endangered. Large patches of unburnt mallee in South Australian parks provide important habitat for these unique birds.

Unlike most birds, Malleefowl do not spend several weeks at a time sitting on eggs. Instead the eggs are buried in a sand and compost mound that produces enough heat to incubate the eggs.

They dedicate up to eleven months a year caring for the nest, yet take no interest in their young once they have hatched.

Given that it's such a long and intensive process to create the right conditions for the eggs to hatch, it would be reasonable to expect that the workload is shared between the male and female. In fact, this is not the case. The male digs and builds the mound, which is around one metre high and three metres wide. This is a complex and exhausting task. The right amount of compost has to be incorporated at the right depth. The male must wait for enough rain to wet the compost before building the upper layers of the nest. The female lays one large egg each week until she has laid 15-20 eggs. The male opens up the mound to receive each egg, then buries it to the right depth. He then regularly monitors and adjusts the nest temperature. This involves regularly 'testing' the sand at different depths, and scraping sand on and off the mound to keep it at a constant temperature.



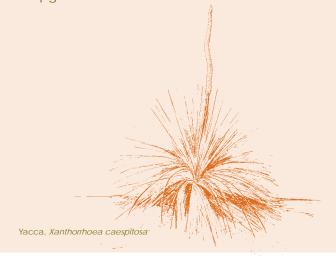
Malleefowl, Leipoa ocellata

The Department for Environment and Heritage in conjunction with community groups, monitors Malleefowl numbers and nest activity each year in parks and on private land. DEH also undertakes baiting programs to control foxes that prey upon Malleefowl and their eggs. Rabbit control is also conducted to remove competition for food.

If you would like to assist in protecting this very special Australian bird, please contact your nearest DEH office.

Tents, pegs and swags

Remember the last time you were in a park, looking for a camping area with shelter, shade and privacy? You found a spot and then wondered whether you were allowed to camp there. Camping is only permitted in designated camping areas. Camping areas are located in both Ngarkat Conservation Park and Karte Conservation Park. Camp sites are clearly marked with designated tracks into them. Caravan parks and facilities are available in nearby towns. Check the chart below to see what facilities are available at each campground.



Park Fees

Entry and camping permits are required in Ngarkat Conservation Park. Permits are available from the DEH office in Lameroo or any of the outlets listed below. Fees collected are used for conservation and to maintain and improve park facilities for your ongoing enjoyment.

Permits can be purchased from:

- Department for Environment and Heritage, Railway Tce North, **LAMEROO**
 - Phone (08) 8576 3690
- BP Roadhouse Pinnaroo, Mallee Highway **PINNAROO**
- Bordertown Visitor Information Centre, 43 Woolshed Street, **BORDERTOWN**
- Heart of the Parks Visitor Information Centre, Railway Station, Dukes Highway, TINTINARA, ph: (08) 8757 2220
- Keith Mobil, Dukes Highway, KEITH, ph: (08) 8755 1700

Campgrounds and Facilities

Campground	2WD access	4WD access only	Caravan access	Toilets	Picnic tables	Washing water	Barbecue	Nearby walking trail
Ngarkat Conservation Park Pertendi Hut Pine Hut Soak Comet Bore Box Flat Bucks Camp Rabbit Island Soak The Pines The Gums Doggers Hut	Dry weather only	•	•	•	•	•	•	•
Karte Conservation Park Karte	•		•		•		•	•

Please note - self registration bays are being introduced to Ngarkat Conservation Park over the next two years. Bays will be located at main entrance points, and will require exact money, as change can not be given.

Enjoying your parks

Mallee Trips

2WD DAY TRIPS AND CAMPING

Pertendi Hut











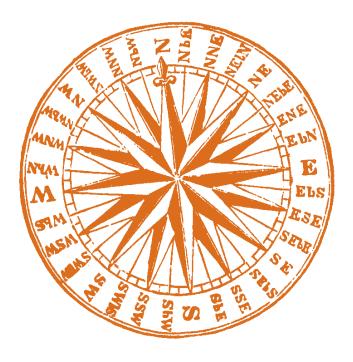


You will see part of the Ngarkat Conservation Park as you travel along the sealed Pinnaroo-Bordertown Road. Pertendi Hut is located on the eastern side of this road and is accessible by 2WD.



This historic hut was restored by the Friends of Southern Mallee Parks in 1997. A short walking trail introduces you to the surrounding mallee (see Pertendi Hike page 12). After the walk, enjoy a barbecue or picnic under the shady trees.

Camping is also an option for those with a little more time. You will see more of the park as you drive along the highway towards either Pinnaroo or Bordertown.



Pine Hut Soak (dry weather only)

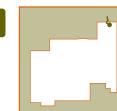












The gravel Rosy Pine Road heads south from the Mallee Highway just 6 km south-west of Pinnaroo. The entrance to Ngarkat Conservation Park is

15 km down the Rosy Pine Road. Just inside the entrance is Pine Hut Soak. There is 2WD access to the car park. You can make use of the shady picnic facilities and explore the network of walking trails that start opposite the campground. See page 16 for a map of the trails. You can enjoy a short one hour walk to the historic Nanam Well, or for those with lots of energy, try the 17 km return hike to Scorpion Springs.

Karte Conservation Park





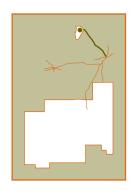


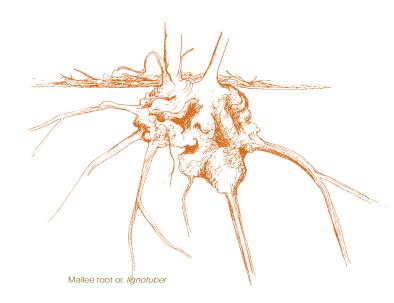






Travel north-west from Pinnaroo and visit Karte Conservation Park. Two-wheel drive access exists into the picnic and camping areas of the park. A short but challenging hike gives great views of the district. See page 10 for more details.





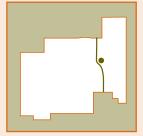
Enjoying your parks (cont.)

Mallee Trips

4WD DAY TRIPS AND CAMPING

Scorpion Springs

From Pinnaroo, travel down Rosy Pine Road to Pine Hut Soak. A short drive from here will take you to the Fishponds, Scorpion Springs and back to the Centre Track via Nanam Well (See page 16). A 5 minute walk along paths at



Nanam Well and Fishponds are good opportunities to stretch your legs.

Follow the Centre Track in a southerly and then westerly direction until you reach Pertendi Hut. Here you can use the picnic facilities, toilets or camp sites. The 2 km walk is very popular. From here follow the bitumen road north to Pinnaroo or Lameroo. Alternatively, driving south will take you to Bordertown.

Baan Hill and Box Flat

South of Lameroo is Baan (pronounced Bain)
Hill - a great area for a picnic, with tables and a toilet available. Further south in Ngarkat Conservation Park is Box Flat. This shady, natural



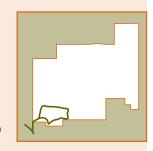
soak is popular for camping and picnics.

A 5 minute walk takes you to the Box Flat outstation ruins.

For those with limited time, you can double back towards Lameroo. If you have all day to spend you may wish to travel further south down Baan Hill Road and explore the sights around Mount Rescue. Just remember to leave yourself enough time to return, or alternatively, travel home via Tintinara.

Mount Rescue Loop

Starting from Tintinara, travel south-east along the Dukes Highway for 22 km. Turn north onto Snoswells Road and follow this until you reach the park. Your first stop is at Tyms Lookout (see page 13,14 for details). From here travel to Bucks Camp ruins (camping



area) and head north towards the Rescue Track. Drive east along Rescue Track to Mount Rescue. A short hike will give you magnificent views of the mallee from the top of Mount Rescue.

When you reach Baan Hill Track turn right and travel until you reach the park's southern boundary. Here a right hand turn will take you along the South Boundary Track to the Snoswells Road corner and back to Tintinara.

EXTENSIVE 4WD TWO DAY TRIPS AND CAMPING

Ngarkat Loop

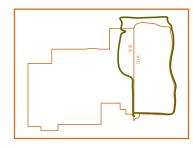
From Pinnaroo, head to Pine Hut Soak, then south down the Centre Track, joining up to the Border Track to travel the southern half of the Border Track. This section of the trip is challenging and requires a reasonable level of 4WD



experience. It is recommended that you travel with more than one vehicle. Head west along Shaugh Track, which will take you to the bitumen. Travelling south on the bitumen for approximately 15 km will bring you to the South Boundary Track. Keep on this track and camp at Bucks Camp or Rabbit Island Soak. The next day, try bushwalking at Tyms Lookout or Mount Rescue and then head north to Box Flat for lunch. Finally, travel back along the Baan Hill Road to Lameroo or Pinnaroo.

Big Desert Loop

From Pinnaroo, head to Pine Hut Soak, taking time to see Nanam Well and Scorpion Springs. Drive south down the Centre Track, and then onto the Border Track. Travel south beyond



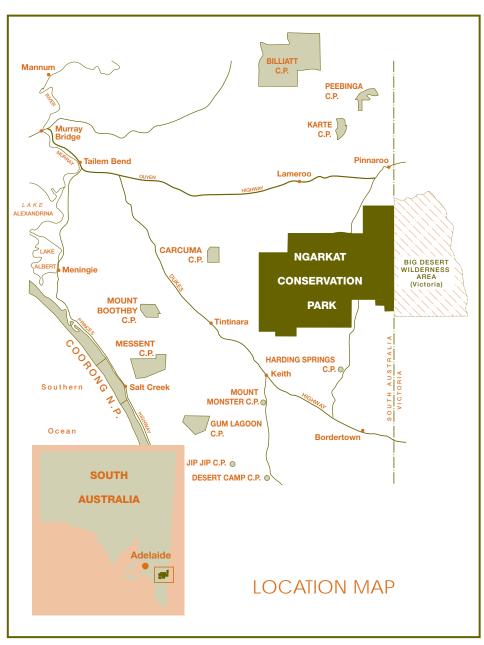
Red Bluff Track to the track heading east to Red Bluff itself. Camp for the night below the shadow of this impressive natural monument. Remember that you are now in Victoria so you will need to contact Parks Victoria regarding park permits and regulations.

In the morning, leave Red Bluff and travel east along the Red Bluff Track until you reach the Murrayville-Nhill Road. Turn left and travel north to Murrayville via Big Billy. Return to Pinnaroo via the sealed Mallee Highway.

WHAT IS MALLEE?

The term 'mallee' has several meanings. 'The mallee' can either be used to define a plant community or an area in south-eastern South Australia. Mallee is also used to describe a tree. This is a multistemmed eucalypt tree that grows from a bulbous root called a lignotuber. There are approximately twelve different species of mallee in Ngarkat.





POINTS OF INTEREST

History:

Box Flat Ruins Nanam Well Bucks Camp

Scenic Views:

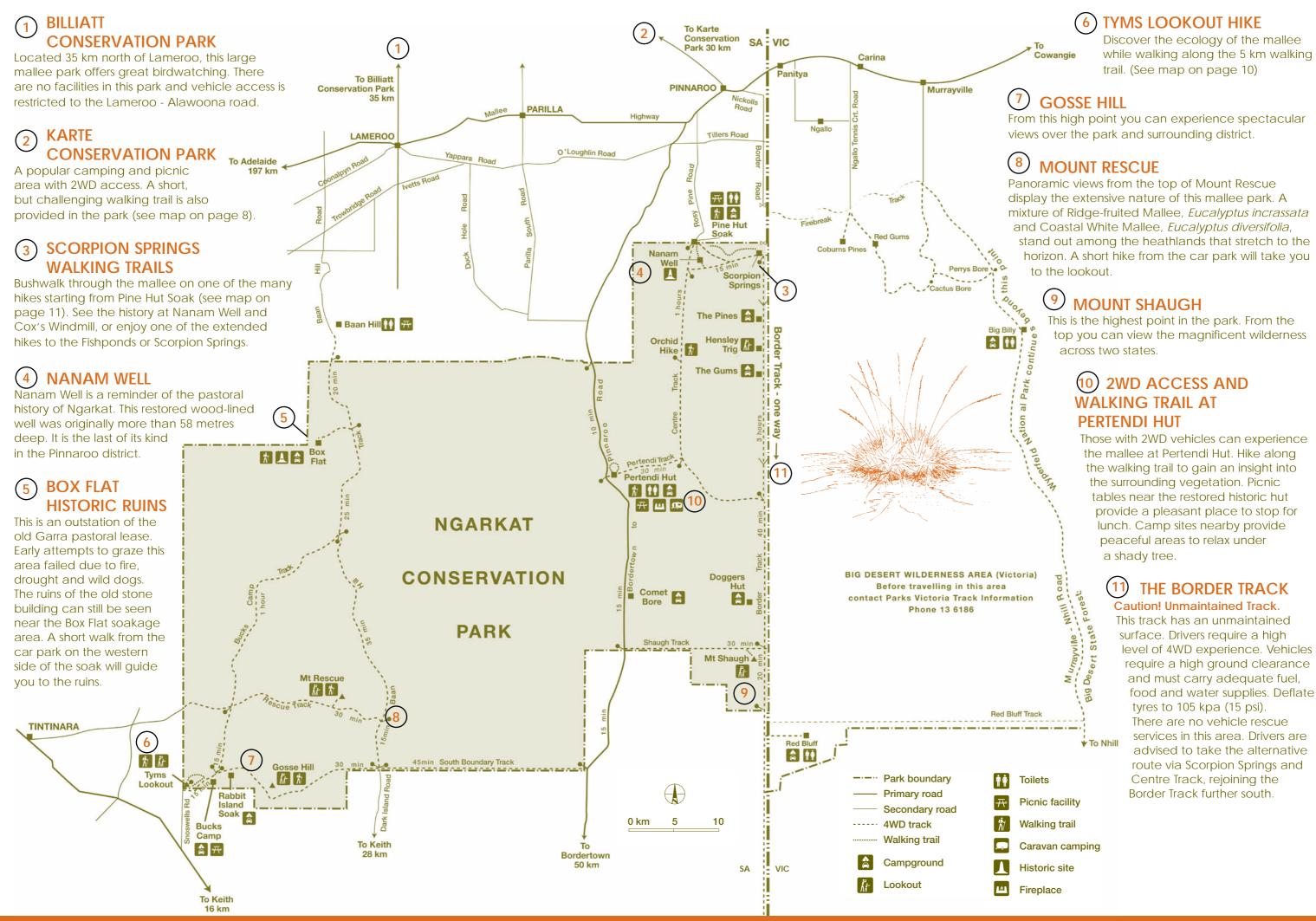
Mt Rescue Pine Hut Soak Gosse Hill Mt Shaugh

Birdwatching:

Box Flat Bucks Camp Comet Bore

Walking Trails:

Tyms Lookout Hike Pine Hut Soak to Scorpion Springs Hike Pine Hut Soak to Nanam Well Hike Pertendi Hike



Special places

Karte Conservation Park

Karte (pronounced Kartee) Conservation Park is located 30 km north-west of Pinnaroo. The word Karte is an Aboriginal word meaning thick, low scrub. The park protects 3565 hectares of mallee vegetation, primarily to provide habitat for the threatened Malleefowl.

+ 45 min 1.5 km return

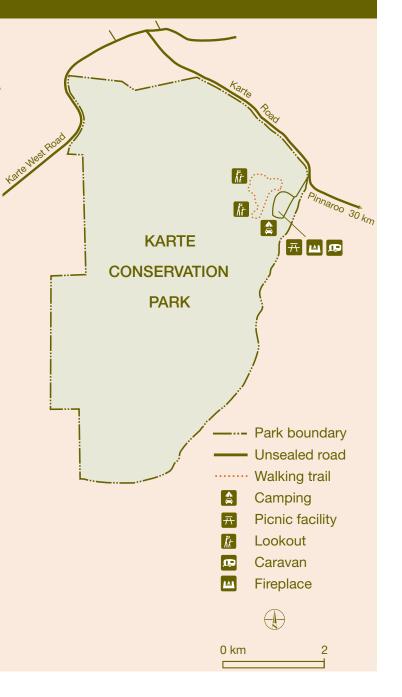
• some steep inclines
• irregular surface with loose, uneven base
• average level of fitness
• some hiking experience

In 1988, Pinnaroo Area School students, as part of a Bicentennial Project, constructed a walking trail. The Friends of Southern Mallee Parks adopted the trail and now help to maintain it.

Starting from the picnic area, this trail forms a 1.5 km loop and takes about 45 minutes to complete. There are some steep sections that require a reasonable level of fitness. Take time to read the signs along the trail that explain a little about the importance of the vegetation in the area. There are picnic facilities and camp sites located near the start of the trail.

Throughout the park there are a series of steep sand dunes rising up to forty metres. During the early part of the twentieth century much of the land in the area was cleared for agriculture. The area that is now Karte Conservation Park was left uncleared as the sand dunes were unsuitable for agriculture. As you follow the walking trail, you will be rewarded with views of the surrounding district. There are a number of smaller, isolated dunes with the original vegetation still present. This vegetation has been left to avoid erosion and loss of agricultural land.

The vegetation in the park provides habitat for the endangered Mallee Whipbird, and a number of rare orchids. More than forty species of bird call this park home.



Special places (cont.)

Ngarkat Conservation Park

Box Flat - a peaceful seclusion

Box Flat in the north-eastern corner of Ngarkat Conservation Park is a shady wetland area that attracted Aboriginal people long before European settlement. It is a very special location, which today enchants visitors with a feeling of peaceful isolation.

Box Flat is an ephemeral wetland, which means it is seasonally inundated with water during winter and dries out in summer. This area was a favoured camping site for the local Aboriginal people due to the presence of water and abundant wildlife. During the years of pastoral occupation from 1871 to 1894, Box Flat was an outstation of Garra Station that was managed by Alan Baker. The main enterprise was sheep grazing, however many difficulties were encountered due to the impacts of wild dogs and competition by rabbits. The main walls and chimney of the three-roomed, local stone hut are all that remain in the park today. Access to these ruins is via a short walk from the day visitor car park.



Box Flat ruins

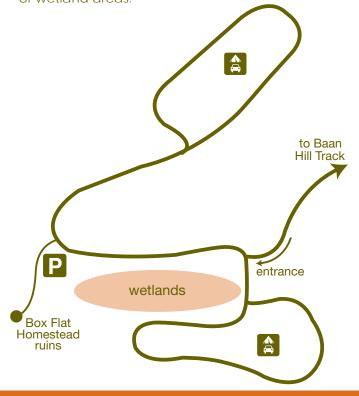
Today, Box Flat is a favourite camping spot for many local families. Several camping sites are available ensuring visitors a peaceful respite and a quality wilderness experience.

An oasis in the wilderness, Box Flat fulfils an important role in the ecology of the sensitive mallee environment. With the opening rains falling between April and June, this area is transformed into a lush haven for wildlife. The flush of new growth provides an important food source for grazing animals, and a breeding area for waterbirds.

Opportunities to observe Western Grey Kangaroos and Emus coming in to water, as well as a huge diversity of birdlife will delight nature lovers and expose a new facet of the mallee for first time visitors

Frogs are an important group of animals which rely on this wetland and its seasonal wetting and drying cycles. These fascinating amphibians burrow into the mud seeking refuge from the scorching summer heat. They emerge to lay their eggs in the mud after rain.

Tadpoles live in the flooded pools in winter and develop into frogs, thereby completing their lifecycle. The presence of frogs reflects the pristine nature of this ephemeral wetland ecosystem. Frogs are commonly used as an indicator species by ecologists worldwide to assess the health of an environment. Studies have shown that frogs are lacking from many ecosystems as a result of chemical use and modifications to flow regimes of wetland areas.



Stepping out

Select Y	Select Your Trail									
	Trail	Time*	Distance	Highlights	Trail Notes					
• even surfaced trail • suitable for small children	Box Flat Walk	20 min return	1 km return	Historic ruins of Garra outstation	A glimpse of the hard life experienced by early settlers. See page 11 for details					
HIKE MODERATE • some moderate inclines • irregular surface with loose, uneven base • average level of fitness	Pertendi Hike	45 min return	2 km return	A fascinating insight into mallee vegetation	Take time to read the signs along the way					
	Orchid Hike	40 min return	2 km return	Walk through native pine woodland that shelters delicate native orchids	Located 13 km south of Pine Hut Soak along the Centre Track					
	Mount Rescue Hike	20 min return	1 km return	Panoramic views over the park	Take your camera to capture the view					
	Gosse Hill Hike	20 min return	1 km return	Magnificent views	Located in SW corner of park, Remember to take your binoculars					
	Pine Hut Soak Lookout Hike	45 min return	2 km return	Views over the surrounding native pine covered hills	See page 16 for map					
+ HIKE HARD • some steep inclines • irregular surface with loose, uneven base • average level of fitness • some hiking experience	Tyms Lookout Hike	2 hr 30 min return	5 km return	Birdwatching, views and wildflowers especially in spring	Be well prepared. Take water, food, and wear sturdy shoes. See pages 13,14.					
	Mount Shaugh Hike	1 hr 15 min return	3 km return	Views to Victoria	A challenging walk to the top of Mount Shaugh					
	Pine Hut Soak to Nanam Well Hike	2 hr return	5 km return	A historic well restored with native pine	See page 16 for map					
	Karte Conservation Park Hike	45 min return	1.5 km return	Spectacular views over the district	A short but strenuous walk involving steep hills. See page 10 for details					
	Pine Hut Soak to Fishponds Hike	4 hr return	11 km return	An area of claypans locked between sand dunes. Fills with water throughout winter.	An extended bushwalk. Be well prepared with water, a hat and sturdy shoes. Cool weather only See page 15 for map					
	Pine Hut Soak to Scorpion Springs Hike	7 hr return	17 km	Peaceful trek through stringybark mallee and native pines	An extended bushwalk. Be well prepared with water, a hat and sturdy shoes. Cool weather only See page 15 for map					

^{*} Return time is generously estimated for an average bushwalking speed of 3 km/hr - allow extra time for resting and sightseeing.

Stepping out (cont.)

The closer you look...

As you travel around South Australia's great mallee parks you will notice subtle changes in the environment. However, the closer you look, the more you will discover.

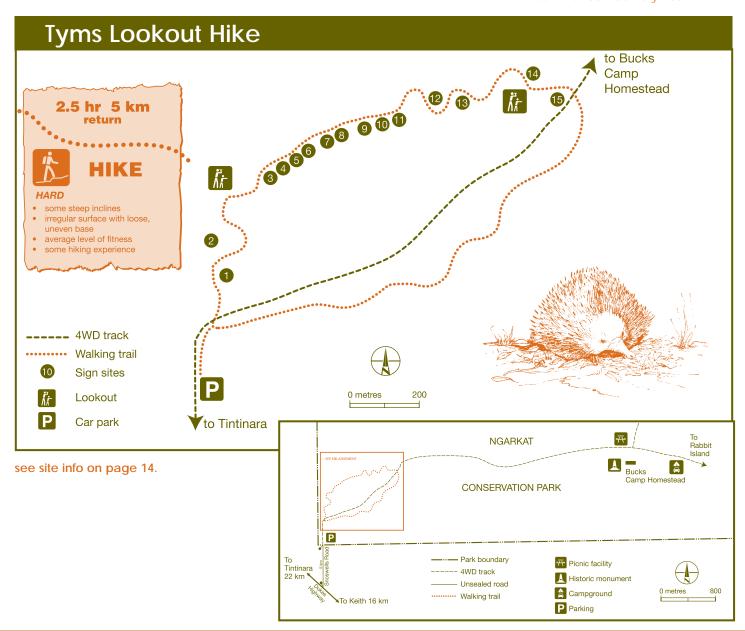
Don't leave the mallee until you have experienced one or more of the great walks or hikes available. By getting out of your vehicle and walking through this unique environment you will discover the intricate beauty of the area.

Watch for small lizards darting along the trails, or sit quietly and listen to the multitude of birdlife that calls the mallee home. Also enjoy the delicate wildflowers that are on display during winter and spring. Take a look at the chart on page 12 to choose the walking trail that suits your abilities and interests.



Be prepared when bushwalking:

- wear sturdy shoes, hat and sunscreen
- carry sufficient drinking water. Allow four litres of water per person per day. Do not rely on tanks or creeks in the park for drinking water.
- keep to the defined walking trails and follow the markers
- inform a responsible person of your proposed route and expected time of return
- weather conditions can change quickly, ensure you have appropriate wet weather clothing.
 Summer can be very hot.



Stepping out (cont.)

Tyms Lookout Hike

Keep this guide handy as you walk along Tyms Lookout Hike. As you come to each numbered post, on page 13, look for the corresponding explanation below.

- Site 1 If you thought that only humans built highways, think again! Crossing over the trail at several points are animal highways through the bushland. Kangaroos, Emus, echidnas and other animals use these tracks to move quickly through thick vegetation. Keep a look out and you may see some of their tracks in the sand.
- Site 2 The mallee contains endless colours, shapes and textures. Many eucalypts are found in the park such as the Ridge-fruited Mallee *Eucalyptus incrassata*, Narrow-leaved Mallee *Eucalyptus leptophylla*, and the trees surrounding you, the Brown Stringybarks *Eucalyptus arenacea*.
- Site 3 The Slaty Sheoak Allocasuarina muelleriana, is an unusual tree. It has separate male and female trees. Male trees have long, rusty pollen spikes, and female trees have small, fluffy red flowers, which develop into woody cones. Another unusual feature is the 'foliage', which is actually hundreds of segmented stems. The tiny leaves form a fuzzy ring around the joints between each segment.
- Site 4 Have a seat. Take some time to listen to the sounds around you. The mallee is home to many species of bird from the gigantic Emu to the tiny Weebill. Try to find the birds by listening to their calls. They may be on the ground, darting from shrub to shrub, perching in the tree canopy, or soaring high up in the sky.
- Site 5 Nectar offers an irresistible reward to the mammals, birds and insects, which pollinate mallee plants. The key to reaching the nectar is to have a mouth or body to fit the flower. Some nectar feeders, such as New Holland Honeyeaters have become specialists in collecting nectar.
- Site 6 The broom-like shrub around you is called Silver Broom *Baeckea behrii*. It is found in many areas of Ngarkat Conservation Park. During spring its white flowers add to the mallee's magnificent wildflower displays.

- Site 7 The Yacca Xanthorrhoea caespitosa, has almost as many names as it does uses.

 Also called the Grass Tree or Blackboy, its sap has been used in explosives, while local Aboriginals crushed the seeds to make flour.
- Site 8 Banksias are common throughout most of Ngarkat. These native plants produce many nectar rich flowers that turn into hard woody cones. The seeds within these cones are not released until the cone is burnt by a bushfire.
- Site 9 Eucalypt trees amazed early scientists. Instead of shedding their leaves, they shed their bark. Different types of bark have lent their names to different groups of eucalypts such as the stringybarks, ironbarks and bloodwoods.
- Site 10 The small shrub around you is the Green Tea-tree *Leptospermum coriaceum*. When it flowers, the landscape becomes carpeted in white.
- Site 11 Take care as you hike through this area to avoid the long, sharp needles of the Porcupine Grass *Triodia scariosa*. The long spines of the Porcupine Grass provide protection for mammals, lizards, birds and insects. Some of these animals are only found under triodia hummocks.
- Site 12 Take a rest and enjoy the view over the park.
- Site 13 Wildfires are often thought of as leaving a trail of death and destruction. However, many Australian native plants have ways of coping with fire and some, such as the banksia, rely on fire for its survival.
- Site 14 Early settlers attempted to farm the Ngarkat area, however, low nutrients and unstable soils meant that these attempts were unsuccessful. Parks such as Ngarkat conserve most of the remaining mallee vegetation in the area.
- Site 15 As you return to the car park, keep your eyes open for tracks and traces of animals that have passed before you. Footprints, tracks, droppings and scratchings are all signs that these animals are all around you.

Stepping out (cont.)

Scorpion Springs Walking Trail Network

This network of walking trails was established between 1992 and 1995 by Friends of Southern Mallee Parks. From the Pine Hut Soak car park choose one of the various routes to help you explore some of the park's natural and historic sites. In dry weather, Pine Hut Soak is accessible by 2WD from Pinnaroo along Rosy Pine Road. See page 16 for map.

Pine Hut Soak

A natural clearing among open eucalypt forest and native pine. When the area was under pastoral lease around the turn of the century, it was a sawpit site for native pine logs. This timber was used for building wells as it was rot and termite resistant.

Pine Hut Soak Lookout

For a panoramic view over the mallee take a hike from Pine Hut Soak, 1 km along the Fishponds trail to the lookout.

Nanam Well

A timber-lined well shaft originally over 58 metres (200 feet) deep. This is a relic of pastoral history. Important as the last surviving well in the Pinnaroo district. A 2.5 km walking trail links Pine Hut Soak and Nanam Well.

Cox's Windmill

Built by Tom Cox to water sheep. It is a relic of Scorpion Springs pastoral lease days (till 1960s). An ideal picnic spot. Return to Pine Hut Soak from the Fishponds via Cox's Windmill. An easy 400 metre walk south from the Fishponds brings you to the parking area on the 4WD track. From here Cox's Windmill is 1.5 km to the west.

Fishponds

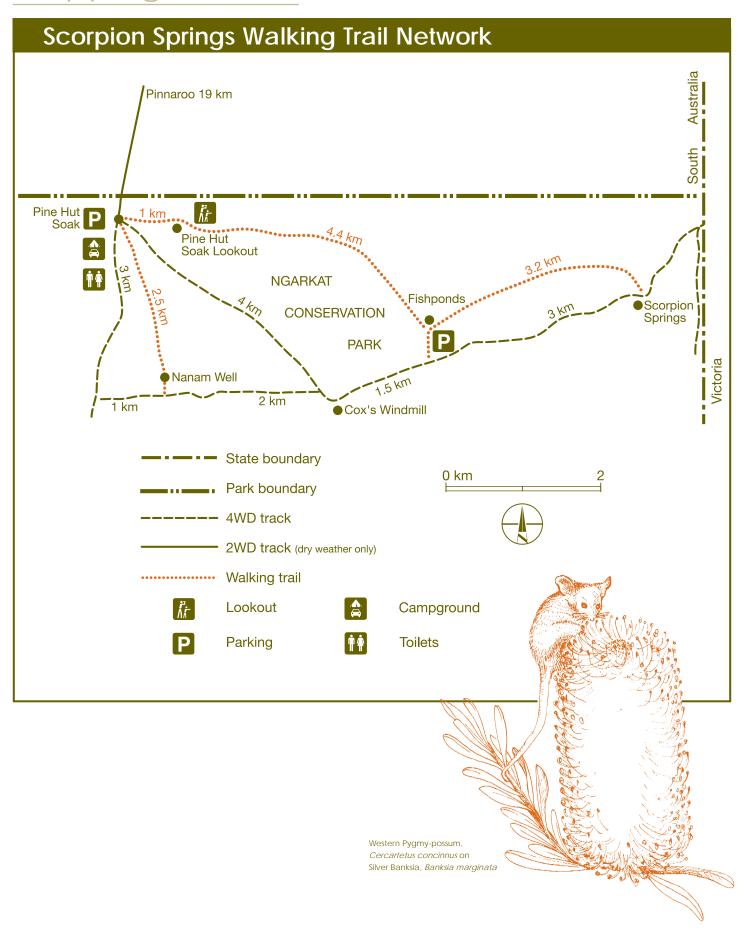
An area of interconnecting claypans between two sandy ridges. The claypans fill with water during the winter months. Surface water is rare in the mallee, so wildlife is attracted to this oasis. Look for the tadpoles in the ponds, or sit quietly and listen to the many birds calling from the surrounding woodland.

Scorpion Springs

A natural sandy blow-out. Visited by the Ngarkat Aboriginal people as they travelled through the area. Important waterhole for wildlife. Day visitors only.



Stepping out (cont.)



Around the campfire

y fascination with 'The Tiger Country' or 'The Desert,' as it was referred to by the locals some 50 years ago, began as a young boy. I climbed onto the roof of our house six miles north of Pinnaroo to watch the summer wildfires raging up the hills to illuminate the night sky. Great fun – nature's free fireworks! Some years later, I bought a scrub block to the south of Pinnaroo, cleared and developed it and built our house. With such a vast wilderness literally at our doorstep, and with the help of a strong riding horse, I spent many hours exploring and appreciating the special magic that this area can display. Being an avid reader I sourced early historical records of the area. For example, Somerset Maugham wrote 'it seems to me that the places where men have loved or suffered keep about them always a faint aroma of something that has not wholly died. It is as though they had acquired a spiritual significance, which mysteriously affects those who pass.' And so it is to anyone who takes the time to explore Ngarkat.

My first enquiry found me at the Mortlock Library searching for the earliest known reference to Scorpion Springs. In doing so, I came across this quote dated 1849 that describes the springs as a 'delightful permanent watering spot in the northeast of the south-east of South Australia!' This would have most likely been the surveyor Edward White on his way north while marking the state border. No doubt an idyllic spot to contemplate the trials and tribulations of surveying during the heat of summer.

Edward John Eyre was probably the first white man to visit the area. He was in the locality on 22 April 1838 to the south-east of Scorpion Springs searching for water. If he had kept going for one more day he would have been able to drink there. The pastoralist and explorer J.W. Beilby certainly did in 1849 and a splendid account of his travels and meeting with the border surveyors can be read in Kenyon's 'History of the Mallee'. One notable visitor in the summer of 1888 was John Shaw Neilson who, with his father, was building the border fence when their water supplies ran out. For two days they travelled along the border and reached Scorpion Springs just in time. The poet claimed that he drank fourteen pannikins of water to slake his dreadful thirst.

My great uncle, John Wurfel moved from Reeves Plains (near Mallala, SA) to establish a farm at Beulah in the Victorian mallee in 1891. Not long after he arrived, three of his draughthorses absconded and headed back north-west towards their old home. After he finished seeding, with the remaining horses he set off in search of his other horses. He found one at the shore of Lake Hindmarsh with fresh collar marks, but the other two were still heading north-west. He passed through the Pinnaroo area and eventually found two forlorn horses on the east bank of the Murray River at Bow Hill - on a direct line from Beulah to Reeves Plains - too afraid to swim the river. This would be an adventurous journey for us nowadays, but in those times his trip would not have been out of the ordinary. Really just another day at the office.

The greatest environmental impact of the area was the early pastoral occupation by the Hensleys. However, all that remains are the wells, which they constructed. Nanam Well is a good example. Many of the native wells were shored up to allow the shallow seepage water to collect, but would only have had sufficient water for infrequent travellers with their horses and dog. I had cause to remember the Hensleys when ploughing the paddock some 80 years later and finding the discs jammed with old eight gauge fencing wire, which they had used on their Pinnaroo Station lease.

An excellent source of information on the Scorpion Springs area is the notes written by our local historian, Allan Schiller. His notes are a good starting point for any person wishing to further their knowledge of this unique part of the Pinnaroo district.

The late Bertrand Russell always said that the only lesson man has learnt from history is that he never learns from history. I think it's our duty to at least make some attempt to learn as much as we can from our forebears and hope to have the wisdom not to repeat their mistakes.

Trevor Wurfel Friends of Southern Mallee Parks, Pinnaroo

PERHAPS WE CAN HELP YOU

FOR INFORMATION ON OTHER SOUTH AUSTRALIAN NATIONAL PARKS AND RESERVES CONTACT:

Department for Environment and Heritage Information line (08) 8204 1910

Murraylands Regional Office

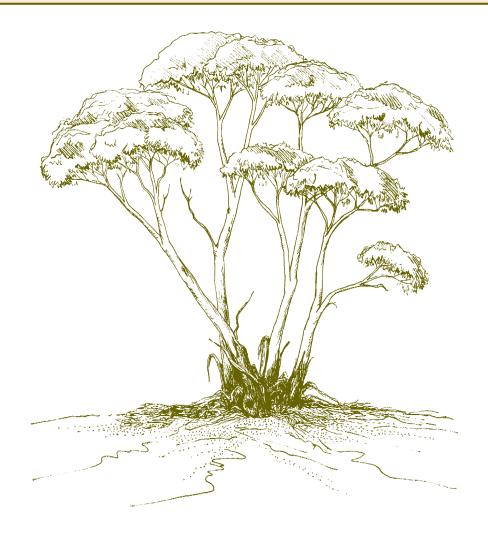
28 Vaughan Terrace, Berri SA 5343 Phone (08) 8595 2111

Mallee District Office

Railway Tce North, Lameroo SA 5302 Phone (08) 8576 3690 **EMERGENCY CONTACTS:**

Police Bordertown (08) 8752 1355
Police Pinnaroo (08) 8577 8077
Police Murrayville (03) 5095 2170
Police Lameroo (08) 8576 3010
Hospital Lameroo (08) 8576 3016
Fire Lameroo CFS (08) 8576 3000
Fire Bordertown CFS (08) 8752 1000

EMERGENCIES-PHONE 000



The illustrations of mallee flora and fauna used in this publication were generously donated by local artist and Friend of Southern Mallee Parks, Ann Angel. Department for Environment and Heritage thanks Ann for permission to use this excellent artwork.



