

Hattah Lakes Nature Discovery

Drive - Cycle - Walk Distance 6.5 km



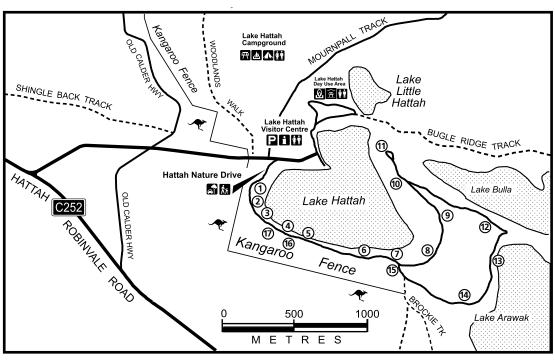




Hattah-Kulkyne National Park

Drive, cycle or walk this self-guided trail and enjoy some of the Mallee and Murray floodplain secrets found in this great National Park.

Ranger In Charge, Phil Murdoch



This self-guided nature drive is an excellent introduction to the parks of the Mallee. It gives you an insight into some of the natural features of the area and reveals some of the challenges this great landscape endures. Although designed as a drive, the trail is also an easy and pleasant walk. So, if you have the time, why not park your car and explore the Hattah Lakes Nature Discovery trail on foot or by bicycle. If you do take your car, please drive slowly and carefully, and stay on the track at all times.

1. Restoring the landscape

Look around and see the natural landscape. What appears natural is not always so. Before this area was declared a National

Park in 1960, sheep, cattle and rabbits heavily grazed the native vegetation cover. Bush fires and timber-cutting added to the impact and the vegetation cover in some areas was completely changed.

Restoration of native vegetation to its pre-1960's condition will take a life time, but works to restore its former values has begun.

2. Plant-life returns

The tall bushes found here are the native Slender Hopbush (Dodonaea angustissima). The Hopbush gets its name from the papery wings of its seeds, which are sometimes called 'hops'. The common names of many Australian plants often reflect their unique features.

For more information call the Parks Victoria Information Centre on 13 1963 or visit our website at www.parkweb.vic.gov.au



Native plants, like the Slender Hopbush, have reestablished on this sand dune as a result of the removal of stock, active campaigns to control rabbits and, more recently, kangaroo management.

3. Water and steam

On the left of the track stand the remnants of a Victorian Railway pump house. In the early part of the 1900's, the facility pumped water from the lake to the Hattah railway line to refill the boilers of steam locomotives. The original buildings were replaced by tin sheds in the 1940's, when the pumps were used to supply water to the township of Hattah.

Today, water is provided to Hattah and surrounding properties via pipeline from the Murray River.

4. Sand dune to flood plain

Notice a change in the vegetation? The track has left the sand dune and moved onto the flood plain where the clay soils are home to magnificent River Red Gums (*Eucalyptus camaldulensis*).

Further to the right are River Red Gums that are growing in an unusual position. It's likely that the seed from which these trees grew was deposited on the sand dune by a large flood, possibly more than a century ago. The seed germinated in the moist sand and the trees grew, fed by rainfall runoff captured by the dune.

River Red Gums, particularly the older trees around the lake edge, are important habitat as they often bear large hollows which are used by a variety of birds and arboreal mammals for shelter and nests.

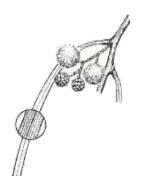


The hollows of old trees provide shelter and nests for a variety of animals, including the Sulphurcrested Cockatoo

5. Hardy inhabitants

On the shore of the lake grows a stand of Eumong (Acacia stenophylla), a species of wattle with long narrow drooping 'leaves' which are not true leaves but flattened leaf-stalks or 'phyllodes'. The absence of true leaves is a special adaptation by acacias to reduce the amount of water-loss due to transpiration.

Being able to reduce water loss is an important survival mechanism for both plants and animals that live in desert conditions.



Phyllodes are flattened leaf stalks which some Acacias have in place of leaves

6. Claiming new territory

To the left of the track are a few mature Hooked Needlewood (*Hakea tephrosperma*) trees. They are probably the remnants of a once larger stand of trees. The Hooked Needlewood is a member of the Hakea family, a group of plants renowned for their curious, but effective, methods of seed dispersal. Most Hakea have seed enclosed in impenetrable pods which open only after exposure to fire, heat or smoke. Once triggered the pod bursts open and the seed, bearing a variety of winged-appendages, float through the air, eventually settling on new ground away from the parent tree.

The young Hooked Needlewood trees on the left of the track are thought to be seedlings from the mature trees on the right.



Hakea seed pod

7. Unexpected treasure

Garland Lilies (Calostemma purpureum) which are rare in Victoria, can be found to the left of the track. These lilies will be most noticeable in late summer when they produce yellow flowers and grape-like clusters of berries.

Like the other herbaceous plants of the park, the regrowth of the lilies have been encouraged by the removal of grazing, along with the control of weeds which would otherwise prevent their growth.

8. "Old Lady" Buloke

Just off the track to the right, is an old pine-like tree called Buloke (*Allocasuarina luehmannii*). The Buloke is one of the Casuarina (Sheoak) family, a group of trees with highly modified leaves. The "needles" are actually branchlets and the leaves are minute scales or 'leaf-teeth' carried in rings on the branchlets.

Unlike most flowering plants, members of the Sheoak family have separate male and female flower-parts. This tree is a female, with flowers that develop into woody cones that house the seed.

As a result of grazing by rabbits and kangaroos and low seed fertility of this species, there are few young Bulokes in the park. A number of fences have been erected through the park to help preserve the threatened Buloke Woodland plant community from grazing damage from kangaroos and rabbits.

9. Undoing the damage

The large, almost bare, expanse on the right of the track probably developed in the following way:

- The original cover of native plants was overgrazed by sheep and rabbits in the early days of non-indigenous settlement. The disturbed vegetation loosened the sand top soil and sand blown by the wind helped cut down the remaining vegetation
- The clay subsoil was eventually exposed and further eroded by rainwater run off. Salt concentrated at the surface through upward seepage and evaporation, and the area became a wasteland
- Restoration began in 1960 when the Hattah Lakes National Park was created. Grazing stock was removed and rabbits gradually brought under control. Salt-tolerant plants began to re-colonise the area
- In the 1990's bare areas were ploughed to trap moving soil and seeds, assisting in the revegetation process
- Regrowth is evident, but recovery is slow in such a harsh environment.



Ducks and other waterfowl frequent the lakes when water is present

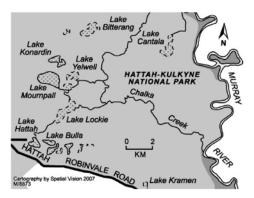
10. Ramsar Wetlands

Hattah Lake, on the left, is one of twelve lakes located in Hattah-Kulkyne National Park that are listed under the Ramsar Convention. The convention is an international agreement, signed in Ramsar, Iran, in 1971, which aims to conserve wetlands of international importance.

11. The Hattah Lakes system

Beyond the peg you can see the channel which connects Lake Hattah with Lake Bulla. In 1956, a small weir was built at the northern end of Lake Hattah to prevent water from flowing back into the Murray River when flood waters receded.

The Lakes in the Hattah Kulkyne system fill via Chalka Creek when there is a major flood in the Murray River. This has only occurred a few times since the record flood levels of 1956, and include the years 1960, 1964, 1966 and on several occasions in the 1970's and late 1980's. Inflows may be frequent enough to keep water in the system for years on end, but often the lakes dry up completely.



The Hattah-Kulkyne Lake system

12. Flood legacy

The grove of Black Box (*Eucalyptus largiflorens*), saplings along the track at this point was created by the record floods of 1956. Black Box trees grow higher up the slopes (and further away from the lakes) than River Red Gum and indicate the height of floodwaters in the past. Only one or two of these seedlings need to survive to maturity to ensure the continuation of the forest here.

Further along the track, on the right, are smaller Black Box trees. These trees germinated here after the 1973 flood.

13. Tolerating salt

To the right of the track grow glassworts and other low-lying succulents that store water in their fleshy leaves. The glassworts are salt-tolerant and soil stabilisers, playing an important role in holding soil together and minimising erosion. Over time the glassworts and other soil stabilising plants help to improve soil fertility by adding nutrients

For further information

Parks Victoria Information Centre Call 13 1963 or visit the Parks Victoria website www.parkweb.vic.gov.au

Visitor Information Centres

Mildura Visitor Information (Alfred Deakin Centre) 180-190 Deakin Ave Mildura Vic 3500

Tel: (03) 50214424

Email: tourism@mildura.vic.gov.au

Caring for the environment

Help us look after Hattah Kulkyne National Park by following these guidelines:

Please take rubbish away with you for recycling & disposal.

Camp only in designated campgrounds or at least 20metres from the water line of the lake.

Dogs and other pets are not permitted in the national park.

All native plants & animals are protected by law. Please do not disturb them in any way

Vehicles, including motorcycles and bicycles, must not be driven off formed roads. Drivers must be licensed and vehicles registered.

The use of chainsaws is prohibited in the national park.

Fires may only be lit in the fireplaces provided.

No fires (including gas or fuel stoves in tents) may be lit on days of Total Fire Ban. Hattah-Kulkyne National Park is in the North Western

Total Fire Ban District.

It is your responsibility to know if it is a day of Total Fire Ban. If in doubt call the Victorian Bushfire Information Line: 1800 240 667.

Mobile Phones

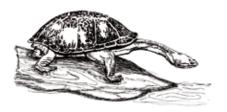
CAUTION: You may not be in network range in some areas of the park. If not in range you can connect to Police, Ambulance or CFA - key in 112 then press the YES key

through decomposition. Eventually soil condition is improved allowing less-tolerant plants to establish.

Among the few plants that thrive here is the rounded Noonflower (*Disphyma clavellatum*), a staple food of the Shingleback Lizard.

14. Black Box Waterhole

At this location the track passes a stand of Moonah (*Melaleuca lanceolata*) as it skirts around Black Box Waterhole. The waterhole is a shallow clay-pan that retains water very well, filling quickly when it rains. Herons, cormorants, ducks and other waterfowl, along with frogs and tortoises appear as if from nowhere when rain arrives.



Rainfall brings life to the otherwise arid looking landscape

15. Rejoin the two way section of the trail at this point

16. Return of the saltbush

In this area the dominant low-growing shrub with succulent leaves is Ruby Saltbush (*Enchylaena tomentosa*). This native plant has spread rapidly in recent years as a result of reduced grazing pressure. The red berries of the saltbush were an important food source for the Llatji- Llatji people and were also eaten by non-indigenous settlers.

17. Canoe tree

Take a stroll down to the 'canoe tree' on the bank of the lake. It is possibly a century or more since Aboriginal people cut away the living bark of the tree to make their canoe, leaving the characteristic 'canoe tree' scar. Smaller scars can also be seen on other trees along the river system. These were created from bark cut away to make dishes called 'coolamons' to carry food and, sometimes, infants.

A home, a meal, a shelter

This concludes the Hattah-Kulkyne Nature Discovery trail. As you've travelled around, you have visited the homes of many animals, even though you may not have seen them. Did you know that even the logs and dead branches scattered on the ground form important habitat and are a link in the food chain for a wide range of species including insects, other invertebrates, reptiles, birds and small ground-dwelling mammals? This is why we ask visitors to use fire wood sparingly and not to collect on this trail, to help ensure there will always be habitat for our unique and precious Australian fauna

Please note: To conserve important habitat, please do not to collect fire wood from around the campground areas or inside the part of Hattah-Kulkyne National Park which is surrounded by the kangaroo-proof fence.

Caring for Country

Indigenous Australians have been connected to this landscape for tens of thousands of years. The ancestors lived in harmony with the environment and nurtured a deep and abiding respect for Country. Caring for Country continues to be an integral part of present-day Indigenous social, spiritual, economic and physical life. All Australians share a responsibility to create a community that shares and values this respect for our land.



Spoonbills, wade through shallow water filtering food via their broad spoon-shaped bill.

If you have enjoyed this drive you might like to try the Hattah Nature Walk or one of the other walks in this park (see the Hattah-Kulkyne National Park/ Murray-Kulkyne Park visitor guide for more information). There are other self-guided walks and drives in National Parks throughout Victoria, including neighbouring Wyperfeld and Little Desert national parks.

PLEASE RETURN THESE NOTES TO THE BOX PROVIDED FOR OTHERS TO USE. THANK YOU.