





Serpentine

Serpentine National Park, best known for the waterfall that cascades over a sheer granite face, abounds with the scenic beauty of ancient landforms and verdant forests. These features, together with its nearness to Perth, have attracted day visitors for almost a hundred years.

A draft management plan, prepared by the Department of Conservation and Land Management, will help ensure that the plants, animals, landscapes and cultural heritage that have attracted so many people in the past, remain for generations of future visitors.



by David Gough, Paul Brown,
David Lamont and Wayne Taylor

The Serpentine National Park is located on the Darling Scarp, about 30 kilometres inland from Rockingham and 50 kilometres south-east of Perth. The scarp is the titled western edge of a huge ancient plateau that is the foundation of much of the south-western part of Australia. It is composed mainly of granite, with some dolerite, gneisses and quartzites up to 2 500 million years old. An overlying layer of laterite rock formed about 10 million years ago, when wetter and more humid conditions leached minerals from the soil to form an insoluble hard crust.

Set in a naturally beautiful cleft at the foot of the scarp, the park stretches up the steep slopes of the Serpentine River valley past a sheer face of granite polished smooth by the rushing waters. Here, in winter, the white waters of the Serpentine River cascade into a swirling, rock-rimmed pool beneath. Serpentine Falls has been one of the main focal points of the area since the early European settlers came in droves to swim, picnic and enjoy a day out in the bush.

ABORIGINAL HISTORY

But long before European settlement, Nyoongar Aborigines of the *Whadjuk* and, probably, *Bindjareb* tribes hunted and camped in the woodlands between modern-day Perth and Pinjarra. Like most Nyoongars of the south-west, they used fire-sticks to burn parts of the forest, and over thousands of years, the scrub fires created some areas of open forest and patches of grassland.



The Serpentine River, the surrounding hills and the coastal plain wetlands provided the Nyoongars with fresh water, fish and other food resources such as tortoises, lizards and birds. Fish traps were frequently constructed on the river downstream of the falls, and where it flows through a chain of small lakes on its journey to the Peel Inlet. Each year, at the start of the winter rains, tribal groups from the north, east and south would gather near Barragup to catch the fish that were driven downstream by the fast flowing waters.

Many of the streams flowing off the scarp supported family groups during different seasons of the year. The two streams that flow into the Serpentine above the falls were named *Carralong* and *Gooralong*, and an area between them, later known as Spencer's Flats, was reputed to have been used for

One of the newly constructed footbridges on the realigned Kitty's Track walktrail along Gooralong Brook.

Photo – Dennis Sarson/Lochman Transparencies

corroborees. Mr Frank Baldwin, now in his 70s, has a property adjoining Falls Road and he remembers, as a child, seeing Nyoongars clambering among the Scarp rock digging out the fleshy tubers of warrine (*Dioscorea hastifolia*).

For the Nyoongars, life in the hills and on the plain was generally good; they had sufficient food and resources for their needs and they moved about freely from season to season. But with the coming of the settlers, their lives changed dramatically.

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Main: Aerial view of Serpentine Falls, one of the major attractions of Serpentine National Park.

Photo – Dennis Sarson/Lochman Transparencies

Inset: The splendid fairy-wren is one of several birds commonly seen around the picnic areas.

Photo – Babs & Bert Wells/CALM

Right: Spencer's Cottage—once home of one of the area's earliest settlers—is listed on the Register of Heritage Places.

Photo – Dennis Sarson/Lochman Transparencies



EXPLORERS & SETTLERS

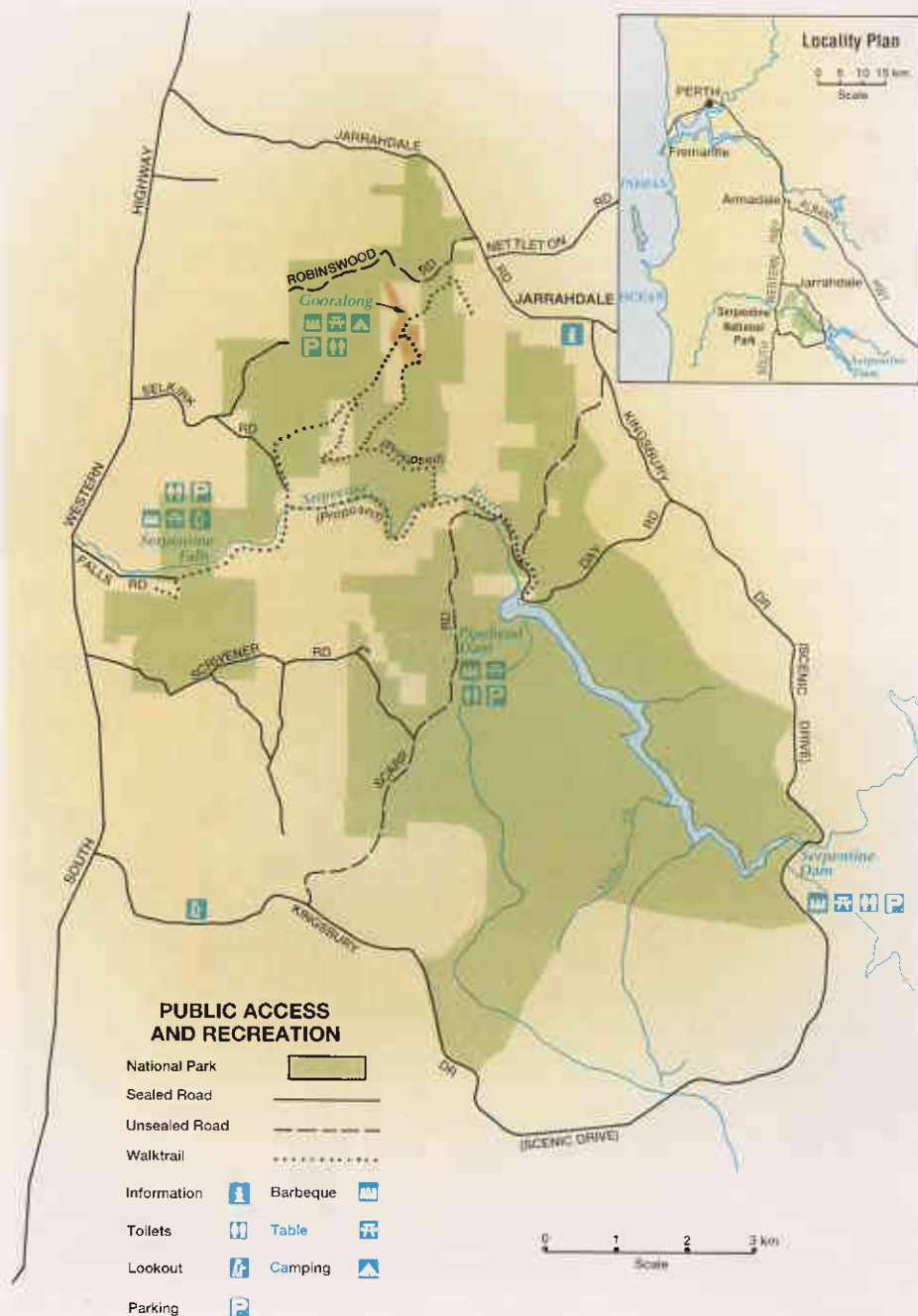
In late July, 1829—two months after the Swan River settlement was founded—Captain Mark Currie led a party, which included botanist James Drummond, ‘to ascertain whether any river ran’ in the area south-east of Mangles Bay. They sailed south on *HMS Challenger* and, leaving the ship on 30 July, headed inland to camp overnight at Tamworth Hill. The following morning, after walking some three miles [4.8 km], the party came across a river ‘...of some magnitude, but could not pursue it to its mouth, owing to a man knocking up with fatigue’ [diary of Jane Currie]. Currie’s journal does not mention the river being named. The first use of ‘Serpentine’ to refer to it appeared on a map published for the *Journal of the Royal Geographic Society* in September 1832.

Much of the land on the coastal plain between Lake Cooloongup and Pinjarra was originally given over to Thomas Peel in late 1829. His plan, which was supported by the then Governor Stirling, was to colonise the area with 400 settlers brought over from England. The scheme, although apparently sound, was fraught with disaster. (See also ‘Yalgorup: A Place of Lakes’, *LANDSCOPE*, Autumn 1995.)

CLEARING, CUTTING & MINING

Between 1850 and 1865, a new wave of settlers began to establish themselves at Pinjarra and along the Serpentine and Murray Rivers. They cleared areas of land near permanent water, built makeshift cottages and began farming for their own supplies. In the mid-1850s, Joseph Batt built a large, water-powered flour mill at Gooralong Brook and a smaller wheat gristing mill at Carralong Brook. In 1860, the Spencer family bought the Carralong Brook property and built ‘Spencer’s Cottage’, which still remains and was placed in the Register of Heritage Places in October 1994.

In 1870, a lease was negotiated to cut timber from the 100 000-hectare Jarrahdale Timber Concession, part of which is now included in the eastern section of the park. Over the next 50 years, a number of mills and a network of wooden railways were built. Very soon, large quantities of timber were being taken from the Serpentine valley—in fact,



in the booming timber days, Jarrahdale was the largest centre of population between Fremantle, Bunbury and York.

Also around that time, part of the area now within the park was mined for gold and silver, although there is doubt as to whether the reported gold strike was genuine. Remains of the old mines persisted until 1981, when several open shafts were filled because they were considered dangerous.

EARLY RESERVES

By the 1890s, so much land had been cleared for farming, cut for timber or mined, that people began to realise the native vegetation and animals were disappearing. Three years after its

formation in 1891, the Western Australian Natural History Society petitioned the State Government to set aside a reserve to protect native vegetation, wildflowers and animals. In February 1894, the State’s first Reserve for Fauna and Flora—160 000 acres between Pinjarra, North Dandalup and Bannister—was proclaimed. But it didn’t take long before there were demands to reduce this area to provide more timber.

Surveyor Absalon visited the area in 1902 and reported that the Reserve was entirely unsuitable. He recommended it be cancelled and opened up for orchard blocks and timber leases. Despite local protests, the reserve was cancelled in 1911. However, Absalon also visited the

Serpentine Falls area and commented on the wide variety of flowers in this natural beauty spot. He recommended a 'permanent caretaker' be placed at the falls to preserve the flora and protect it from the 'trainloads of excursionists who visit the Serpentine Falls every flower season'. The falls themselves were already in a Reserve, gazetted for public recreation in August 1900, but the area was subsequently enlarged as three other nearby blocks were set aside as parklands in 1903. Control and management of the falls area was handed to the State Hotels Department in November 1914, and the Serpentine-Jarrahdale Roads Board took over responsibility in 1922.

Over the next few decades, various blocks of land were added and the area was managed by the State Gardens Board, renamed National Parks Board in 1956. A year later, all the Serpentine Reserves were vested together in the board and renamed Serpentine National Park.

By October 1961, some development had begun in the park—change-rooms, toilets and barbecue facilities were constructed at the falls. Although there had been a caretaker since the mid-1950s, the first ranger was not appointed until 1964. Even then, he was only on duty part-time. A full-time ranger was appointed in 1976, when the National Parks Board became the National Parks

Authority. A new path and elevated walkway were constructed in 1980, to provide easier access to the falls and pool, and in 1988, the size of the park was increased to 4 500 hectares.

RECREATION

There are now two main recreation areas with visitor facilities at Gooralong and at the Serpentine Falls.

Vehicle access to Gooralong is not possible from the national park entrance off South-Western Highway. Instead, it is reached from Jarrahdale by following signs to Gooralong picnic area. Wildlife abounds here, with western grey kangaroos and several bird species to be seen. There is a large shaded picnic area and campground in an open grassed area, surrounded by jarrah and pine forest. Several walktrails begin here.

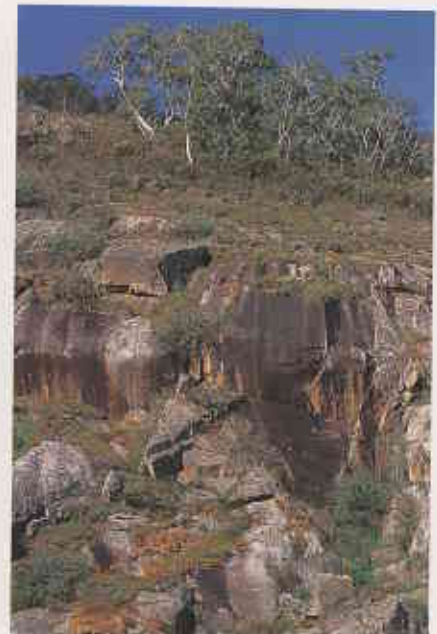
Kitty's Track provides a gentle two-hour walk down the Darling Scarp into the Gooralong Brook valley and back.



Left: The picnic area near the falls is particularly popular with families.
Photo – Dennis Sarson/Lochman
Transparencies

Below left: Wilson's grevillea thrives in the jarrah forest, especially after fire.
Photo – Babs & Bert Wells/CALM

Below: The Darling Range ghost gum is geographically restricted, but can be seen in areas above the falls.
Photo – Dennis Sarson/Lochman
Transparencies





Visitors can get a good view of the Serpentine Falls and river from the viewing platform.

Photo – Dennis Sarson/Lochman Transparencies

The track has recently been realigned closer to the brook and new wooden platforms and bridges have been built. You cross the brook at a small gauging weir and return to the carpark through jarrah forest and pine plantation. This part of the trail provides good views to the ocean. If you're short of time, you can cross the brook about halfway down to the gauging weir and return along the other bank. But if you have a few hours to spare, follow the wilderness track from the gauging weir along the gorge to the Serpentine Falls.

No camping is allowed at the falls, but there are two trails. The Falls Trail is a short 500-metre interpretive trail that leads to the falls and is accessible by wheelchair. The longer Baldwin's Bluff Nature Trail runs uphill from the picnic area along a small tributary of the Serpentine River to the top of a 180-metre granite outcrop. From here you can clearly see the falls to the east—especially picturesque in late afternoon as the sun goes down. Looking out over the coastal plain, you can clearly see the tall buildings of Perth's city skyline to the north-west, Rockingham to the west and the ocean near Mandurah a little farther south-west.

There are also plans for a new walktrail to be constructed between the Serpentine Falls and the Pipehead Dam.

Away from the main picnic areas, walkers can explore fire breaks and management tracks to discover some remote and beautiful parts of the park. If you decide to explore some of these less visited areas, be sure to let the ranger know where you are heading and what time you are likely to return. And don't forget to tell him or her when you get back!

The most comfortable time to go walking in Serpentine National Park is from late autumn to mid-spring, when temperatures are lower and fewer people visit. But its closeness to Perth makes it an attractive park at any time of the year, providing walking, wildlife observation, picnicking and camping. During summer, the number of visitors rises considerably, but in winter and spring, there is no doubt the main attraction is the stunning displays of wildflowers.

PLANTS

The best time to see the wildflowers is from July to November, with September presenting the finest displays; when the hillsides and wooded areas become a blaze of colour.

Jarrah, marri and wandoo are the most common species of tree to be found within the park and they occur together and as discrete communities. But the park is important for two geographically restricted tree species. The Darling Range ghost gum (*Eucalyptus laeliae*), is restricted to an area between Darlington and Harvey, and can be seen in the north of the park above the falls. It is generally associated with drainage lines near granite outcrops. The salmon white gum (*Eucalyptus lane-poolei*) is found at the foot of the scarp. Wilson's grevillea (*Grevillea wilsonii*) is a small shrub with brilliant red flowers that thrives in the jarrah forest, particularly after fire. Tucked away in various gullies along the hillside, from where streams feed into the Pipehead Dam, are tall tree ferns. These introduced plants give a rainforest feel to the sometimes deep and mysterious gullies.

The slopes above the falls are covered

in spindly grevillea (*G. endlicheriana*), which is restricted to the scarp between Bindoon and Serpentine. From July to November, white flowers are held about a metre above the main plant on almost leafless stems. Coral vine (*Kennedia coccinea*), with its brilliant red-orange flowers, rambles over other plants in the jarrah forest.

Granite outcrops support diverse and often unique plant communities. They act as water catchments for fire-sensitive ephemeral or resurrection plants such as pincushions (*Borya* spp.). These clumpy perennial herbs are prickly with white flowers between August and October. As moisture is depleted, the plants appear to die, becoming brittle and turning bright orange. After the first rains, they 'resurrect' and flower again.

Donkey orchids (*Diuris* spp.) are often found around the granite outcrops, with spider orchids (*Caladenia* spp.) and greenhoods (*Pterostylis* spp.) being abundant in other areas. Trigger plants (*Stylidium* spp.) form pink carpets in spring.

Sundews are common in the park, with the giant sundew (*Drosera gigantea*) being found south of Scrivener Road. Cut-leaf dryandras (*Dryandra praemorsa*), with their yellow flowers, are common on the rim north of the falls. Other dryandras include pingle (*D. carduacea*), a large shrub similar in appearance to parrot bush (*D. sessilis*) and a favourite with black cockatoos, and couch honeypot (*D. nivea*), a small plant with fern-like leaves and large orange flowers.

Although there have been no formal flora surveys of the area, one threatened plant—the rare summer pimelea (*P. rara*)—and the priority listed *Acacia horridula*, have been found in the park.

ANIMALS

The park abounds with birdlife. Often seen are red-capped parrots, western rosellas, red-tailed and white-tailed black cockatoos, and yellow robins. Red-eared firetails are sometimes seen below the falls. In all, some 70 of the 100 species known to occur on the Darling Scarp



Left: The fat-tailed dunnart is one of several small mammals believed to inhabit the park.

Photo – Jiri Lochman

Below left: Red-capped parrots provide flashes of colour as they shoot about in the forest and woodland areas of the park.

Photo – Babs & Bert Wells/CALM

Below right: Orchids, such as these jug orchids, are abundant throughout the park.

Photo – Babs & Bert Wells/CALM



have been recorded in the park. Parrots, owls and tree-martins require hollow trees for nesting. Smaller bush birds such as fairy-wrens and robins thrive in the dense thickets of hakea and grevillea found around the granite outcrops. Creek and streamline vegetation not only provides additional habitat for the wrens and robins, it's also important for the grey shrike-thrush and red-eared firetail, which feeds on sedges and introduced grass (*Paspalum* sp.).

Little eagles and wedge-tailed eagles are commonly seen in summer, soaring on thermals high above the scarp. Owllet nightjars can be seen by

patient observers near the Gooralong camping area. These little birds with big eyes and even bigger mouths sit motionless on paths and tracks at night, allowing you to approach quite close.

Yellow robins, white breasted robins, scarlet robins and splendid fairy-wrens are commonly seen around the main picnic area near the falls, where they pick at food scraps.

While picnicking here, it is quite common to be joined by western grey kangaroos. Other, less visible mammals that have been recorded in the park include the echidna, mardo, quenda, brushtail possum, western brush-

wallaby and possibly the quokka. It is also believed that chuditch, brush-tailed phascogales, fat-tailed dunnarts, honey possums and water rats occur here, together with several species of bat—including Gould's wattled bats, which are often seen swooping for insects attracted by the light near the park gate.

Twenty-four species of reptile and three of frog, including the quacking frog, have been recorded in the park, together with a number of snakes. Lizards, including the gecko *Gehyra variegata*, inhabit areas near granite outcrops. Death adders inhabit the jarrah country, but tend to be very cryptic, moving only at night and lying in wait for their prey under leaf litter. Dugites are common, preferring to curl up in cool places during the summer. Carpet pythons are less common, but have been found near the park entrance on Falls Road. The wetter areas of the park provide habitat for several reptile species, with tiger snakes being found along the river and streams, and long-necked tortoise below the falls.

Gilgies are quite common, and their remains can often be seen beside streams—remnants of a meal for herons and water rats, which are particularly fond of these crustaceans.

Bothriembryon snails are generally widespread in the south-west of Australia, but the *B. serpentinus* is not so abundant and is thought to have quite a limited range. Little is known about this snail, but it is believed to be associated with dolerite (for calcium extraction) and wandoo. It is able to survive the long dry summers by sheltering in rock crevices and aestivating.

MANAGEMENT

One of the major management concerns surrounding Serpentine National Park is the threat of the spread of *Phytophthora cinnamomi*, the organism that causes dieback. Some areas are badly affected, with trees and wildflowers dying off. As in other CALM-managed areas, a full survey of the effects of dieback in the park will be completed and management strategies implemented to protect those areas not affected and minimise further spread.

Weeds are a problem in some areas of the park, particularly around the creeks. Weeds displace native plants by successfully competing for light, nutrients and water, and consequently have serious effects on animal habitats. Watsonias, arum lilies, castor oil plants, cotton bush and blackberries are the main culprits. The draft management plan proposes a five-year weed management program to control weed invasions in areas of greatest conservation value and environmental threat, and to rehabilitate areas denuded by these control measures with appropriate local species.

Visitor numbers and patterns of use will be monitored using traffic counters at the Serpentine Falls and Gooralong recreation sites. In addition, visitor surveys and interviews will be conducted to determine use, preferences and satisfaction, so as to investigate alternative or additional recreation uses and make appropriate modifications to management practices, to ensure visitors enjoy their visit in a safe, clean and tidy environment.

Historically, one of the most popular recreation activities at the Serpentine Falls has been swimming in the pool beneath the falls. Although swimming is discouraged by CALM for health and safety reasons, numerous accidents have still occurred at this site with visitors diving, jumping or falling onto submerged rocks. Steps will continue to be taken to discourage these dangerous activities through additional signs and public education programs.

These and other management issues are discussed in detail in the draft management plan. Take the time to read it and put forward your ideas and



The quacking frog (*Crinia georgiana*) is one of three frogs recorded from the park.

Photo – Jiri Lochman

concerns. The Serpentine Falls National Park has attracted recreational visitors for nearly a century and it continues to offer many of the features that attracted our ancestors. Through careful management and public consultation, CALM aims to help ensure the park retains those features for our children and our children's children.

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Fence skink

Photo – Babs & Bert Wells/CALM

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Much of the historical information was obtained from Neil Coy. His book, *A History of Serpentine-Jarrahdale*, is published by the Shire of Serpentine-Jarrahdale.

The Draft Management Plan for Serpentine National Park will be released for public comment soon.



Visitors can walk in the treetops along a series of walkways, platforms and stairways at the new Forest Heritage Centre in Dwellingup. (See page 10.)



A major survey of the Carnarvon Basin has recently been completed by staff from CALM, the WA Museum and the University of WA. What did they find? (See page 15.)

LANDSCOPE

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It was a very good year in the Wildflower State. Find out just how good in our story on page 38.



Australia has its own families of songbirds that are very different from their European namesakes. See 'True Blue Birds' on page 45.



Quokkas were once widespread on WA's mainland, but the most visible populations are now found on just two islands. 'Where Have All the Quokkas Gone?' (See page 49.)

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COVER

Western black-footed rock-wallabies are on the increase in Yardie Creek, thanks to a CALM fox-baiting program. Their numbers are being monitored by local tour operators Neil and Rhonda McGregor. See our story on page 36.

Illustration by Philippa Nikulinsky



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