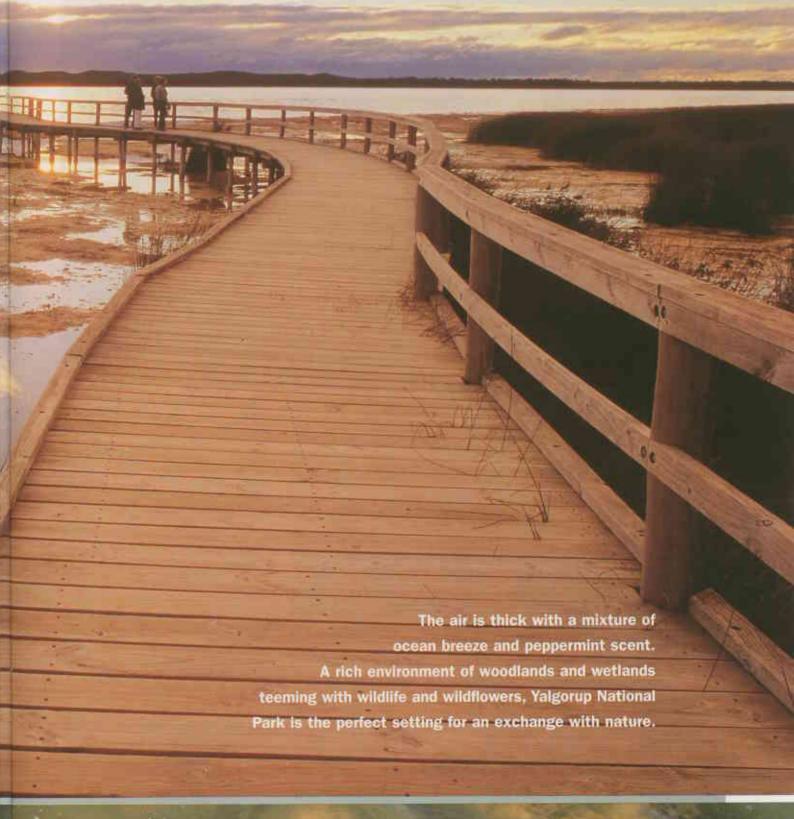


Yalgorup National Park

coastal escape



estled between a frequently travelled highway and the Indian Ocean, just south of Mandurah, lies a series of lakes and reserves that together make up the largest national park on the Swan Coastal Plain.

Yalgorup National Park stretches from just south of Mandurah to north of Myalup and covers an area of 12,888 hectares, including ten magnificent lakes. It protects a wetland system that has achieved international recognition as an important area for migratory waterbirds, and it supports several threatened plant and animal species. But its crowning glories are the microscopic communities that reside in Lake Clifton and form thrombolites. This is one of few places in Western Australia where these communities survive.

Microscopic masterbuilders

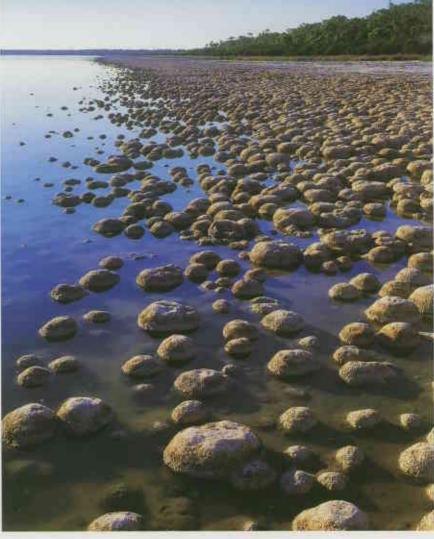
Yalgorup National Park protects a natural marvel. Lake Clifton, which is furthest from the coast, contains rocklike structures known as thrombolites on its edges. They also occur in Lake Richmond, near Rockingham. Like the famous stromatolites of Hamelin Pool, in Shark Bay (see 'Lilliput's Castles', *LANDSCOPE*, Summer 1991–92), the thrombolites are built by micro-organisms.

From the outside, there is no real difference between the two types of structure. Only when they are excavated can you see what distinguishes them. A stromatolite (which is only formed in marine environments) has a distinctive layered structure, whereas a thrombolite (formed in fresh water) has a disrupted internal construction—a kind of clotted, or messy, look.

The most striking things about the thrombolites are their limestone colour and rounded shape. Visitors could be forgiven for mistaking them for fossils or boulders placed there in earlier times. Lieutenants Collie and Preston certainly did in 1829. They recorded what they thought they saw in their journal.

'The rising ground on the bank [of Lake Clifton] is formed of sand and calcareous petrifactions of trees.'

The thrombolite-building microorganisms are too small for the human



eye to see and resemble the earliest forms of life on Earth. The discovery of modern examples helped scientists to understand the significance of microorganisms in the environment and unravel the long history of life on Earth. These organisms were the only known form of life on Earth from 3500 million to 650 million years ago. The formations that they construct grow at an incredibly slow rate. When the stromatolite or thrombolite reaches a metre high, it is estimated to be approximately 2000 years old and is filled with living communities of diverse inhabitants with population densities of 3000 per square metre.

Scientists know little about the thrombolites and why they form at Lake Clifton, but one theory is that they form because the lake is associated with upwellings of fresh groundwater that is high in calcium carbonate. The micro-organisms living in this environment are able to precipitate calcium carbonate from the waters as they photosynthesise, forming the mineralised structure that is the thrombolite.

Lake Clifton's thrombolites are very

Previous page
Main Boardwalk over thrombolites at
Lake Clifton
Photo – Sallyanne Cousans
Bottom Thrombolites.
Photo – David Bettini

Above Thrombolites at Lake Clifton. *Photo – Alex Bond*

fragile, so an observation walkway has been built for visitors to enjoy these incredible formations while protecting them from damage.

Aboriginal heritage

The Swan Coastal Plain, which stretches between Moore River and Busselton, has been the traditional home of the Nyoongar Aboriginal people for thousands of years. The Aboriginal people who lived in this part of the State were fortunate, as the South West provided plenty of fresh water and rich hunting and foraging grounds.

The name Yalgorup is derived from two Nyoongar words, 'yalgor', which **Right** Bird hide at Lake Pollard. *Photo – Marie Lochman*

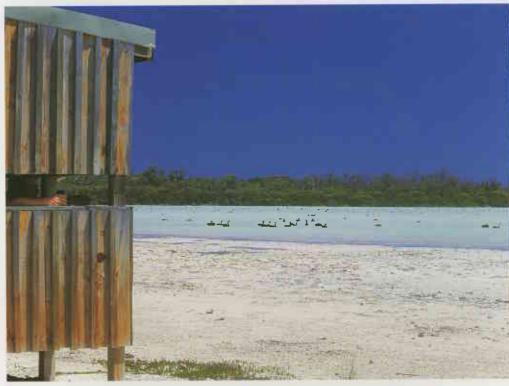
means 'lake or swamp', and 'up', which is a suffix for 'a place'. Discoveries of stone artefacts within the park have led to seven occupation sites being identified. As well as these, there are two significant sites located close to the park. One is a cave east of the park and the other is a ceremonial site just north of the park. Despite the area's obvious importance to Aboriginal culture, little is known about the significance of the park itself and, as yet, there have been no recognised sites listed.

European discovery

Lieutenant Surgeon Alexander Collie and Lieutenant William Preston were the first Europeans to discover Lake Preston and Lake Clifton, while exploring the coastline from Cockburn Sound to Cape Naturaliste in November 1829. When they came across the lake now known as Lake Clifton, they believed that the body of water could be a section of the Murray River. Only on the following day did they discover that the 'river' was a lake.

After Collie and Preston returned from their expedition, Thomas Peel built a settlement in the area now known as Mandurah. In those days, to reach the settlement meant a day's journey by sea, followed by a second day of travel with horse and cart over some very rough terrain. It wasn't until 1842 that the Old Coast Road, along which the park is situated, was built. Convict road gangs rebuilt it in the 1850s to connect Mandurah with Perth, effectively putting an end to the settlement's isolation. The remains of some of the wells built by the road gangs can still be found in the park, near Whittakers Mill picnic site.

The 10th Light Horse Brigade used areas now in Yalgorup National Park for training and patrol during the Second World War. There are remains of a horse yard in the middle of Duck Pond, and, at the north end of Lake Clifton, is Greenwood Cottage, whose facilities were used by the unit. The





cottage is known today as the Herron Homestead and still has historic family links to the area.

Early last century, the area was briefly exploited for its resources. The WA Cement Company built lime kilns on the eastern side of Lake Clifton in 1921. The supporting settlement that developed at the lake included a bakery, school, shop, postal receiving point, houses and a boarding school. The lime operation turned out to be uneconomic and closed after only a few years. The foundations of the lime

kilns can still be seen in the park. It was fortunate that the lime kiln venture wasn't a success, because it might have destroyed the natural wonders that live in the lake.

Yalgorup was established as a national park during the early 1970s and is governed by a management plan prepared by the Department of Conservation and Land Management (CALM) that has been in operation for the past nine years. The shires of Mandurah, Harvey and Waroona maintain the beach areas.





Wildlife and wildflowers

Yalgorup National Park is a place teeming with birds At last count, more than 134 species had been recorded in the park. The sheer number of species makes the park a haven for bird lovers. The 10 lakes play a large part in attracting such a huge number of birds, and have collectively been recognised by the Ramsar Convention as being internationally significant. They provide important habitat for waterbirds such as Australian shelducks, musk ducks and black swans. Waders include bar-tailed godwits, red-necked stints, greenshanks, red knots, whimbrels and three species of sandpipers. A variety of other waterbirds also use the lakes, including banded and black-winged stilts, rednecked avocets, red-capped plovers, Australian pelicans and coots.

The incredible number of bird species found in Yalgorup National Park makes it perfect for birdwatching. CALM has built a bird hide on the edges of Lake Pollard that gives a perfect vantage point from which to observe most species. But if sitting in a bird hide doesn't appeal, many birds can still be seen from other recreational areas in the park. There is a population of bold little wrens that scrutinise visitors at the boardwalk leading to the thrombolites and confident ducks abound around Lake Hayward and at the adjacent picnic site.

Yalgorup National Park contains one of the few surviving populations of chuditch on the Swan Coastal Plain. The park has been the recipient of southern brown bandicoot (Isoodon obesulus) and western ringtail possum (Pseudocheirus occidentalis) translocations since 2000. The populations of bandicoots were moved from other areas near Mandurah and the threatened western ringtail possums, also known by their Nyoongar name of

Above left Lake Preston. *Photo - David Bettini*

Left Australian pelican. *Photo – Rob Olver* **Right** Campsite beneath peppermint trees. *Photo – Rob Olver*

Below right Swamp donkey orchid (*Diuris micrantha*).

Photo – Andrew Brown/CALM

'ngwayir', were sourced from the Leschenault Peninsula, near Bunbury.

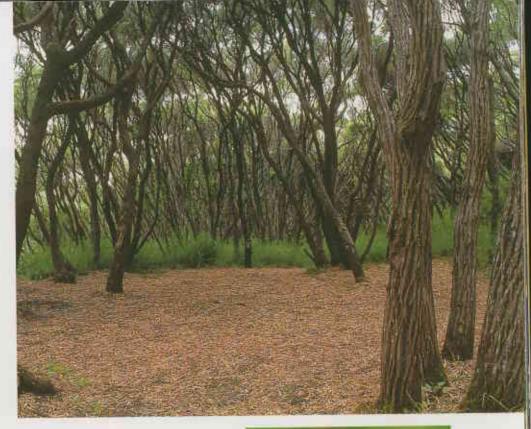
The introduced European fox threatens native animals in the park, including chuditch, possums and bandicoots. To give native animals a fighting chance in their natural habitat, CALM established Western Shield-the largest conservation program ever undertaken in Australia-in 1996. The program aims to bring at least 13 native species back from the brink of extinction by controlling predation by foxes and feral cats. The key weapon in this fight is baiting, using the naturally occurring poison 1080. The 1080 poison is found in native plants called gastrolobiums or 'poison peas'. Native animals have evolved to be able to resist this plant, but introduced species haven't, making 1080 the perfect choice for safe predator control (see 'Western Shield', LANDSCOPE, Winter 1996).

The park also has the perfect habitat to support a threatened flora species, the swamp donkey orchid (*Diuris micrantha*). This orchid only grows in swampy ground or shallow water such as that found around the lakes. The tiny plant doesn't grow taller than half a metre, and produces a delicate yellow and brown flower from September to October.

Peppermint sanctuary

Yalgorup National Park is known for its peppermint (*Agonis flexuosa*) and tuart (*Eucalyptus gomphocephala*) woodlands, although the tuart has suffered noticeable decline—of undetermined causes—in recent years. The peppermint can reach up to 10 metres and is covered in elegant white flowers with a wine red heart, from July to December.

The park's only campsite is situated in a cleared area among the



peppermints, on the banks of Martins Tank Lake. The dappled shade thrown by the beautiful trees makes this an ideal place to relax and enjoy the area's natural splendour. The site has basic facilities, including toilets, barbecues and tables, but is the perfect setting for a weekend escape from the hustle and bustle of the city. Brushing the foliage of the trees releases a strong peppermint scent that infuses the entire campsite, enhancing the peaceful experience.

The park puts on a magnificent show for the visitor, particularly in spring and autumn, making it the perfect time for some exploring. The sheer size of the park allows for some extended bushwalking. For the less dedicated, there are nature walks at Lake Pollard and Lake Preston, both of which can be strolled at a leisurely pace before indulging in a well-earned barbecue or picnic. Nearby, Hayward Lake picnic site and Martins Tank campsite have barbecue facilities and picnic tables.

With so much to see and do in Yalgorup National Park it is hard to believe that it does not have much higher visitation, especially as it is located along the busy Old Coast Road. The park is less than an hour's drive from Perth, it's close to the beach and it offers a wealth of wildlife and wildflowers, the rare thrombolites and the option to escape from the city. Why not consider the park for some weekend explorations?



Margitta Docters van Leeuwen is a final-year student in the Department of Communications and Cultural Studies at Curtin University of Technology, where she is completing a major in Publishing Practice with a supporting minor in Creative Writing

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