

he Lesueur National Park is an area of exceptional beauty and botanical importance. Located near the town of Jurien, 280 kilometres north of Perth, its 27,000 hectares conserve some of the most diverse and rare flora in Western Australia.

History and landforms

The area was first investigated by Europeans in June 1801, when the French exploratory vessel Naturaliste sailed up the coast past Jurien Bay. Two prominent hills sighted on the mainland were named Mount Peron after the expedition's naturalist, François Peron, and Mount Lesueur after Charles Alexandre Lesueur, a topographical painter and natural history artist on the expedition. Europeans first traversed the Lesueur area in 1839. However, when the northern sandplain region between Perth and Geraldton was opened up for pastoral use in 1851, much of the Lesueur area was bypassed because of its rugged terrain and poisonous plants.

In 1950, Charles Gardner, the Government Botanist (see 'Botanic Guardian', *LANDSCOPE*, Autumn 2003), realised the botanical value of the region and recommended that the



area be protected from the effects of farming and mining. Mount Lesueur was made a reserve for educational purposes, but due to mineral and petroleum exploration and mining in the area, the Lesueur National Park was not proclaimed until January 1992.

The park protects many landforms and soil types. The Quindalup and Spearwood dune systems on the western edge of the park have sandy soils and salt lakes that support many species of wattles, melaleucas, banksias and succulents such as samphires and coastal pigface (Carpobrotus virescens).

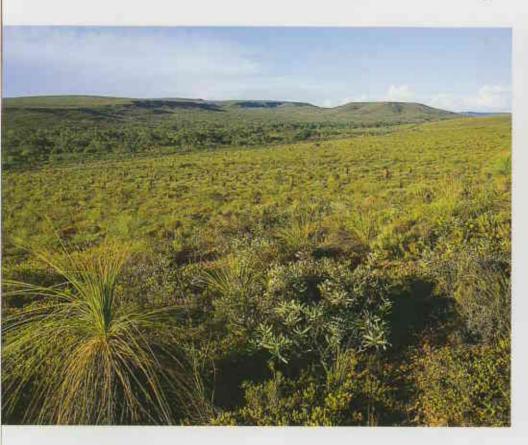
The Mount Lesueur and Cockleshell Gully areas were formed from ancient, sedimentary rocks that range in age from 280 to 150 million years. A series of faults shaped the landscape, and much of the area has been laterised (their surfaces have been covered by a crust of brown gravel

through a process of chemical weathering). The near-circular mesa Mount Lesueur is the area's highest feature and superficially resembles a reef that rises from the surrounding landscape. However, it is actually a remnant of an ancient land surface that remains following extensive erosion of the surrounding lateritic plain.

Patches of banksia and eucalypt woodlands occur throughout the area, and are important for the survival of the endangered Carnaby's black-cockatoo, which feeds on the banksia flower heads and nests in tree hollows. Several other species of birds—including the regent parrot, western rosella, Port Lincoln parrot, barn owl and boobook owl—also nest in the wandoo woodlands.

Fabulous flora

The vegetation of this area is known as kwongan, a Nyoongar Aboriginal word meaning sandy country with open, scrubby vegetation. The visual similarity of this low shrubland is, however, very deceptive. These shrublands have more shrub species per unit area than any vegetation type known in the State. An area of 100 square metres can support up to 100 different species. Moreover,





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Main Purple starflower (Calytrix sp.).

Left Lesueur National Park.

Above Queen of Sheba orchid (*Thelymitra variegata*)



the species growing together change rapidly over short distances, so that sites less than one kilometre apart may have less than half their species in common. Such diversity is comparable to rainforest vegetation in the tropics.

Around 900 species of plants (about 10 per cent of the State's flora) grow here. Several of these species are declared rare flora, nine are endemic (found nowhere else) to the Lesueur National Park, and 111 grow only in the region. Eighty one species are at either their most southern or their most northern limits.

Jarrah grows in the Lesueur area as a stunted mallee shrub. It is at its most northern limit and the next stand of jarrah occurs 100 kilometres to the south. Limestone ridges in the area are home to the illyarrie (Eucalyptus erythrocorys), a eucalypt that is widely cultivated within the Perth area. Its bright red, four-lobed bud cap is pushed off to reveal flowers with bright yellow stamens during summer. Other trees of these woodlands include powderbark (E. accedens), pricklybark (E. todtiana), candle banksia (B. attenuata), firewood banksia (B. menziesii) and the rare endemic pine banksia (B. tricuspis).

Much of the upland landscape is dominated by grasstrees. Grasstrees are related to lilies, and produce their small white flowers on single long spikes that can protrude several metres above



the thin leaves. The spiky grasstree (Nanthorrhoea acanthostachya) is at its northern limit, Kingia (Kingia australis), although similar in appearance to grasstrees, is not closely related to them. The kingia is a herb that produces aerial roots that grow down the stem beneath the leaf bases. Their greenish flowers are held in many short inflorescences (known as drumsticks) that are produced above the drooping leaves, normally after fires. Carbon dating has estimated that large kingia plants are from 750 to 900 years old, older than many large forest trees! Often, in the early morning or late afternoon, it is a

Above Blushing spider orchid (Caladenia lorea)

Left Examining smokebush (Conospermum sp.)

delight to see western grey kangaroos bounding through the shrubland between the grasstrees and kingia.

2003 display

The shrubby species (generally less than a metre tall) are the main attraction for tourists in late winter and early spring. The colourful flowers emanating from these bushes are stunning. Good rains during the 2003 season contributed to an exceptional year of colour Brilliant reds of the scarlet featherflower (Verticordia bottlebrush, grevillea, honeysuckle, wild rose and cockies tongues (Templetonia retusa) contrasted with the yellow acacias, guinea flowers, dryandras, the drumstick isopogon and the yellow featherflower. Purple startlowers, blue fanflowers, pink honeymyrtle, the delicate grey to white hues of smokebushes and the multicoloured yellows, browns, reds and oranges of the peas added to this display of colour. Catspaws and red and green kangaroo paws (Anigozanthos manglesii) grew in profusion and many







magnificent metre-tall black kangaroo paws (Macropidia fuliginosa) towered above the surrounding bush.

Orchids, especially when flowering in the season after fire, are also a big attraction to this area. The queen of orchids, the Queen of Sheba (Thelymitra variegata), is found within the park along with its sun orchid cousin, Cleopatra's needles (Thelymitra apiculata). Spider orchids, donkey orchids, red beaks (Pyrorchis nigricans), leek orchids, jug orchids, snail orchids, mignonettes, bee orchids, bunny orchids, the fringed hare orchid, the sandplain duck orchid and even a hammer orchid can be found within Lesueur National Park.



Above Pink fairy orchid (Caladenia latifolia)

Left Walktrail in Lesueur National Park.

Centre left Scarlet featherflower (*Verticordia grandis*).

Bottom left Common catspaw (Anigozanthos humilis subsp. humilis).

Road to discovery

Lesueur National Park is a botanical mecca, with very high conservation values. Like a coral reef, the area is very requires fragile and management to preserve its rare wildflowers and wildlife. A new drive through the park, planned for completion by December 2004, will give visitors the chance to view the magnificent landforms and see many of the spectacular wildflowers. Walktrails are also planned to allow closer inspection of the heathland and woodland plants and trees. Many of the plants of this area are relics of ancient times that have survived adverse climatic conditions for millions of years. They deserve the most careful management and respect that we can provide.



Ann Storrie is a freelance writer and photojournalist who normally specialises in the marine environment and articles about diving. However, with coauthors Sue Morrison and Peter Morrison—with whom she also collaborated on the recent CALM book Beneath Busselton Jetty—Ann is currently working on a book about the Jurien area that also includes the adjacent terrestrial environment.

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