

At Jandakot Regional Park,
a gentle breeze whistles
through the botanically-rich
environment of woodlands
and wetlands.



Within its vast areas of pristine
vegetation, the pervasive
silence accentuates the park's
distinct features and invites the
simple observation of nature.

by Margaret McNally





Jandakot Regional Park

Understated
beauty

On low-lying land in Perth's Swan Coastal Plain, banksia woodlands crown a mosaic of parklands that make up Jandakot Regional Park. Situated in the south-east metropolitan area, the park's 3,800 hectares span across numerous wetland and woodland estates that support rare and endangered plants and animals. The park is renowned for its colourful sprinkling of spring wildflowers. The fact that many bushland reserves adjoin its widespread boundaries enables year-round enjoyment of this regionally significant conservation haven.

Management and protection of the park's ecologically rich environment is shared by the Department of Conservation and Land Management (CALM), the Department of Justice, and the City of Armadale, City of Cockburn and Town of Kwinana. CALM is responsible for the coordinated management of the park, and has prepared a draft management plan due for release soon. The draft management plan invites public comment on the proposed ten-year management strategies that aim to preserve the park's diverse plant and animal life, and enhance recreation facilities.

Spiritual beginnings

For tens of thousands of years, the Jandakot area has played a key cultural role among Aboriginal people. Known by Nyoongars as the Beeliar district, the land, lakes and wetlands in and around the park were once a valued source of food, water and shelter for a tribal group of 58 people led by Midgegooroo. Jandakot—a Nyoongar name meaning 'place of the whistling kite'—also provided travel routes for groups visiting from the south-west regions. Wetlands were especially appreciated for their plentiful supplies of fruits and fish. They were also sites of trade and ceremonies that continue to hold special significance.

Forrestdale Lake, which adjoins the park, has particular spiritual meaning for Aboriginal people. According to tradition, it is home to the powerful rainbow serpent (Waugal) associated at this site with rain. The tradition warns against disturbance of the native reeds (*Baumea articulata*) around the lake's edge, as this could unleash the Waugal's destructive power. As a campsite, the lake was also valued for its supply of oblong tortoises (*Chelodina oblonga*).

One Aboriginal site, registered by the Department of Indigenous Affairs, is located inside the park in Sandy Lake. A number of other registered Aboriginal sites are located close to the park.



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Main Swamp honeymyrtle (*Melaleuca seriata*) occurs at Jandakot.

Photo – Michael James

Inset Inundated throughout most of the year, the wetlands of Harrisdale Swamp provide secluded focal points within the park.

Above left The seasonally inundated wetlands of Shirley Balla Swamp support a variety of vegetation communities, including banksia and melaleuca woodland.

Photos – Jacinta Overman

Left Oblong tortoises (*Chelodina oblonga*) were an important traditional food source for Nyoongar people.

Photo – Jiri Lochman

Flourishing farms

In 1885, William and Alfred Skeet became the first European settlers to settle the area after being granted a 'Special Occupation' licence for 100 acres (approximately 40 hectares) of land near Forrestdale Lake to the east of the park. Jandakot's low-lying and swampy peat areas proved useful for settlers, who developed the land for market gardens and honey production.

By the early 1900s, the Jandakot area produced generous supplies of fruit and vegetables—and later, dairy produce—that were sold to markets in Fremantle and Armadale. As competition increased with the proliferation of market gardens closer to those markets, the importance of the Jandakot region gradually declined.

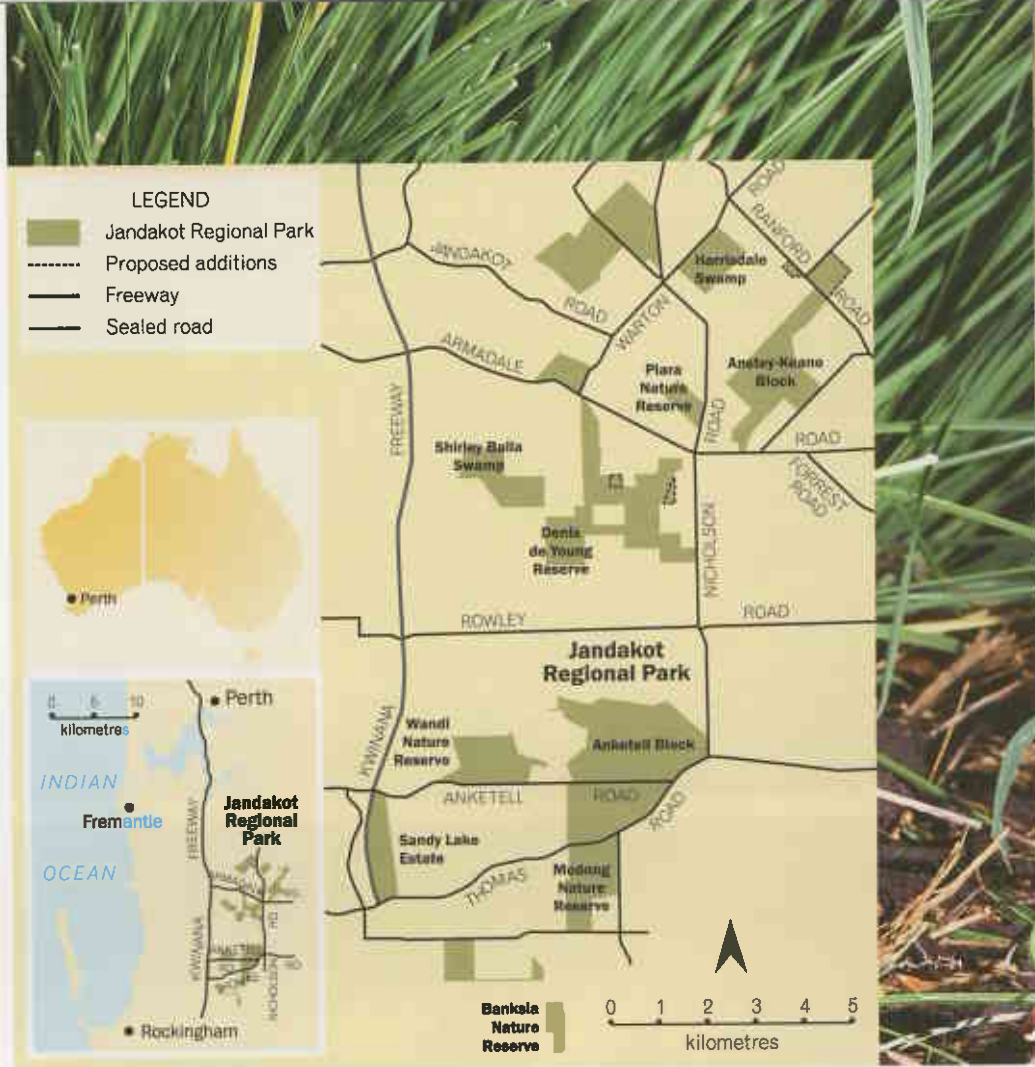
The use of land for intensive agriculture soon gave way to broad-scale grazing of sheep and cattle, a practice that continued from the 1920s to the 1970s, resulting in the loss of many low-growing native plants.

Some of the estates within the park have been reserved for their conservation value since the early 1980s. However, it wasn't until 1987, following a review of the Corridor Plan for Perth, that the establishment of a regional park to protect a network of representative areas of banksia vegetation and wetlands at Jandakot was proposed. The concept, objectives and boundaries for the park were confirmed in 1995, following a process of public consultation and planning. The Western Australian Planning Commission has been acquiring land on behalf of the State to include within the park, and the responsibility for coordinating its management was given to CALM in 1997.

Linking landscapes

Despite its distinctly flat landscape, and estates fragmented by rural and urban land uses, the park teems with biodiverse vegetation and sustains important ecosystems.

Jandakot Regional Park is a vital link in a series of reserves in the south-east metropolitan region. The State Government has declared many areas bordering the park as Bush Forever



Above The park provides important habitats for a range of waterbirds, including purple swamphens.
Photo – Jiri Lochman

sites, noted for their distinct conservation qualities. Beelii Regional Park is located to the west of the park, and the Darling Range Regional Park lies to the east. Nearby, Forrestdale Lake Nature Reserve is a protected and internationally recognised wetland. The lake provides a habitat for a range of waterbirds, including 21 species listed under international agreements.

Linkages to bushland in adjoining reserves within Jandakot Airport and Southern River are also vital. A considerable number of small birds

frequent these areas, including splendid fairy-wrens and hooded robins, and rely on the park's native vegetation for food and shelter.

The park overlies now subdued ancient sand-dune systems. The Bassendean Dune System was originally part of the coastline and is thought to have formed between 225,000 and 115,000 years ago, during



the Pleistocene geological period. Over time, winds have flattened the topography normally associated with coastal dunes, resulting in the low sand hills that typify the park's landscape today.

The region's porous sands allow the storage and movement of groundwater, and the Jandakot Groundwater Mound underlies the western areas of the park. Protection of this groundwater is essential because it is a significant source of metropolitan Perth's drinking water, storing a volume of approximately 2,700 million cubic metres.

From secluded wetlands and sedgelands to open heath communities, low woodland and forest, the diversity and complexity of the park's ecosystems is made more valuable because of their poor representation on the Swan Coastal Plain—the result of past land clearing and development. For instance, the Gibbs Road Swamp System within the park—listed on the Directory of Important Wetlands in Australia—is a remnant example of the formerly extensive swamps in the area. It is also a known nesting site for freckled ducks (*Stictonetta naevosa*).

Brimming with banksias

A diverse range of banksia species dominates the landscape. Slender banksias (*Banksia attenuata*), firewood banksias (*B. menziesii*) and holly-leaved banksias (*B. ilicifolia*) proliferate in upland areas including Modong Nature Reserve to the south, as well as Anketell block and Banksia Nature Reserve. Taller coastal blackbutts (*Eucalyptus tottiana*) and saltwater sheoaks (*Casuarina obesa*) are scattered through the park with a dense understorey of native shrubs.

Top left Spectacular wildflowers on display in the park during spring include the firewood banksia.

Photo – Marie Lochman

Centre left Donkey orchid (*Diuris corymbosa*).

*Photo – G. Saueracker/Lochman
Transparencies*

Left Christmas tree (*Nuytsia floribunda*).
Photo – Jiri Lochman

Right Carnaby's black-cockatoos (*Calyptorhynchus latirostris*) frequent the Jandakot area to forage on banksia seeds.

Photo – Jiri Lochman

Below right There is a wide variety of vegetation within the park.

Photo – Jacinta Overman

Below far right The sandhill dragon is at the southern limit of its distribution in the Jandakot region.

Photo – Jiri Lochman

Several species of declared rare flora are also present, including king spider orchids (*Caladenia huegeli*), Purdie's donkey orchids (*Diuris purdiei*) and warty hammer orchids (*Drakaea elastica*). Weed infestation and the plant disease dieback (*Phytophthora*) are among the main threats to their survival.

Seasonal treats

Springtime boasts wonderful wildflower displays that colour the parkland with common donkey orchids (*Diuris corymbosa*), parrotbushes (*Dryandra sessilis*), acacia shrubs and mass showings of golden slender banksias. During early summer, a profusion of Western Australian Christmas trees (*Nuytsia floribunda*) decorate the scenery with clusters of orange stars bursting through their foliage.

The park's many seasonal wetlands support native sedgeland and wildlife habitats. In winter and early spring, these wetlands attract large numbers of waterbirds when water levels are highest. Here, Pacific black ducks and purple swamphens breed extensively.

Bird sightings in the Jandakot area were documented in 1998 in a study by ecologists Michael and Mandy Bamford, and avid birdwatchers are likely to spot most of the 76 waterbird species that have been recorded. These include black swans, little pied cormorants and dusky moorhens, which are also thought to breed in the park's wetlands.

On land, the banksia woodlands support native bushbirds, where birdwatchers can further indulge their



passion eyeing 89 different recorded species including painted button-quails, scarlet robins and the rarer square-tailed kites.

Peregrine falcons are also known to visit the area, while Carnaby's black-cockatoos retreat to the park to forage on banksia seeds. These birds are specially protected under the State's Wildlife Conservation Act, with the latter also among the threatened bird species listed as endangered under the Commonwealth's Environment Protection and Biodiversity Conservation Act.

Mammals and more

A notable number of habitats inside the park support upwards of 30 mammal species. The decline of

mammals in the Perth region makes Jandakot Regional Park a fundamental refuge and breeding ground.

The park's vastness provides a haven for western grey kangaroos, western brush wallabies and honey possums. Bats, including white-striped bats and lesser long-eared bats, roost high in the park's trees.

Closer to the ground, visitors may spot up to 43 recorded species of reptiles and nine species of amphibians. Turtle frogs, (*Myobatrachus gouldii*) western blue-tongued skinks, (*Tiliqua occipitalis*), and sandhill dragons (*Tympanocryptis adelaidensis*) are of special interest, being at the southernmost limit of their distribution around Jandakot. Rosenberg's goannas (*Varanus*



Above Flowering spikes of the grasstree (*Xanthorrhoea* spp.)
 Photo – Brett Dennis/Lochman
 Transparencies

rosenbergi) and crowned snakes (*Elapognathus coronatus*) also have a restricted distribution and are at their northernmost range in the region. The venomous dugites and western tiger snakes are typical of bushland areas. And carpet pythons (*Morelia spilota imbricata*), specially protected under the Wildlife Conservation Act, are also likely to inhabit areas of the park.

Doing what comes naturally

Open landscapes characterise the park and create a sense of spaciousness. Its sprawling nature also means the park enjoys high visibility from adjoining roads, with Nicholson Road forming the spine that passes through many of its disjointed parklands.

Each of the intriguing parcels of land offers a range of scenic experiences, from secluded wetlands

and banksia woodlands to rural landscapes. An unmarked network of challenging sand tracks awaits intrepid bushwalkers. The provision of nature trails, interpretive signs and displays proposed in the draft management plan aims to introduce visitors to diverse vegetation communities and provide an understanding of the park's defining characteristics.

The flat terrain is ideal for horse riding, which is a popular recreation activity in the park. Tracks and firebreaks take visitors past thickets of melaleuca shrubs and through banksia woodland.

While there are, as yet, no facilities within the park, given its existing informal use, visitors can lay a blanket on the ground in a number of areas fringed by banksia woodland in the more attractive Anketell block. Here, a walk through the changing scenery offers distant views of the Darling Scarp across the park. Pockets of dense woodlands and shady alcoves create a tranquil experience. In open spaces, visitors may encounter kangaroos grazing. Meanwhile, the odd, gnarled trunk of a paperbark adds an architectural dimension to the setting and provides excellent opportunities for the burgeoning photographer. So, too, do grasstrees (*Xanthorrhoea* spp.) and woollybush (*Adenanthos sericeus*), and the native ferns and shrubs that flourish in the understorey of flooded gums (*Eucalyptus rudis*) in gradient shades of green.

At Harrisdale Swamp and Shirley Balla Swamp, urban development hugs the park's boundaries. The draft management plan proposes walktrails in these areas, bringing proud stands of banksia and melaleuca woodlands to the front doors of neighbouring residents. Designated nature trails are also proposed to explore the woodland of tuart, marri and jarrah at Sandy Lake Estate.

A park for the future

Stretching for an estimated 17 kilometres north to south, and nine kilometres east to west, Jandakot Regional Park presents an open invitation to explore nature in all its understated charm. With urban development slowly rising, proposals

contained in the draft management plan will make the park more accessible to the growing numbers of residents, and raise awareness of its dynamic biodiversity and important Aboriginal and non-Aboriginal heritage.

Protecting banksia woodlands from plant diseases, and stemming the spread of weeds and wildfires is all part of ongoing management measures in the park. Future management requires the joint efforts of park managers and the broader community to maintain the integrity of wildlife habitats, wetlands and woodlands—and Perth's water supplies.

Public comment on the draft management plan is the first step people are encouraged to take to help formulate a final management plan committed to exploring recreation opportunities, while also sustaining the park's inherent values. Active participation by volunteers in research and park management programs is also welcomed, since rehabilitation of degraded areas is only possible with their efforts.

Accommodating the community's needs and preserving the park's botanical richness requires the delicate art of balance. By embracing a dual approach, the draft management plan will go a long way to harness the future growth of plant, animal and human communities in an environment where both nature and culture coexist in harmony for generations to come.



Margaret McNally is a final-year writing and publishing student at Curtin University of Technology.

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A free downloadable screensaver featuring Perth Regional Parks is available on CALM's NatureBase website (www.naturebase.net/screensavers).

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