

SHOWCASE

A Botanical Jewel: The Anstey- Keane Damplands in Perth Western Australia

Rod Giblett and David
James

Photos by Bryony
Fremlin

The Anstey-Keane dampland or heathland and Bush Forever Site (342) in Perth, is the second most floristically diverse of 500 Bush Forever sites, with 381 species of native flora. According to *Bush Forever*, it is second only to the Greater Brixton St. site in terms of number of species. The site includes rare flora and two threatened ecological communities. It is located in Jandakot Regional Park in Forrestdale within the City of Armadale in the Perth south-eastern metropolitan area. Two threatened ecological communities have been described in this area. They are associated with seasonal wetlands. One of these is endangered type 10a, described in *Bush Forever*, 'shrublands on dry clay flats and the other is vulnerable type 8, 'herb rich shrublands in clay pans'. It should be nominated to the *Directory of Important Wetlands in Australia*.



The Anstey-Keane dampland in Forrestdale also has more species of native flora than Kings Park which has 293 native taxa (plus 172 weed taxa) and which is Bush Forever site 317. Kings Park is regarded as an iconic tourist destination for visitors and valued recreation site for Perth residents. This year it was crowded with many people enjoying the picnic areas and the activities that were part of the wildflower festival, held for six weeks. Kings Park is notable for the many species of native flora common to the area and for its botanical gardens that showcase flora species from elsewhere in Western Australia. Not well-known and certainly not as well-visited as Kings Park, is Anstey-Keane dampland with its botanical treasures and rich biodiversity and flowers for six months of the year. It too could be a valued park.

Yet it is threatened with a proposed road through the middle of it. It is also being degraded by off-road vehicle use and rubbish dumping. This proposed road

would not only destroy the flora in the road reserve but also seriously compromise the fauna, including bandicoots and kangaroos, that live in the site and cross the road reserve.

From Anstey Road the heathland is flat and the vegetation is low. It stretches north and south from Armadale Road in the south to Ranford Road to the north. The land is flat with barely a rise or fall. The trees are short and the bushes and other vegetation are low. One nearby resident calls the area 'scrub,' implying that its vegetation is worthless. The vegetation is certainly not tall, grand and uplifting like forest, nor like picturesque 'bush'. Much of its vegetation, however, is small, exquisite and valuable in its own right.

Many of the species are found in the lower and wetter land summed up nicely as 'dampland'. Moisture is diffused through the land and not usually visible on the surface. The wetness of the land is usually inferred only from the types of plants that it



supports. Dampland is thus unlike other wetlands, such as the nearby, internationally significant Forrestdale Lake, with its large body of open shallow water in winter and spring, but that usually dries out in summer. Damplands are moist basins covered with plants. They have been defined by the V and C Semeniuk Research Group as 'seasonally waterlogged basins' that 'support rich plant and animal communities'. The types of plants found in damplands depend on moisture close to the surface of the land. As many of these plants are short, and ground-hugging, the area is often called heathland, though there are also sedgeland and herblands in the area.



Before European settlement these once floristically-rich damplands occurred all the way from Pinjarra in the south, to the southern Perth metropolitan area. The sandy, clay soils of these flat damplands, called the Pinjarra Plain, have resulted in the evolution over thousands of years of their unique vegetation. The northernmost tip of the Pinjarra Plain is wedged between the Bassendean Dune complex to the west and the Wungong River to the east. Confined almost solely to the east side of the Swan Coastal Plain the Pinjarra Plain was highly suitable as good agricultural land and so has been almost entirely cleared. With the removal of almost all the native vegetation for farming, the only places it can be found today are along the Perth-Bunbury railway line, road verges (such as Mundijong Road), nature reserves, remnants on private property, and two large areas in Forrestdale,

including the east side of Forrestdale Lake Nature Reserve and the Anstey-Keane damplands.

Professor Stephen Hopper, Professor at the University of Western Australia, former Director of Kings Park and Botanic Gardens and an eminent botanist said:

'Ephemeral wetlands are a special favourite of mine. I have worked in particular on gnammas on granite outcrops since the 1970s, as well as being actively involved in rare flora conservation for damplands, and in helping securing Brixton St, Kenwick as a reserve when I worked in CALM [now DEC]. Such damplands are truly unsung biodiversity jewels of international significance, at risk from many perspectives. Perth itself is one of the most biodiverse cities on Earth, and its ephemeral damplands are at the sharp edge of conservation concern given their rarity and vulnerability. In this context putting a road through the Anstey-Keane damplands would be ill-advised indeed when suitable alternatives could be implemented.'

(CALM = Department of Conservation and Land Management now termed Department of Environment and Conservation [DEC])

The exceptional shrub species found at Anstey-Keane include: swamp fox banksia (*Banksia telmatiaea*); one-sided bottlebrush (*Calothamnus hirsutus*);



swamp cypress (*Actinostrobus pyramidalis*); sand bottlebrush (*Beaufortia squarrosa*); and *Regelia ciliata* which provides important habitat for southern-brown bandicoot, or quenda (*Isoodon obesulus*), as it provides dense cover for this secretive and vulnerable animal.

Because of its size this area supports a rich representation of birds and mammals

the dampland are: woolly dragons (*Pityrodia uncinata*), the southernmost population of this species according to the Bush Forever site description; *Petrophile seminuda*; basket flower (*Adenanthos obovatus*); swamp pea (*Euchilopsis linearis*) and stinkwood (*Jacksonia sternbergiana*). Many herbaceous species found here show themselves each spring.



including the western grey kangaroo (*Macropus fuliginosus*). Several species of birds are attracted to the flowering heathland shrubs such as the white-cheeked honeyeater (*Phylidonyris nigra*), tawny crowned honeyeater (*Phylidonyris melanops*), along with insectivorous birds such as the splendid blue wren (*Malurus splendens*), white-winged triller (*Lalage sueurii*), and black-faced wood swallow (*Artamus cinereus*). Raptors include the little eagle (*Hieraaetus morphnoides*), wedge-tailed eagle (*Aquila audax*) and nankeen kestrel (*Falco cenchroides*).

Several species of melaleucas are also found in this dampland, including robin red breast bush (*Melaleuca lateritia*) and saltwater paperbark (*Melaleuca cuticularis*), more commonly found closer to the coast. Lower ground cover plants are icons of the area with exceptional colour in spring. Some highlights found in

Many species of orchids occur here including purdies donkey orchid (*Diuris purdiei*), a declared rare flora (DRF) species. Green kangaroo paws (*Anigozanthos viridis*) are endemic to these damp areas (that is, found nowhere else). Carpets of pink petticoats (*Polypompholyx mutifida*) appear here and give an extra blaze of colour. Many sundews (*Drosera* spp) are also pink and give an exceptional splash of colour.



Cutting a jewel in half makes it relatively worthless. The same would apply to the Anstey-Keane Bush Forever site.



The larger an area of conserved bushland, the more viable it is for the plant and animal communities that inhabit it. The shorter the length of boundaries it has, the less opportunity there is for the 'edge-effect' of weeds, disease and human incursions. The area where Keane Road is proposed to go through has recently been surveyed as the most pristine of the entire Bush Forever site.

Environmental consultants 'Enviroworks' are currently preparing a Public Environmental Review (PER) of the proposed road.

This will be released for public comment soon.

Rod Giblett is Secretary of the Friends of Forrestdale and Associate Professor in the School of Communications and Arts, Edith Cowan University. He is the author of many books including *Forrestdale: People and place*; *People and places of nature and culture*; and *Black swan lake: Life of a wetland*. He is also co-editor with Hugh Webb of *Western Australian wetlands: The Kimberley and south-west* and co-author with Hugh of 'Western Australian Wetlands: Living Water or Useless Swamps?' *Habitat*, 21(3), 1993, 30-36.



David James is President of the Friends of Forrestdale and a well-known naturalist. He has lived in Forrestdale all his life. His story and those of other long-time former and present residents can be found in *Forrestdale: People and place*.



'In the paddock ahead, six kangaroos graze in the cool light of dawn.'

'Fringed *Regelia* shrubs still bear flowers, though most are past their best. A gentle warmth now in the air.'

'As I walk along, I pass countless animal tracks. The trail's white sand is like an embroiderer's sampler: complex, fancy stitches designed and laid down by the skittering, scurrying, slithering feet and bodies of reptiles, secretive mammals, birds and insects. Delicate and sinuous, they meander in twists and turns across the powdery sand in pleasing, artistic designs, often leaving one mystified as to whom their creators might be. Easier to recognize are the large, lithe, sweeping marks made by snakes and monitors, the straight, chunky traces of bobtail skinks, and the wide-spaced prints of kangaroos and quendas. But like sand castles on the beach, these ephemeral works of art are not to last, when the warm summer breeze

'I disturb a blue skimmer dragonfly. Languorous in the cool early morning, he floats around for a moment or two, then settles on a twig in the shade, where, despite his showy blue colouring, he is almost invisible.'

'Garrulous flocks of honeyeaters chatter and squabble around me as they feast upon the flowers of the Candlestick banksias. Little wattlebirds chortle excitedly as they flap from tree to tree.'

'I suddenly find myself in the midst of a flock of rainbow bee-eaters, they are all around me, streaking through the air. They flick their wings in and out. The sun's rays shine through their outstretched wings setting them aglow with burnt orange light. With fluent sweeps and curves they weave like ice skaters through banksia and modong trees, they skim over thickets of fringed regelia, and the air rings with their purring, fluty calls.'



starts to blow across the land, they subtly and gently get swept away.' Always to be replaced.

'The air is still and warm, it resonates with honeyeater song. I hear the distant, single caw of a raven.'

'Birds scold from within a nearby regelia thicket, two male blue wrens emerge...'

'A western grass-dart alights on the tip of a leafy sprig. Slowly she opens her wings until she looks like a tiny orange and brown paper aeroplane. The posture is characteristic of this little butterfly, forewings held vertical, hind wings flat.'

'I spy a velvet ant scurrying about on the track,.....'

'Ants of various sizes crawl at my feet. Among them is an insect that at first glance I mistake for another ant. But closer inspection reveals it to be, not an ant but a tiny praying mantis, so small it is barely visible. Artfully camouflaged in shades of brown, it moves along in stops and starts, stabbing the air with its stout little arms as though challenging the ants to a boxing match.'

'The air is still and warm, it resonates with honeyeater song. I hear the distant, single caw of a raven.'

'A wanderer butterfly drifts by; it flutters away, into the distance, headed for who knows where.'

10 45 am.

'I trudge along the dazzling white track that is fringed on both sides with sand bottlebrush. The first flowers of the season are bursting out. They are the colour of hot coals, ignited by the intense mid morning sunshine. In a week or two, these feathery, vermilion blooms will set the land on fire.'

