

The Bushland Whistler

Friends of Forrestdale Newsletter ♦ 5th Edition ♦ April 2014

NATURE'S BUSHLAND TREASURES - Lacewings

Our bushland is alive with an amazing variety of nature's treasures and in this edition we'll look at some insects belonging to the lacewing order Neuroptera that occur in Forrestdale. These insects (pictured below) were photographed at Anstey-Keane Dampland and, like most wildlife, they need quality native bushland to survive. On the left is a species of owlfly (belonging to the family Ascalaphidae) – an insect with some curious features. Resembling a dragonfly in flight, the owlfly, when at rest, adopts an unusual posture by holding its long abdomen at right angles to its thorax and wings. The owlfly's body is covered in fine, soft hair and it has two pairs of long lacelike wings which enable it to fly quite strongly. But perhaps the most intriguing features of this insect are its bulging owl-like eyes – hence its name – and its exceptionally long, heavily knobbed antennae. The larvae of the owlfly are similar to those of the better-known antlions (also lacewings), however unlike antlion larvae that construct pit traps in sand to catch prey, owlfly larvae lie in wait in leaf litter or foliage for invertebrate prey to come close; they then snatch their prey with their sharp, extra-large mandibles. The adult owlfly catches its insect prey on the wing much like a dragonfly does.

Pictured on the right are the male and female spoon-winged lacewing *Chasmoptera hutti* (male top), which are daytime flyers and can be seen from late spring to late summer. Little is known about the life cycle of spoon-winged lacewings, of which there are several species, but they are known to feed on nectar. The insects photographed were, when first seen, both together on *Leschenaultia floribunda* flowers. The remarkable feature of these insects is their extended hind wings which are narrow at the base and broaden into fanciful paddle-like shapes. The purpose of these bizarrely modified wings is unknown, but as they differ markedly between male and female, it is possible they are used in courtship displays. ✧



KANGAROOS – Anstey-Keane Dampland

Uniquely Australian and a central feature of our natural heritage, western grey kangaroos have for eons been part of the local ecosystem. Their overall range extends from the west coast across southern Australia to the Murray-Darling Basin and in many areas they are still abundant.

On the Swan Coastal Plain, however, and particularly in the Perth region, kangaroo habitat is continually being whittled away, fragmented or destroyed entirely and as a result, bushland blocks large enough for mobs of kangaroos to live undisturbed are becoming increasingly scarce.

By metropolitan standards, Anstey-Keane in Forrestdale is a large reserve. Its size and lack of fragmentation gives the reserve its value in terms of the range of flora and fauna it can support – including kangaroos.

The exact number of kangaroos living in Anstey-Keane is not known, but roos and their tracks are seen there regularly and it is estimated that a sustainable kangaroo population – neither too large nor too small – lives throughout the ≈ 300 ha reserve.

Many native animals that were plentiful in the Perth region before European settlement are now locally extinct or nearly so and it would be a great shame if kangaroos were to suffer the same fate.

Kangaroos belong here, they are a core part of our natural environment and they undoubtedly play a beneficial role in the Anstey-Keane ecosystem, since they graze on and thus help prevent serious weeds, such as the invasive perennial veld grass *Ehrharta calycina*, from taking hold in the reserve.

When kangaroo bushland habitat is made too small or is fragmented by roads – a situation that threatens Anstey-Keane – the long-term survival of these iconic animals becomes much less secure. ✧



Western grey kangaroos (*Macropus fuliginosus*), Anstey-Keane Dampland – March 2014

LAKE FORRESTDAL - when dry

Decades ago Lake Forrestdale was much deeper, it held water for longer periods and some years it did not dry up at all. In recent years, mainly because of reduced rainfall and government and private ground water abstraction, the lake has become shallower. Depths now rarely exceed 500mm. For six or seven months of the year the lake is dry.

During these dry periods, the lake might seem utterly barren. But even at this time Lake Forrestdale continues to support life. Not only that, it embraces a multitude of moods, influenced by the weather and by the time of day.

Often, at dawn, the lake is shrouded in a low mantle of mist, obscuring the hills and the unsightly power lines to the east. At these times it is a soft, restrained, enchanted landscape.

Nebulous shapes of kangaroos can sometimes be seen in the mist out on the lake's dry surface – the roos go to graze on the few succulent weeds that grow there – but when the sun peeps over the hills and the mist begins to fade, they return to the cover of vegetation that fringes the lake, where, through the heat of the day, they lie up under the paperbark trees.

Later when the sun is higher and the air is warm, the surface of the lake looks desolate, like a dry salt lake, and it's hard to imagine that anything would live here. But suddenly a movement catches your eye. An Australian pipit. It runs a short distance, stops abruptly, and bobs its tail. Brown streaked plumage camouflages this small bird perfectly – until it moves. Pipits favour open country, avoiding heavily wooded areas, and the dry lake habitat, barren as it may seem, suits them well. They feed on the various insects that live among the weeds.

In the middle distance, beyond the pipit, are moving specks of white, tiny specks in the vast expanse. A view through binoculars reveals a small flock of red-capped plovers, their snow-white bellies bright in the late morning sunshine. Across the ground they dart in their characteristic stop-start fashion and are joined by a pipit which moves along with them in a similar style.

Red-capped plovers are small, dapper birds and surprisingly tough. The lake in summer is a parched, often searing environment, yet these small wading birds stay and breed when no trace of water remains, making a scant scrape in the grey soil for a nest. Both parents incubate the two or three greenish-grey spotted eggs, and



when the speckled downy young hatch after about thirty days, they can soon scurry across the ground as capably as the adults.

Mixed flocks of tree martins and welcome swallows regularly patrol the dry lake to catch midges, mosquitoes and other small flying insects.

Nankeen kestrels catch mice and grasshoppers in the rushes at the lake's edge and they perch on short sticks to eat their prey. Scattered at the base of these regularly used perches are the remains of the kestrels' meals: grasshopper wings and spiky hind legs that the raptors typically discard.

Black-shouldered kites (pictured) often hunt over the rushes around the edge of the lake for prey which consists mostly of mice. When a kite spots a potential meal, it starts to hover – motionless in mid-air, just its wings moving – it then lowers itself vertically, like a spider on a strand of silk, enough to hone in on its target. Then it plunges into the rushes. A second or two later the kite rises – with, or without, a mouse in its talons.

The insect world, too, has predators that hunt prey at Lake Forrestdale when it's dry, and few insect predators are more formidable than the robber fly. Pictured below on the lake's edge with a honeybee that it has just caught, this predatory insect hunts by waiting in ambush. When a suitable insect flies by, the robber fly darts from its perch and catches it with its bristly legs. It then stabs the prey with its bayonet-like proboscis and injects saliva that both paralyses the prey and liquefies the body contents. Using its proboscis, the robber fly then sucks up the liquid meal. ✧



Robber Fly with honeybee – Lake Forrestdale, February 2014



Early morning mist fading away over the dry lake – March 2014

WILDERNESS LOST

Darkness settles

The near full moon is already high

All around pale clouds hang over the horizon

One by one, stars appear

The slate-coloured hills are spangled with lights

Lights of aeroplanes blink in the northern sky

The lake's dry surface silvery in the moonlight

My moon shadow sharply defined

The cricket trilling forlornly in the rushes

Competes with distant, interminable rumbling of traffic

Somewhere an owl might be calling

But the cricket and the traffic are all I hear

Bryony Fremlin



Lake Forrestdale when dry viewed at dusk with the full moon rising over the Darling Range – March 2014