



BUSHLAND NEWS

KATANDRA BUSHLAND SANCTUARY NEWSLETTER
Summer 2025

New Year's greetings from Katandra

One of the simple pleasures of spending time immersed in nature is the beautiful sound of the different songbirds throughout the bushland. It is widely accepted that the original ancestor of all songbirds evolved in Australia some 50 million years ago, before they then differentiated into the huge range of species that eventually spread around the world. See the article about songbirds inside this edition of Bushland News.

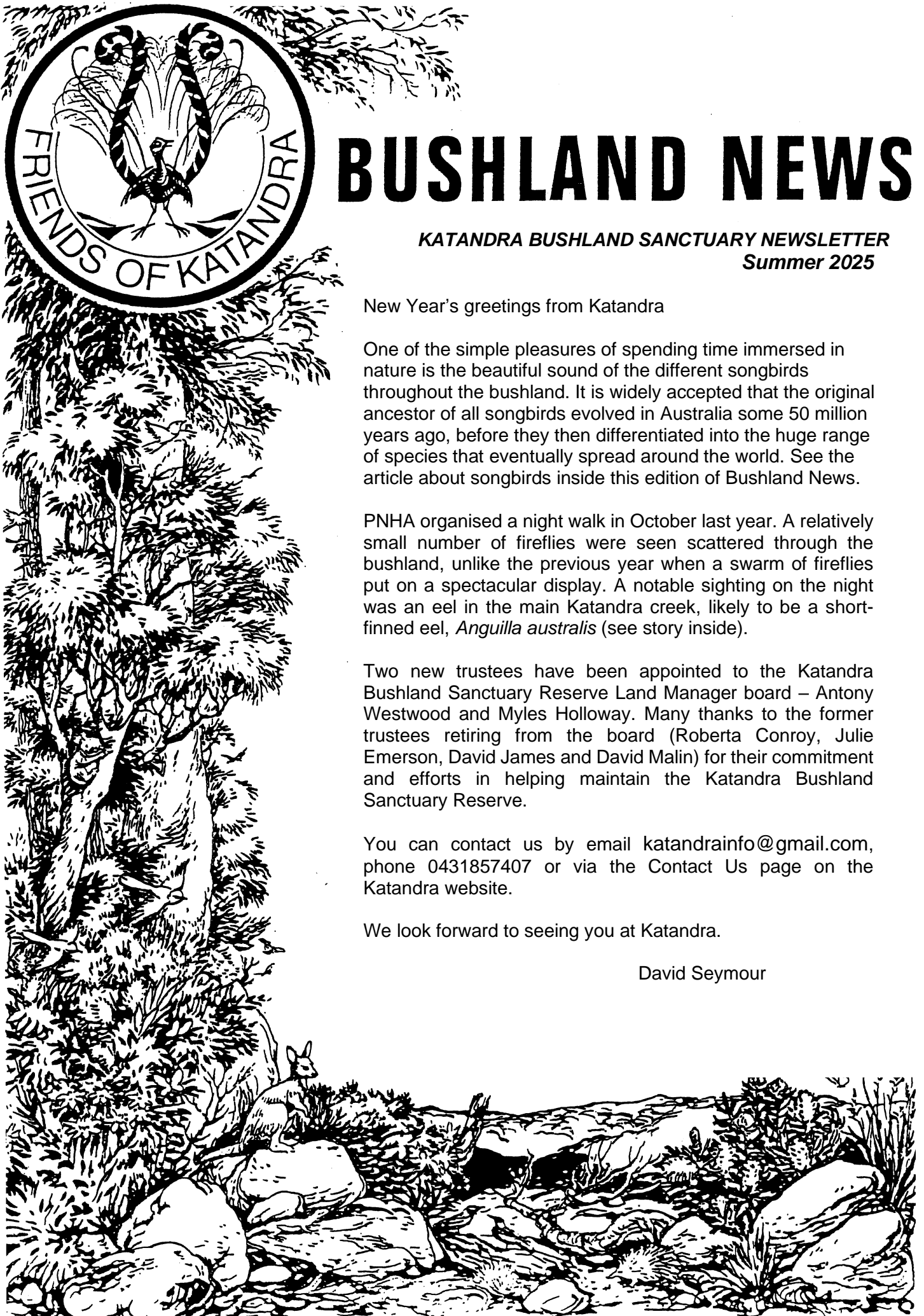
PNHA organised a night walk in October last year. A relatively small number of fireflies were seen scattered through the bushland, unlike the previous year when a swarm of fireflies put on a spectacular display. A notable sighting on the night was an eel in the main Katandra creek, likely to be a short-finned eel, *Anguilla australis* (see story inside).

Two new trustees have been appointed to the Katandra Bushland Sanctuary Reserve Land Manager board – Antony Westwood and Myles Holloway. Many thanks to the former trustees retiring from the board (Roberta Conroy, Julie Emerson, David James and David Malin) for their commitment and efforts in helping maintain the Katandra Bushland Sanctuary Reserve.

You can contact us by email katandrainfo@gmail.com, phone 0431857407 or via the Contact Us page on the Katandra website.

We look forward to seeing you at Katandra.

David Seymour



Australian Short-finned Eel (*Anguilla australis*)

The Australian short-finned eel is native to the lakes and coastal rivers of south-eastern Australia, New Zealand and many of the South Pacific islands. It is one of the 15 species of eel in the Anguillidae family. In Australia it is restricted to the eastern seaward side of the Great Dividing Range.

The short-finned eel's body is tubular, long and snakelike, with a small head. The colour is usually a deep olive-green, but can be much lighter, and the underside is paler. The upper dorsal and lower anal fins are of similar length, unlike the similar long-finned eel that has a longer dorsal fin. When fully grown a female may measure up to 1.1 m in length, while the males tend to be a bit shorter. They are ferocious predators, mainly carnivorous feeders, eating all manner of aquatic animals including fish, insects, yabbies, molluscs, frogs and sometimes even small birds and snakes.



Anguilla australis with equal length dorsal and anal fins. Source: Rudie H. Kuiter / Aquatic Photographics

Anguilla australis spends much of its life in freshwater, however, like most of the other catadromous eels, their life story of migration is quite remarkable.

This life story begins in the spawning grounds of the Coral Sea somewhere near New Caledonia. Adult eels have sometimes travelled many thousands of kilometres to breed in these waters. Mature females about 1 metre in length have been found to carry over to 3 million eggs. After hatching the flat, transparent larvae formed are called **leptocephali** (singular **leptocephalus**). These larvae drift in the currents in the upper layers of the ocean eventually reaching shallower coastal waters. Here, about 6 months after hatching, they metamorphose into tiny, semi-transparent **glass eels** with more rounded eel-like bodies. After reaching an estuary or river mouth and moving into fresh water, they metamorphose again into **elvers**, young eels darker in colour. As elvers they continue to migrate upstream traversing obstacles such as waterfalls and dams. If necessary, they are capable of leaving the water and travelling short distances over moist ground, absorbing some of the oxygen they need through their skin.



A small waterfall in Katandra creek – the type of obstacle faced by eels migrating upstream.

It is only when they reach about 30cm in length that the young eels reach puberty and their sex is determined, influenced by the density of the population. In areas of high density, young eels tend to become male, while further upstream where there are less eels, they are more likely to become female. Eventually they take up residence in a lake, river or other body of water where they remain until they reach maturity – about 15 years for males and 20 years for females.

After this time, the eels start to change their shape again in preparation for moving downstream into the ocean for a trip back to the spawning ground to begin the life cycle again. They stop eating, their digestive system shrinks and they start producing eggs or sperm. Their eyes get bigger, and their heads pointier, possibly an adaptation for better ocean swimming. For those eels living on the south-eastern coast of Australia it means swimming north back to the Coral Sea.



The incredible life journey of Anguilla australis

Songbirds (Oscines)

Songbirds (sometimes called **oscines**) provide many of the beautiful, melodic sounds heard in the natural bushland.

A **songbird** is a bird belonging to the **Passeri** suborder of **Passeriformes**, the largest order of birds, members of which are referred to as perching birds. **Perching birds** generally have an anisodactyl arrangement of their toes (three pointing forward and one back), which facilitates perching. A tendon in the rear of the leg linked to the underside of the toes automatically pulls and tightens when the leg is bent, causing the foot to curl and become stiff when the bird lands on a branch. This also allows the bird to sleep while perching without falling off.

Over 5000 of the 6500 or so identified species of Passeriformes are songbirds, making them the dominant group of birds on Earth today. The vocal organ in a songbird that allows it to produce the range of sounds in its repertoire is called the **syrinx**. Commonly known as the song box, this organ is a solid, bony structure lined with a film of membranes which vibrate as air passes through producing the sound. Muscles modulate the sound shape by changing the tension of the membranes as the songbird calls.

Unlike the human **larynx** (voice box) which is found towards the top of the **trachea** (windpipe), the syrinx is found at the lower end of the bird's trachea where it splits into the two **bronchial tubes** which lead to the lungs.

It is widely thought that birds evolved from the theropods dinosaurs some 150 million years ago. The distribution of the basal lineages of the songbirds suggest that they originally evolved in Australia some 50 million years ago, about the time it was separating from the Antarctic land mass.



Some of these birds eventually island-hopped their way north through South-east Asia before colonising other continents around the globe. The descendants of Australia's original songbirds now deliver their bird songs on nearly every land mass on the planet.

Lyrebirds, some of which regularly nest in Katandra, belong to the family Menuridae, one of the oldest families of songbirds. They have been providing a sound track for the Australian bushland for tens of millions of years.

Since about half of all birds are songbirds, when listing them it is often easier to list some of those that are NOT songbirds. Birds that are NOT songbirds include seabirds (such as penguins, petrels, albatrosses, cormorants, gulls and terns) shorebirds (oystercatchers, plovers, ducks, herons, egrets, ibis and cranes), emus, fowl (quail, turkeys and chickens), birds of prey (eagles, hawks and owls), parrots and kingfishers.



The photos on this page show a few of the many types of songbirds frequently seen in Katandra; left - Olive-backed Oriole (*Oriolus sagittatus*) top – Eastern Yellow Robin (*Eopsaltria australis*) above – a nesting Black-faced Cuckoo-shrike (*Coracina novaehollandiae*)

KATANDRA BUSHLAND SANCTUARY

Foley's Hill, Lane Cove Rd, Ingleside NSW
Department of Lands Reserve No 86487
Founder: the late Harold Alfred Seymour
Managed by Katandra Bushland Sanctuary Trust.
Phone: 0431857407

OPEN: Every Sunday: July, August, September, October

HOURS: 10 am — 4 pm

ADMISSION: \$5 donation

KATANDRA BUSHLAND SANCTUARY TRUST PO Box 485 Mona Vale NSW 1660

President: David Seymour

Secretary: David Seymour

Treasurer: Peter Hammond

Trustees: Marita Macrae OAM

Antony Westwood

Myles Holloway

Bushland News Editors: Marita Macrae OAM

David Seymour

(Cover Design by the late Walter Cunningham)

**Enquiries: phone – 0431 857 407,
email - katandrainfo@gmail.com
or via the Contact Us page on the Katandra website**

Katandra website -
katandrabushlandsanctuary.com

DONATIONS

Donations to Katandra to help maintain the Sanctuary can be made by direct deposit.
Katandra's bank details are below

Account Name –

Katandra Bushland Sanctuary Trust

BSB – 082132

Account No. - 509347998

PUBLIC OPEN DAYS 2025

Each Sunday of July–October

10 am – 4 pm

Picnic tables are available for use should you wish to bring along a picnic lunch to enjoy in the Sanctuary.

DIARY DATES 2025

SANCTUARY MAINTENANCE 2025

Maintenance days are generally the third Sunday of the month from March to November, from 9am. Please check by contacting us on 0431 857 407 as these dates and times may vary.

Volunteers are needed

If you can assist on maintenance days or with welcoming visitors to Katandra on open days, please phone 0431 857 407.

Katandra Bushland Sanctuary Trust
PO Box 485 Mona Vale NSW 1660