



BUSHLAND NEWS

KATANDRA BUSHLAND SANCTUARY NEWSLETTER

Autumn 2022

The wet weather in Sydney has continued well into autumn. Mona Vale experienced its wettest March since rainfall measurements began to be recorded at Mona Vale Golf Club in 1969. This has resulted in good flows of water in the creeks running through Katandra as well as providing ideal conditions for leeches to thrive. Did you know that Australia is the only continent on which leeches live on dry land? See inside this newsletter for more information on leeches.

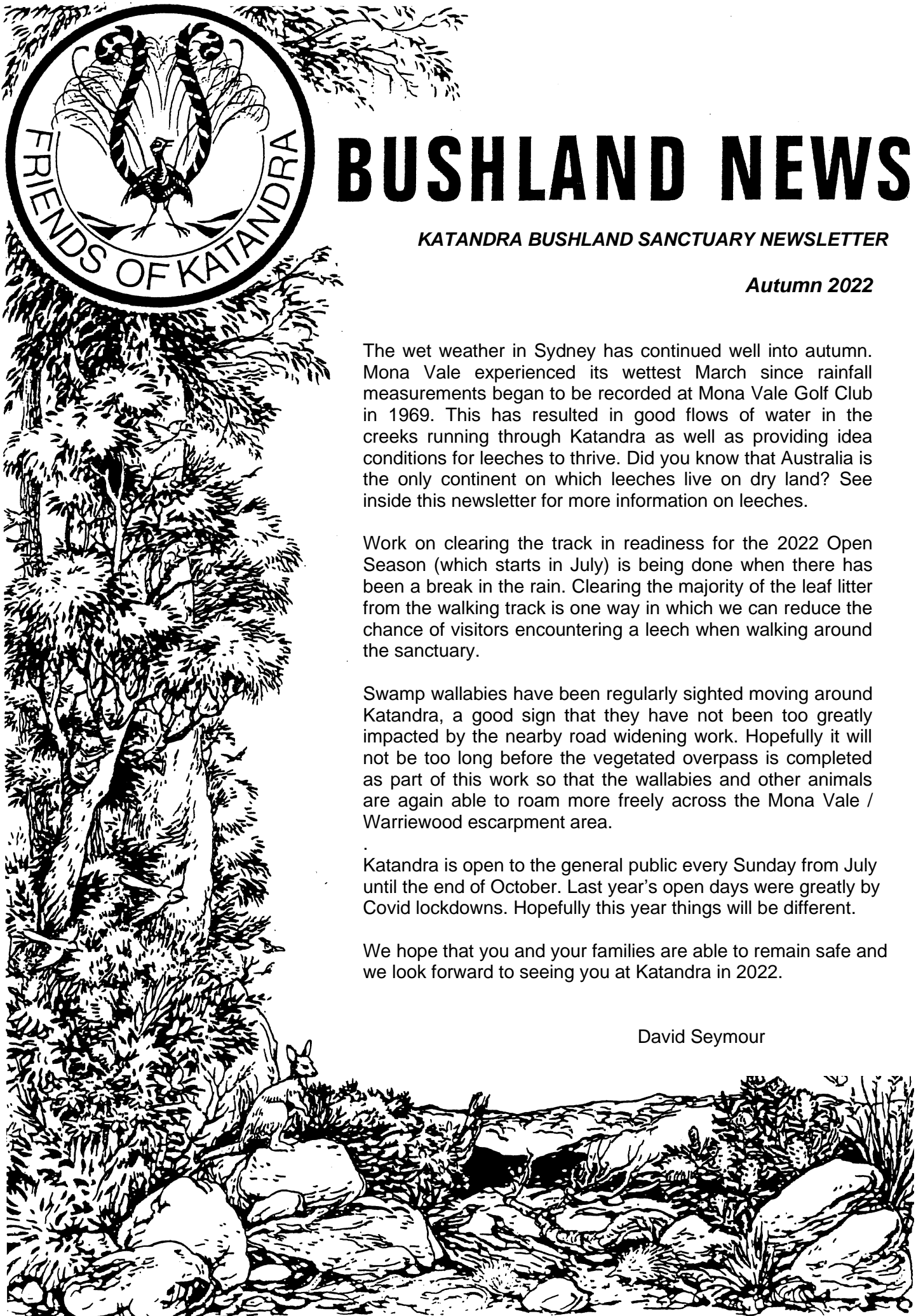
Work on clearing the track in readiness for the 2022 Open Season (which starts in July) is being done when there has been a break in the rain. Clearing the majority of the leaf litter from the walking track is one way in which we can reduce the chance of visitors encountering a leech when walking around the sanctuary.

Swamp wallabies have been regularly sighted moving around Katandra, a good sign that they have not been too greatly impacted by the nearby road widening work. Hopefully it will not be too long before the vegetated overpass is completed as part of this work so that the wallabies and other animals are again able to roam more freely across the Mona Vale / Warriewood escarpment area.

Katandra is open to the general public every Sunday from July until the end of October. Last year's open days were greatly impacted by Covid lockdowns. Hopefully this year things will be different.

We hope that you and your families are able to remain safe and we look forward to seeing you at Katandra in 2022.

David Seymour



LEECHES

The wetter than usual weather over the past few months has seen an abundance of leeches throughout local bushland.

There are about 700 species of leech found around the world, the bulk of which are aquatic, living in freshwater lakes and streams. Australia is the only continent which has leeches that live on dry land. Aquatic leeches have three jaws and make a Y-shaped incision when they bite. Australian land leeches have only two jaws, making a V-shaped incision.



*An aquatic freshwater leech
(NOT found in Katandra)
Image - Museums Victoria Collections*

The most common Australian land leech species is ***Chtonobdella limbata***, the one found in Katandra. It can vary in size from 7mm up to 150 mm when extended (the Giant Amazonian leech can reach over 300mm). ***C. limbata*** feed on the blood of vertebrates, including humans. They wait on the forest floor or on plant foliage to attach themselves to a passing warm-blooded animal. They wave their head around looking for signals that food is nearby. Their bodies are covered with receptors that allow them to detect possible food sources by sight, smell, vibrations and temperature. Leeches move by an 'inch-worm' like crawling motion using the suckers on each end of their bodies. The posterior (rear) sucker is attached to a surface, then the leech stretches out and attaches with the anterior (front) sucker. The posterior sucker is then detached and pulled up next to the anterior sucker.

Leeches may only eat twice in a year, consuming several times their own weight in just one meal. They have symbiotic bacteria in their guts to help digest their blood meals. It can take months for a single meal to be digested. Once a leech has found a suitable spot on its host, it holds on tightly with the large sucker at its mouth, then cuts a hole in the skin with its sharp



The 'inch-worm' crawling motion of a leech

teeth. The leech releases an anaesthetic in its saliva to numb the skin which keeps the host from knowing it is sucking their blood. It also releases an anti-coagulant, called hirudin, which stops the blood from clotting and keeps it flowing for as long as the leech is feeding. It can also mean that blood may keep flowing for some time after a leech has been removed. Leeches are not dangerous to humans, they rarely cause any infection at the bite site and the amount of blood they take is tiny. However, the bite site can remain itchy for a few days. Leeches can however, be dangerous if they attach to an eyeball.

Leeches have been used in medicine for centuries, mainly to draw "bad blood" from sick people. Even today they can be applied to a wound after micro-surgery to reduce blood clotting and blood pooling.



A leech on a fence post waving its head around looking for its next meal source

Leeches, like earthworms, are hermaphrodites, having both male and female sex organs. Both earthworms and leeches belong to the Class Clitellata within the Phylum Annelida (segmented worms) because of the presence of a clitellum, a swelling towards the head of the worm where the gonads are located.

Unlike earthworms (Subclass Oligochaeta) which show the clitellum all year round, the clitellum in leeches (Subclass Hirudinea) only becomes visible during the breeding season. Mating involves the intertwining of bodies with each depositing sperm in the other's clitellar area. The body of a leech is muscular, quite solid and covered by a tough skin making it possible for it to stretch its body when taking in food and when moving. The gut cavity inside the leech is

Leeches are an important food source for many birds and other invertebrates. In Katandra, lyrebirds can be regularly seen scratching through the leaf litter on the forest floor looking for leeches and other invertebrates.

Visitors to Katandra often ask about removing leeches and possibly avoiding them. Workers in Katandra have found liberally applying a cream-based insect repellent (eg Rid cream lotion) to shoes, socks and legs helps deter leeches from attaching themselves. Wearing white socks also helps one easily see leeches searching for bare skin.

If a leech is found attached, sprinkling salt onto its body will cause it to retract and drop off, or you can simply grab it with your fingers and pull it off (although they can hang on quite tightly).

Alternatively, if you can bring yourself to do it, you could just wait for 15-40 minutes until the leech finishes feeding and then detaches itself so that it drops off.

Wet weather continues

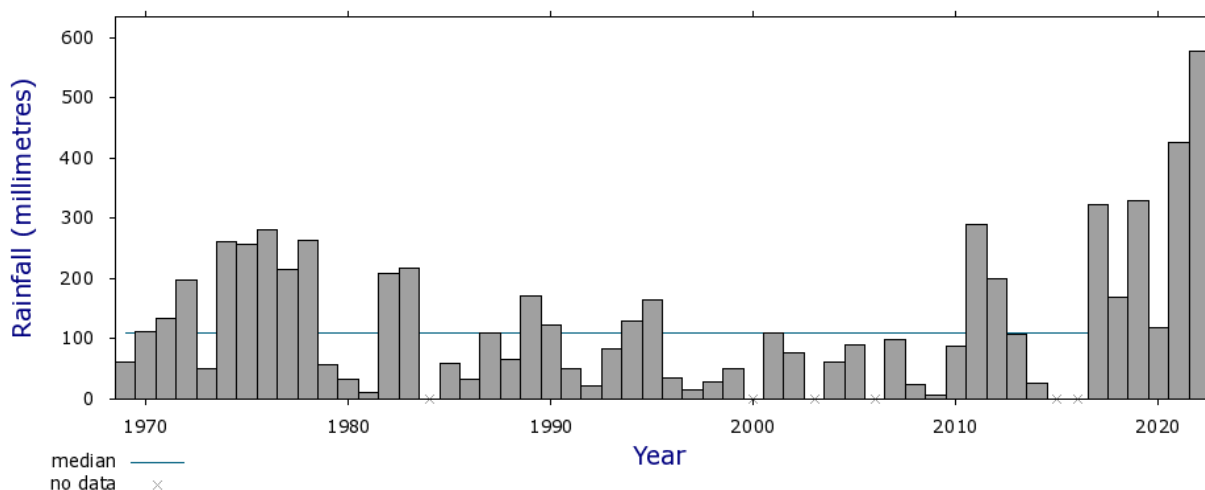
The wetter than normal weather from 2021 has continued into 2022. In Mona Vale the month of March this year was the wettest March since official rainfall measurements began to be collected at Mona Vale Golf Club in 1969. 576.6 mm of rain was recorded, compared to the March average of 138.0 mm. This represents more than half of the average yearly rainfall of 1154 mm for this recording station. It was well above the previous March record of 426.4 mm set just last year in 2021. March 9th this year also saw the highest March daily total recorded, 138.0 mm. The first four months of this year has already seen a total of 1249.6 mm of rain fall. Yes, it has been wet.

Recent long range weather forecasts suggest this wetter than normal weather pattern will continue for some months ahead.



A leech engorged with blood after a meal

reduced to a series of small channels. They respire through their body wall. While they prefer to live in damp surroundings, leeches can burrow into soil and survive for many months in dry weather.



March rainfall totals as measured at Mona Vale Golf Club – 1969 to 2022 (Climate data online BOM)

Katandra website -
katandrabushlandsanctuary.com

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: \$3 donation

KATANDRA BUSHLAND SANCTUARY TRUST
PO Box 365 Mona Vale NSW 1660

President: David Seymour
Vice-President: David James
Secretary: (acting) David Seymour
Treasurer: Peter Hammond
Minutes Secretary: Julie Emerson
Bushland News Editors: Marita Macrae
Roberta Conroy

(Cover Design by the late Walter Cunningham)

Enquiries: phone 0431857407 or by email
information@katandra.org

Volunteers are needed

If you can assist on maintenance days or with
welcoming visitors to Katandra on open days,
please phone 0431857407

DIARY DATES 2022

FOUNDER'S DAY (to be confirmed)

Sunday 14th August, 12 noon

Bring your lunch to cook on the wood-burning
BBQs. The trust will provide 'dessert', drinks, tea
and coffee.

CHRISTMAS PARTY (to be confirmed)

Sunday 4th December, 4.30 pm

Cold meats, drinks and salads are provided, but
please feel free to bring along some sweets or
savouries to share before or after. Also enter the
raffle to win one of Ruth's sort-after Christmas
cakes.

SANCTUARY MAINTENANCE 2022

(3rd Sunday March–November)

9 am Sunday 20 March
9 am Sunday 17 April
9 am Sunday 15 May
9 am Sunday 19 June
9 am Sunday 17 July
9 am Sunday 18 September
9 am Sunday 16 October
9 am Sunday 20 November

PUBLIC OPEN DAYS 2022

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

Katandra Bushland Sanctuary Trust
PO Box 365 Mona Vale NSW 1660