

FROM THE PRESIDENT

Happy New Year! How is it 2023?! How is this the 7th issue of Pobblebonk?! We have been putting together this newsletter every six months for the last few years with the help of our lovely supporters, who send in stories, pictures and news items.

We accept things for the newsletter year-round (with mid-Jan and mid-June deadlines) and we are always happy to consider anything frog-related you might like to share, so please do let us know if you have something you'd like to have featured. We accept anything from a picture and short caption to a 500-word feature piece with a few photos; event notifications; recruitment notices and even the occasional cartoon! We also accept feedback on the newsletter, so if there's something you'd like to see, or something you wouldn't like to see(!), please give us a croak at ed@frogsvic.org.

Thanks for your ongoing support.

For the frogs,
Lynette Plenderleith

FROGS ON IN VICTORIA

February

20th [Summer Frog Census](#)

Nangak Tamboree Wildlife Sanctuary; **La Trobe University**

22nd [Discover the frogs and microbats of Merri Park Wetland](#)

Merri Park Wetland; **Merri Creek Management Committee**

March

9th [Frogs Victoria Annual General Meeting](#)

Elgin Inn; **Frogs Victoria**

April

6th [Frogs Vic April Event](#) Elgin Inn; **Frogs Victoria**

May

4th [Frogs Vic May Event](#) Elgin Inn; **Frogs Victoria**

Got an upcoming event?

Submit it to pobblebonk@frogsvic.org and we'll include it next time!



Nick Clemann

JOIN US AT OUR AGM – NOTE THE DATE!

Frogs Victoria Annual General Meeting
The Elgin Inn, Hawthorn, **9th March 2023** (the second Thursday in March).

The AGM is an opportunity for members to hear a summary of Frogs Vic's 2022 and to help direct the 2023 year. It is also the best time of year to get involved in the committee, either as a member, or by voting for the elected members.

Please forward agenda items to secretary@frogsvic.org by 1st March 2023.

All are welcome to attend the meeting, but only financial members are eligible to vote or be nominated to a role. You can apply for membership at www.frogsvic.org/membership. If you are a member unable to attend the meeting but wish to vote, notification of proxies can be sent to secretary@frogsvic.org before the meeting. Your proxy does not need to be a Frogs Vic member.

Up for grabs this year are positions on the Events Sub-Committee! This is a great way to influence what we do at Frogs Vic and to meet and liaise with Victoria's Froggers! If you are interested in nominating for a position on the committee, please have a look at our [Committee Roles and Responsibilities](#) document on the website for more details. Please email secretary@frogsvic.org if you would like to nominate yourself for a position. Nominations will be accepted on the night too.

Please join us Thursday 9th March 2023, from 6 pm - Meeting starts 7:30 pm at Elgin Inn 75 Burwood Rd, Hawthorn VIC 3122

Previous AGM minutes can be found at www.frogsvic.org/agm.

AROUND THE (PIT) TRAPS

[Most Australians don't recognise Southern Corroboree Frogs](#)

[Amphibian Bushfire Recovery Centre open at Melbourne Zoo](#)

[Growling Grass Frog identified as conservation priority](#)

[Australian frog call track hops up the ARIA chart](#)

[Frozen frog sperm an amphibious insurance policy](#)

[New research into the embryo health of captive-bred Southern Corroboree frogs](#)

[Threatened Wrinkled Toadlet spotted in new spot](#)

[Restored wetlands popular with Growling Grass Frogs](#)

Got a news story? Email us at ed@frogsvic.org



THANKS TO OUR 2022 SPEAKERS!

- ☛ [Louise Durkin](#)
- ☛ [Dr Laura Brannelly](#)
- ☛ [Craig Cleeland](#)
- ☛ [Prof Ben Phillips](#)
- ☛ [Prof Kirsten Parris](#)



Frogs Vic could not hold events without the generous speakers who share their time, energy and expertise. We thank you!

A NIGHT SEARCHING FOR SLOANE'S

Teisha Sloane-Lay, Co-founder of Frogs Victoria

During August last year, species expert Dr David Hunter and myself visited numerous wetlands of the greater Albury region. We conducted a survey of Sloane's Froglet (*Crinia sloanei*), which is listed as endangered under the federal Environment Protection and Biodiversity Conservation Act. This species was described by Frogs Victoria Patron Murray Littlejohn in 1958, and named after my grandfather, Ian Sloane.

Most of the wetlands we visited echoed with calling frogs, many common to urban landscapes. Sloane's Froglet requires shallow wetlands / ephemeral freshwater marsh habitats and we found Sloane's Froglet in recently created wetlands. Sighting them was initially challenging due to their dull colouration and small size, but once I 'got my eye in', they were easier to detect. Their call is quite distinctive from other species, and they were often heard calling alongside Plains Froglets (*Crinia parinsignifera*).

The evening provided optimal survey conditions, and I had a ribbiting time in the field with Dave. My family connection to the frog made the trip unforgettable.



Left: Sloane's Froglet, *Crinia sloanei*, by Teisha Sloane-Lay

*survey conducted under research permit

THE INAUGURAL FROGS VIC MINI-CONFERENCE

Teisha Sloane-Lay, Frogs Victoria Co-founder

Frogs Victoria's first mini-conference held mid-year was most successful and enjoyable. A great mix of short talks and presentations catered to an enthusiastic audience.

The evening commenced in a creative way by Claire Brownridge who took the audience on a rhyming journey into the world of frogs. Next up, committee member Teisha Sloane-Lay presented some hard-hitting facts and figures on amphibian regulations and how to report exotic species and wildlife crime.

The research segment of the conference kicked off with Sam Wallace from Uni of Newcastle who presented her research on uncovering the ecology of threatened Heath Frogs – Littlejohn's and Watson's Tree Frogs. Committee member David De Angelis then spoke about the persistence of the Growling Grass Frog in the middle Yarra River catchment – an area not known for the species to occur. Following on was Matt Clancy, another committee member who showed off his impressive photography skills in his presentation of frogs of Borneo. Another talented Wallace sister, Dani from Uni of Melbourne, closed the conference with her talk on the effect of chytrid fungus infection on Alpine Tree Frog breeding display. A fun night had by all!

The mini-conference hopes to continue annually to provide public speaking and networking opportunities to frog enthusiasts.



Above: Teisha Sloane-Lay presents at the first ever Frogs Victoria Mini-Conference. We hope to see you at the next one in 2023!

SHOW US YOUR FROGS!

Have you got an idea for a talk? It doesn't have to be scientific, it doesn't have to be long, it just has to be about frogs!

We are looking for speakers for 2023 and would love to see you talk. Please email events@frogsvic.org

**MOLECULAR SYSTEMATIC ANALYSIS DEMONSTRATES THAT
THE THREATENED SOUTHERN BELL FROG, *LITORIA RANIFORMIS* (ANURA: PELODRYADIDAE) OF
EASTERN AUSTRALIA, COMPRISES TWO SUB-SPECIES**

Stephen Donnellan, South Australian Museum

Bell Frogs are well known for having been transported from their native ranges in Australia to New Zealand and a number of Pacific Islands. Green and Golden Bell Frogs *Litoria aurea* and Growling Grass Frogs (aka Southern Bell Frogs) *L. raniformis* are both in New Zealand and Judit Vörös travelled there from Hungary in 2004 to use genetic techniques to track down where they had been sourced in Australia. To her surprise, her analyses identified two very different genetic groups of Growling Grass Frogs.

Skye Wassens, Judit and Luke Price with the help of several frog biologists in NSW, VIC and TAS mapped the two genetic groups, finding a northern group in the southern Murray Darling Basin and a southern group in south-eastern SA, southern VIC and TAS.



Above: An individual from the northern genetic group on the (left) and an individual from the southern genetic group (right) of the Growling Grass Frog *Litoria raniformis*.
By Judit Vörös

But we still needed to figure out if the northern and southern Growling Grass Frog groups are different species or just recently isolated populations. Fortunately, a new DNA analysis technology became available commercially in 2014 that analyses the genetic contribution from both parents (nuclear DNA). The technique we had been using until then could only characterise variation in DNA (mitochondrial DNA) from the female parent which allowed us to test if the two groups were interbreeding. Again we had some surprising outcomes. We found frogs at Frances in eastern SA and in northern TAS that were hybrids of the two groups. We did not expect hybrids in TAS because all of the other frogs we examined from there belong to a genetically distinct sub-group of the southern mainland group. What was even more telling about how this could have happened was that one of the parents was from the northern mainland group! The northern parent had to have been introduced and be there quite recently and may even still be there considering how long these frogs can live for! So what started out as an investigation of where the Bell Frogs in New Zealand had come from in Australia, has shown that Bell Frogs are still being moved around by people and given that these species are not typically accidental passengers in agricultural trade, then the movement of these frogs may be deliberate but their release into the wild may be accidental.

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(Continued from Page 4)

Now we had almost enough information to describe the two groups of the Growling Grass Frogs as separate sub-species (not separate species due to the extent that they are able to breed together). The final piece of the puzzle was to compare the calls of the frogs to see if we could tell them apart and thus provide a handy way for anybody to recognise them. Jodi Rowley at the Australian Museum made hundreds of calls available for our colleague Michael Mahony to analyse that had been submitted to the citizen science program [FrogID](#). FrogID is a truly remarkable resource and one that phenomenally speeds up the description of new Australian frog species and demonstrates the very valuable contribution of citizen scientists.

So finally, after more than decade of investigations and scientific adventures, we have published our findings. Scientists can now treat the two sub-species independently for investigations of their biology and how to assess various threats to their persistence, a much more informed situation that should produce clearer conservation outcomes.



Above: Luke Price catching frogs. By Judit Vörös



Right: Judit Vörös swabbing *L. raniformis* for DNA analysis,
by Luke Price

These findings were [published in Zootaxa in January 2023](#), authored by Judit Vörös, Skye Wassens, Luke Price, David Hunter, Steven Myers, Kyle Armstrong, Michael Mahony and Stephen Donnellan.



MISSED A TALK?

Most of the Frogs Vic events are filmed and uploaded to the webpage. Check them out at www.frogsvic.org/events

If you have a technological touch and want to help out with the a/v side of things, please give us a shout at info@frogsvic.org. When it comes to technology, we're very good herpetologists!

TAXONOMIC REASSESSMENT OF THE THREATENED YELLOW-SPOTTED BELL FROG, *LITORIA CASTANEA* (ANURA: PELODRYADIDAE) FROM THE SOUTHERN TABLELANDS OF NEW SOUTH WALES

Stephen Donnellan, South Australian Museum

The results of our study on the taxonomic status of the Growling Grass Frog (Vörös *et al.* 2023) called into question the identity of another member of the Bell Frog group from the southern tablelands in NSW, the Yellow-spotted Bell Frog *Litoria castanea*. This species was thought to be extinct, but in 2010 a population was discovered near Yass by David Hunter. Dave sent some animals to Taronga Zoo for captive breeding and also sent some skin swabs to us to try to confirm that they were Yellow-spotted Bell Frogs. Our genetic data at that time suggested that they might be a tablelands population of the Murray Darling Basin group of the Growling Grass Frog, so we had a new problem to investigate!

Kyle Armstrong used his ancient DNA skills to analyse preserved specimens of Bell Frogs in the South Australian and Victorian Museums from places where they had disappeared to try and fill in gaps between the two Growling Grass Frog groups and the frogs from Yass. Kyle showed that the Yass frogs were genetically inseparable from specimens collected near Canberra the 1970s, confirming that they were indeed Yellow-spotted Bell Frogs.



Above: Yellow-spotted Bell Frog, *Litoria castanea*,
by Teisha Sloane-Lay

References:

Vörös, J., Wassens, S., Price, L., Hunter, D., Myers, S., Armstrong, K., Mahony, M. J. and Donnellan, S. (2023). Molecular systematic analysis demonstrates that the threatened southern bell frog, *Litoria raniformis* (Anura: Pelodyadidae) of eastern Australia, comprises two sub-species. *Zootaxa* **5228**: 1-43.

Thanks to Judit Vörös for reviewing both articles written by Steve Donnellan.



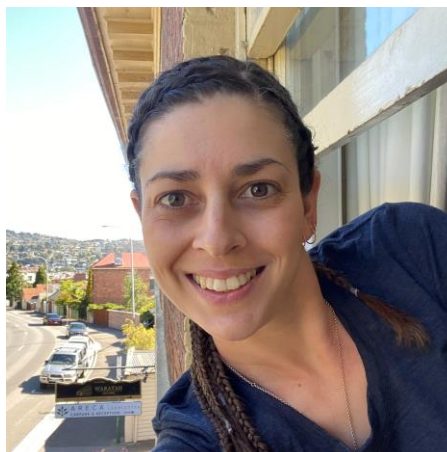
THANKS TO OUR OUT-GOING EVENTS SUB-COMMITTEE

Frogs Victoria was very lucky to have an elected Events Sub-committee in 2022 and Teisha Sloane-Lay and Steph Tomic worked hard to invite and liaise with our wonderful speakers. Teisha also put together the event posters and created social media advertising.

Teisha was a co-founder of Frogs Victoria – the original Secretary and one-third of the original committee. This year she is stepping down from the committee altogether, but you are sure to see her at future Frogs Vic events!

Steph was one of Frogs Victoria's first speakers – all the way back in November 2018! We wish Steph and her new-ish family all the best and hope to see her and/or them whenever we can.

We thank Teisha and Steph for their service to Frogs Vic and all the people that have enjoyed our events. They will be hugely missed!



MISSED AN ISSUE OF POBBLEBONK?

Check out the [newsletter page](#) of the Frogs Vic website. All of our previous issues are published there.

GOT MEMBERSHIP?

Frogs Vic membership fees:

- Pay for speakers' dinners, drinks and gift
- Pay Frogs Vic admin costs (including Zoom registration for online meetings)

Thanks to everyone that supports us financially. We could not continue to operate without you!

If you are not a member and would like to help support Frogs Vic, it's easy to sign up at www.frogsvic.org/membership Current pricing is \$40 Full Membership / \$20 Concession.

Have something you'd like to contribute to Pobblebonk? If you have an idea for a newsletter article, or a photo you'd like us to include, please email the editor: ed@frogsvic.org

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