POBBLEBONK



FROM THE (OUTGOING!) PRESIDENT

Happy New Year! As 2024 makes a start, I will be finishing up my Presidency at Frogs Victoria. It has been a hugely rewarding seven(!) years at the helm and I will be sad to be stepping down. I won't be going too far, though. I hope to be re-elected to the 2024 committee in a different capacity.

That means that the Frogs Vic Presidency is up for grabs, so if you feel inclined, pop a nomination in to secretary@frogsvic.org. More details about the AGM, where the election will be held can be found in this newsletter, but if you have any questions, you can drop us a line any time.

I can never thank you enough for your ongoing support. You have all made me an extremely happy and satisfied outgoing President.

Much love, Lynette Plenderleith

FROGS ON IN VICTORIA

February

2nd <u>Discover the frogs and microbats of Merri Park Wetland</u> – Merri Park Wetland; **Merri Creek Management Committee**

14th Valentine's Day Frog Census – Nangak Tamboree Wildlife Sanctuary; La Trobe University

18th <u>Discovering Merri Creek's Growling Grass Frogs in Moomba Park</u> – McBryde St, Fawkner; Merri Creek Management Committee

March

7th Frogs Victoria Annual General Meeting Elgin Inn; Frogs Victoria

<u>April</u>

4th Frogs Vic April Event Elgin Inn; Frogs Victoria

May

2nd Frogs Vic May Event Elgin Inn; Frogs Victoria

Got an upcoming event? Submit it to pobblebonk@frogsvic.org and we'll include it in our next email (monthly-ish) and newsletter!



JOIN US AT THE FROGS VIC 2024 AGM

Frogs Victoria Annual General Meeting

The Elgin Inn, Hawthorn, 7:30pm 7th March 2023 and online on Zoom.

The AGM is an opportunity for members to hear a summary of Frogs Vic's 2023 and to help direct the 2024 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 2024.

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:

Victoria's Froggers!

President
Vice President
Positions on the Events Sub-Committee
(Extra)Ordinary Member

(Extra)Ordinary Member

If you are interested in nominating for a position on the committee, please have a look at our Committee Roles and Responsibilities document at www.frogsvic.org/committee for more details. Please email secretary@frogsvic.org if you would like to nominate yourself for a position. This is a great way to influence what we do at Frogs Vic and to meet and liaise with

Please join us Thursday 7th March 2023, from 6 pm in person - Meeting starts 7:30 pm at Elgin Inn 75 Burwood Rd, Hawthorn VIC 3122 or online from 7:30pm, please click here.

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

AROUND THE (PIT) TRAPS

Asian black-spined toad (Duttaphrynus melanostictus) found in Melbourne

New Victorian frog species identified

Call for citizen scientists at Wilson's Prom

Marion Anstis reviews Clemann and Swan, Frogs of Victoria

Growling grass frogs getting closer to Winton Wetlands

Genetic approach to the fight against Chytrid

Deakin Uni research shows frogs value farm dams

Pobblebonk rates 7th in ABC's Australian favourite animal sounds

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

FIRE IMPACTS AND TINY THREATENED TOADLETS

Mary Thorpe, Research Officer, Environmental Research Partnerships and Programs Unit, Parks Victoria

In 2021, my first year with Parks Victoria (PV), I was privileged to work with a team of dedicated and deeply passionate local staff, amphibian experts and citizen scientists (including Frog Vics own David De Angelis and Matt Clancy). Together, we developed a five-year post-fire monitoring program for Martin's (*Uperoleia martini*) and Southern Toadlets (*Pseudophryne semimarmorata*) in Holey Plains State Park (Holey Plains). This project is now in its second year.

Holey Plains is nestled within the heavily modified landscape of the Gippsland Plains Bioregion and is one of Victoria's lesser-known biodiversity hotspots. In January 2019, the Rosedale bushfire burnt over 81.3% of the park. The fire's severity, together with several potentially compounding factors, raised PV's concerns about the immediate and long-term survival of the toadlets and post-fire monitoring was recommended.

Southern Toadlet (Endangered) and Martin's Toadlet (Critically Endangered) are indicated as experiencing ongoing population declines. Much of the known remaining habitat of both species was impacted in the later 2019-2020 bushfires. Details of population distribution, ecology, and life history of these two species is limited. Further research and monitoring are essential to obtain a clearer picture of population trajectories, and remaining habitat refuges.





The tiny threatened toadlets:
Southern Toadlet, *Pseudophryne semimarmorata (left)*; and Martin's Toadlet, *Uperoleia martini (Right)*Photos by David De Angelis

In all, 41 sites were surveyed using nocturnal listening and audio recordings. It was hoped that the wetter La Niña conditions would provide an improved chance of detecting our focal species, and we were not disappointed. At some of the larger wetlands the noise was absolutely deafening with up to six species calling simultaneously. Overall, nine species were detected including Peron's Tree Frog, Whistling Tree Frog, Southern Brown Tree Frog, Common Eastern Froglet, Haswell's Froglet, Spotted Marsh Frog, Eastern Banjo Frog, Martin's Toadlet and Southern Toadlet.

Continued on Page 4

FIRE IMPACTS AND TINY THREATENED TOADLETS

(Continued from Page 3)

Southern Toadlet was detected at 30 sites including > 60% of historical sites and 21 new sites, which was a very satisfying outcome for our first survey. Observational estimates of calling males ranged from one individual to over 20+ individuals at a site. More in-depth quantitative surveys are needed to determine any population estimates at these locations.

Martin's Toadlet was only detected at eight of 32 sites. Less than 50% of historical sites had detections, with some sites unable to be located or completely dry. Despite this, four new sites were found. Observational estimates of calling males ranged from 1-4 individuals. Martin's Toadlet is notoriously difficult to survey, and conditions may not have been ideal at the time. Repeat surveys will be conducted in coming seasons, during much wetter and warmer conditions, to compare results at the same locations.

Several key wetlands were occupied by both threatened species and had higher frog diversity than other sites. Further research into what factors make these wetlands suitable for these threatened frogs, and whether they can prevail in the face of a changing climate and fire regimes is needed to assist land managers conserve these special sites and species.

Acknowledgements

A huge thanks to all those involved in the project including Paula Dower, David De Angelis, Matt Clancy, Nick Clemann, Joanna Summer, Craig Cleeland, Karen Rowe, Renee Catullo, Jeremy Tscharke, Phillip Rance, Brianna Dennett, Vaughn Gale, Asha Billing, Brenna Billing, Nathan Amos, and the entire Central Gippsland PV team

Mary is a Research Officer at Parks Victoria, leading a five-year project at Holey Plains to try and help understand how these toadlets and other threatened animals are recovering after the Black Summer fires.

GOT MEMBERSHIP?

Frogs Vic membership fees:

- Pay for speakers' dinners, drinks and gift
- Pay Frogs Vic admin costs

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.



THANKS TO OUR 2023 SPEAKERS

Dr Tiffany Kosch

Dr Jeff Hughes

Thais Sasso Lopes

Dr Brendan Casey

Dr Lynette Plenderleith

Edward McNabb

David De Angelis

Louise Durkin

Dr Peter Griffioen

Nick Clemann

Jack O'Connor

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

MISSED A TALK?

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

We apologise for the delay in uploading 2023's talks due to ill health. We promise we will get them all on the website soon!

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!



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 2024 and would love to see you talk. Please email events@frogsvic.org

MISSED AN ISSUE OF POBBLEBONK?

Check out the newsletter page of the FV website. All of our previous issues are published there.

BOOK REVIEW:

FROGS OF VICTORIA: A GUIDE TO IDENTIFICATION, ECOLOGY AND CONSERVATION BY NICK CLEMANN & MIKE SWAN, CSIRO PUBLISHING, 2023

Craig Cleeland

Australia's herpetofauna has had a diverse array of field guides and natural history publications, the latest of which is the book Frogs of Victoria by Clemann and Swan. For those that collect books of this nature, I'm sure you will already have a copy, but for those of you debating whether this book offers anything different from other books you may already have, or from what the internet can provide, then let me suggest you won't be disappointed.

While the authors make no claim to this book being a field guide to Victorian frogs, they have however, managed to squeeze an amazing amount of information into 180 pages of A5 paperback that could quite easily slip into a backpack and be taken out into the field for use. The authors, both highly experienced and well-known Victorian herpetologists, have had to make some compromises along the way to keep the book to this size. While the book briefly describes the larval stages (tadpoles), including the eggs and nests, the text and images primarily refer to adult frogs. The frog images, while providing the necessary detail for identification, are generally small and some are underexposed, presumably in the printing process. As well as the images of the 38 native Victorian species and two introduced amphibian species, the authors have included a very useful distribution map for each species which will be invaluable to those users who will flick through the book trying to ID a frog based on the pictures and their location. Unfortunately, there is little information about the size of the frogs, although the authors do refer to the frogs as medium sized or large sized.

For those users who are more inclined to use a key to ID their frogs, there is an excellent key provided, which is straightforward to follow and has images of key anatomical aspects used so the user doesn't need to be an expert on frog anatomy to work their way through. However, keys are available online on the various frog related websites. As this book is a frozen snapshot of taxonomy at the time it was written, it won't have *Geocrinia sparsiflora* from the Otway's or any of the taxonomic revisions yet to come; so is this book worth purchasing?

The answer is a resounding yes, the crowning jewel of this book is its species profiles. They are incredibly detailed and highlight knowledge that the authors have gleaned either from their own extensive fieldwork or from their broad network of colleagues currently working on the frog species in Victoria. Go figure – that's not a picture of *Uperoleia tyleri* that I have, turns out having read this book that *U. tyleri* is no longer the species defined as occurring in Victoria - what I photographed was in fact Martin's toadlet *U. martini*.

Further, each frog species profile has an initial identification section, with bold text used for key features, a very useful tool for those who are looking to confirm their identification. The ecology and conservation of each species is beautifully crafted and is worth reading on its own merit whether the book is used for frog ID or not. When the authors feel there is information worth sharing, they share it – four fascinating pages devoted to the Southern Giant Burrowing Frog, while some other species perhaps just have two. Lastly, and perhaps in my mind the part of the book that still resonates is the passion these authors have for their subject matter – it seeps into the text, sometimes in a most unexpected way. Clemann and Swan are first and foremost committed to the conservation of Victorian Frogs and this book stands testament to that!

FROGS
of VICTORIA
A Guide to Identification, Ecology and Conservation
Neck Clements
and Michael Swen

Frogs of Victoria is in bookshops now! Alternatively, order a copy here: www.publish.csiro.au/book/7950/

Craig is a former science teacher and wildlife educator and considered to be the foremost expert on Victoria's threatened Southern Toadlet, having studied the species for over 20 years.

THANKS TO OUR OUT-GOING COMMITTEE MEMBER, MAGGIE HAINES

Long-term Frogs Victoria supporter turned committee member Maggie Haines is stepping down from the committee at this year's AGM.

Maggie worked hard to create and execute 2023's program of events. Maggie has supported Frogs Victoria from the start and her attention to detail, great organisation skills and diplomatic sense making in committee meetings have made her an invaluable member of the team! Maggie will be missed greatly, but we hope to see her at future events. Thank you, Maggie, so much for all your hard work.



Maggie is evolutionary biologist and has studied a variety of amphibians and reptiles. Recently, she assessed frog species impacted by 2019-20 bushfires to determine which ones should be listed as threatened under the EPBC Act. She reckons the Growling Grass Frog is the best looking frog in Victoria.



FROM PARKS VICTORIA...

A CROAK ABOVE THE REST: HOW YOU CAN HELP THE ELUSIVE GROWLING GRASS FROG IN WILSONS PROM

"The vulnerably listed Growling Grass Frog (*Litoria* raniformis) has been sighted in Wilsons Promontory

National Park but the range and status of their population is not well understood..."

Click here to read more on the Parks Victoria website...

FROM THE MUSEUM AUSTRALIA BLOG...

SMOOTH OPERATORS: INTRODUCING A TINY NEW SMOOTH FROG FROM SOUTHERN VICTORIA

Tom Parkin and Dr Jodi Rowley

"Hidden in plain sight in the forests of Victoria's Otway Plains and Ranges, we describe a new smooth frog to science, with an unusual reproductive mode..."

Click here to read more on the Museum Australia Blog...

MOUNT WILLIAM CREEK CATCHMENT, A HAVEN FOR BIBRON'S TOADLETS

Peter Homan

Bibron's Toadlet *Pseudophryne bibronii* (also called Brown Toadlet) is a small member of the family Myobatrachidae, with distinctive black and white marbling on the ventral surface (Clemann and Swan 2023). The species walks rather than hops and is an autumn breeder with males calling from February to about June, usually after rain (Clemann and Swan 2023). Bibron's Toadlet may be declining throughout its range including in Victoria. As a consequence, the species is categorised as Endangered under the Victorian Flora and Fauna Guarantee Act 1988.

"Wuurak" Land for Wildlife property is located approximately 7 km west of Moyston in western Victoria. The property covers 150 hectares and is owned by Adam and Tracey Merrick. Adam is the Trust for Nature officer for western Victoria. Four Ecological Vegetation Classes are represented on the property: Heathy Woodland, Sand Forest, Plains Grassy Woodland and Damp Sands Herb-rich Woodland. Reservoir Creek, an ephemeral tributary of Mount William Creek, flows in a northerly direction on the eastern boundary of the property.

Rhynie Pastoral Company is a large cropping and grazing enterprise located in the Willaura/Maroona district south of Moyston. The owners of the property, Jack and Celia Tucker, are the main organisers with the Upper Hopkins Land Management Group. The Tuckers have conducted a wide range of conservation activities on their property including revegetation, preserving remnant native grasslands, fencing-off creek-lines and managing farm dams to benefit frogs, especially the Growling Grass Frog *Litoria raniformis*. The Tuckers also own a bush block, close to Mount William Creek, about 6 km NNW of the Merrick property and 10 km NW of Moyston.

In October 2004, I commenced a long-term survey of vertebrate fauna at "Wuurak" (Homan 2012, 2014). On most occasions surveys took place during spring and/or autumn each year. During a survey in March 2005, Bibron's Toadlets were recorded for the first time at "Wuurak". An estimated 20 individuals were heard calling in Plains Grassy Woodland beside Reservoir Creek and one individual was captured in a pitfall bucket on an ancient sand-dune in Heathy Woodland.





Figure 1 (Left) The author in Bibron's Toadlet habitat, April 2010 by Maryrose Morgan.

Figure 2 (Right) Bibron's habitat April 2023 by Peter Homan.

Following the initial discovery in 2005, Bibron's Toadlets were recorded on a regular basis, especially during autumn surveys when conditions were favourable. All records of calling males have been from the same location near Reservoir Creek (Figs. 1 & 2). In April 2010, an estimated 30 individuals were heard calling and one was captured by hand (Fig. 3). One was also captured during pitfall trapping in Heathy Woodland during this study. In March 2011, an estimated 60 individuals were heard, two were captured in a pitfall bucket and one was found under debris in Sand Forest. In March 2013, April 2014 and March 2017 several individuals were captured in pitfall traps in Heathy Woodland, but none were heard calling during these autumn surveys. However, Bibron's Toadlets were also captured in pitfall traps in the Heathy Woodland area outside the usual activity period, with captures occurring in December 2010 and November 2013.

Continued on Page 9

MOUNT WILLIAM CREEK CATCHMENT, A HAVEN FOR BIBRON'S TOADLETS

(Continued from Page 8)

I had made arrangements to visit both properties during early April 2023 and was hoping conditions would be favourable for detecting Bibron's Toadlets. Fortunately, heavy rain fell across the eastern Grampians region on the Saturday before my visit. The rain had passed by the Sunday morning, but Adam Merrick reported no Bibron's were calling from the usual area on Sunday night. However, on Monday night numerous males were calling and when Jack Tucker, Adam and I visited the area on the Tuesday night, 11 April 2023, we estimated at least 100 individuals were calling. After much effort we managed to catch two Bibron's Toadlets. We surveyed the site from 2100 hrs to 2130 hrs. The temperature at 2130 was recorded as 14.2°C and relative humidity was 79.6% (Kestrel 3500 Weather Meter). The night was completely calm with no wind recorded.



Figure 3. Bibron's Toadlet April 2010 ventral view by Peter Homan.

The following night, 12 April 2023, the Tucker family and I visited their bush block hoping to record Bibron's Toadlets calling. Jack had already found three Bibron's under roof tiles in October 2022, which were the first available, confirmed records for this location. I had visited this block several times previously and had identified at least two low-lying areas that drained down towards Mount William Creek as potential sites for Bibron's Toadlets. When we arrived at the first area at 2045 hrs, we estimated 30 Bibron's Toadlets were calling. At the second site, several hundred metres away, at least 50 males were calling. At this second site, four individuals were captured (Figs. 4 & 5). The survey concluded at 2130 hrs at which time the temperature was recorded as 17.2°C and relative humidity as 81.7%. No wind was recorded at either site on the Tucker property.

Continued on Page 10

MOUNT WILLIAM CREEK CATCHMENT, A HAVEN FOR BIBRON'S TOADLETS

(Continued from Page 9)

There have been few targeted surveys and no long-term monitoring of Bibron Toadlet populations in Victoria (Clemann and Swan 2023). It is therefore very pleasing to know that a substantial population of this threatened species persists at "Wuurak" after many years of studies. The Wednesday night survey at the Tucker's bush block also confirmed a substantial population at that property. Other areas, with similar habitat to that found on the Merrick and Tucker properties, exist throughout the Mount William Creek catchment, upstream of Lake Lonsdale. It is therefore very likely that other populations of Bibron's Toadlet would be found throughout this district with further targeted surveys.





Figure 4 (Left) Bibron's Toadlet dorsal view by Celia Tucker; Figure 5 (Right) Bibron's Toadlet ventral view by Ceila Tucker.

Acknowledgements

Surveys at the Merrick and Tucker properties were conducted under the terms of various research permits issued by, what is now, DEECA and under approvals by the Wildlife and Small Institutions Animal Ethics Committee. Many thanks to the Merrick and Tucker families for access to their wonderful properties.

References

Clemann N and Swan M (2023) Frogs of Victoria: A Guide to Identification, Ecology and Conservation. (CSIRO Publishing: Melbourne)

Homan P (2012) Survival and recolonisation following wildfire at Moyston West, Western Victoria: 1. Mammals. The Victorian Naturalist 129, 192-202.

Homan P (2014) Survival and recolonisation following wildfire at Moyston West, Western Victoria: 2. Herpetofauna. The Victorian Naturalist 131, 4-14.

Peter is a Wildlife Ecologist who conducts fauna surveys for various clients, including monitoring populations of Growling Grass Frogs for the City of Whittlesea and Green and Golden Bell Frogs for Gippsland Water

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

Reproduction/republishing of articles:

To reproduce Pobblebonk, the Frogs Victoria Newsletter material in any form, you must receive express permission from the author and/or photographer, give them full and appropriate credit and include a note that the material has been reproduced from Pobblebonk, the Frogs Victoria newsletter. If possible, please also include a link to our website frogsvic.org and/or our logo (available for download from the website). You must not sell material from Pobblebonk, the Frogs Victoria newsletter.