

# THE FRESHWATER TURTLE TIMES



1 MILLION TURTLES  
COMMUNITY CONSERVATION PROGRAM

## Newsletter 4

October 2022

Welcome to the fourth of our quarterly newsletters. These newsletters provide updates on what you and the program have achieved in the last couple of months.

This edition includes:

- Launch of Turtle Month 2022 with a 'first birthday' online event
- National Nest Predation Survey update
- New activity – Nest Protection
- Basking sites
- New TurtleSAT promotional postcards available
- Research update from La Trobe University – Variations in reproductive cycling and nesting in female turtles
- Ongoing opportunities to assist research projects

### **1 Million Turtles Community Conservation Program**



**YOU ARE INVITED  
TO OUR  
1 MILLION TURTLES  
2022 TURTLE MONTH  
KICK-OFF!**

1 NOV, 6.30PM - 8.00PM  
(AEDT - SYDNEY) ON ZOOM

<https://1millionturtles.com>

@ Dr James Van Dyke

*This project is supported by an Australian Government Citizen Science Grant.*



The first day of November will mark one year since the official launch of the [1 Million Turtles program](#) and the start of Turtle Month 2022. To celebrate, we will be holding an evening online event hosted by the 1 Million Turtles research leaders Dr James Van Dyke, Associate Professor Ricky Spencer, and Dr. Deborah Bower who will provide an update on the data collected, and the picture they are seeing so far.

Your interest in turtle conservation has been an integral part in what has been achieved and we'd love you to join us.

Webinar Monday 1 November 2022. Register here- <https://www.eventbrite.com.au/e/1-million-turtles-turtle-month-2022-kick-off-tickets-371829511077>

The 1 Million Turtles team and all the contributors (First Nations community members and ranger teams, community groups, local councils, non-government organisations, land management agencies, schools and individuals) across Australia have had a busy year sharing their knowledge, collecting data through [TurtleSAT](#), running the National Nest Predation Survey, establishing new 'basking' sites, and protecting nests, among many other things.

The interest in turtle conservation and people's willingness to share their knowledge and take conservation actions has been really heart-warming, but there is still a long road to travel.

At this time of year, and particularly after big rains, we encourage everyone to be on the lookout for signs of turtles coming out to nest, crossing roads, nests dug up by foxes, and even over-wintered hatchlings emerging. Please record any of these sightings by taking a photo and uploading it to TurtleSAT.

### **National Nest Predation Survey**



Best Time to Do This: Avoid peak nesting period in November, but anytime from December to end of October 2023.



Just a reminder that we have a 'blackout' month in November for this survey to avoid the peak nesting time of many of our turtle species. But we'd love people to be ready to run this predation trial again from December onwards. If you have undertaken the survey already, do you have a nearby site where you could run through it again to compare different times of year?

November would be a great time to get your training done if you are new to the National Nest Predation Survey. The training module can be found here: <https://1millionturtles.com/nnp-survey1>

### **Nest protection in NSW, VIC and WA**



Best Time to Do This: Throughout the nesting seasons.

A 'new' activity is ready to roll for the 1 Million Turtles Community Conservation Program in NSW, VIC and WA and we hope to add more states in the near future. Predation rates on turtle nests are very high in many parts of the country. Introduced foxes and pigs are the major predators that attack turtle nests.

While successful trials of protection techniques for individual nests have been undertaken at a number of sites around Australia, we now have ethics approval through La Trobe University to encourage this practice at as many sites as possible, just in time for peak nesting in November, Turtle Month. By protecting turtle nests, you can help to manage the impact foxes and pigs have on turtles.

The first step is to complete some compulsory on-line training to understand how to protect the nests correctly and in an ethically responsible way while minimising any potential risk of injury or damage to you and any species. The most important aspect of our training is that we cannot give you authorisation to directly touch, handle, or pick up any turtles or their eggs.

To protect the nests you will use simple equipment such as small sections of mesh, turf pegs, and a hammer.

Victoria, New South Wales, and Western Australia have provided state approval for this activity and are good to go. We hope to have the other states approve the activity soon.

Visit <https://1millionturtles.com/nest-protection> for more information and to access the training module. All new state level ethics approvals will be updated on the website when confirmed.

We will also provide some more detail on this activity at our Turtle Month online event.

### **Basking sites**



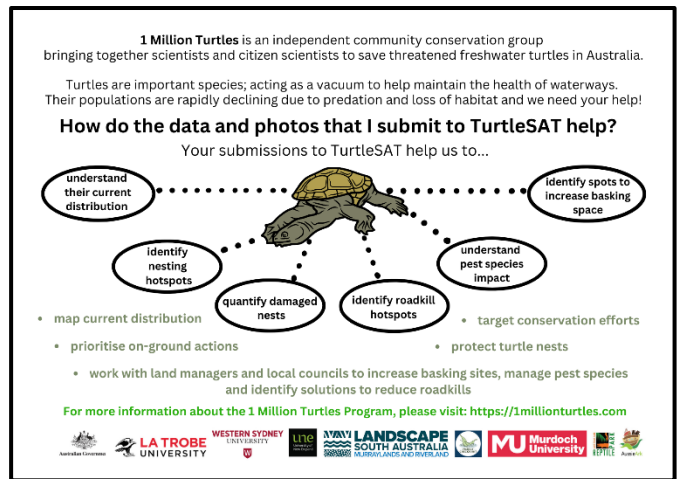
The historical removal of snags from many waterways means our turtles are often left without basking sites where they can safely leave the water to absorb energy from the sun. Several community groups are talking with their local councils and land management agencies about suitable sites to re-establish basking sites.

Basking sites are also a great place to monitor turtles. Ricky Spencer has been working with Wingecarribee Shire Council in the New South Wales Southern Highlands to put up signs near basking sites at Lake Alexandra to encourage people to look out for turtles and record any sightings through TurtleSAT.

If adding extra basking sites and/or setting up monitoring points is something you think might work in your local waterway, we'd love to hear about it.



## New TurtleSAT postcards



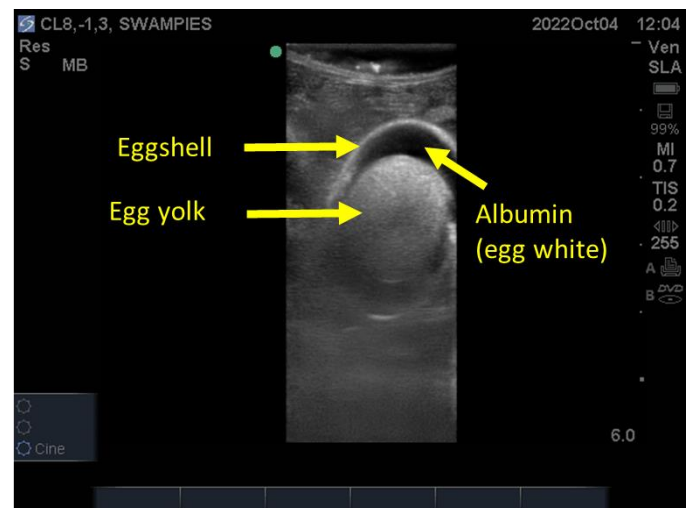
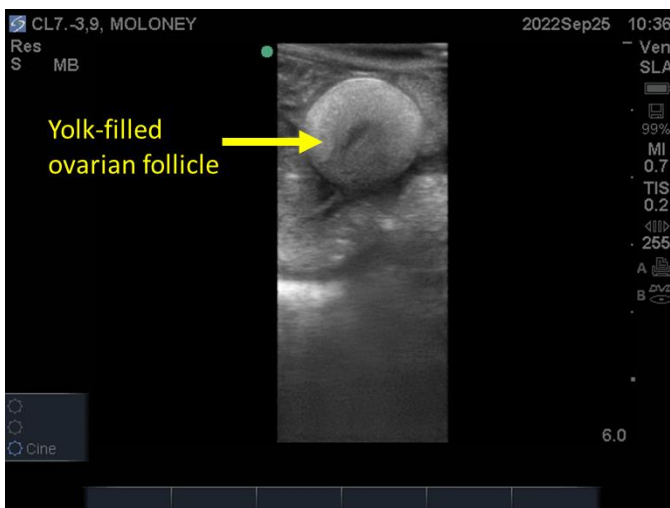
We have developed new 1 Million Turtles promotional 2-sided postcards to encourage the use of TurtleSAT. If you have upcoming events where you could hand these out to the public please let us know and we can send you a set of 250 or 500.

Please email: [1millionturtles@1millionturtles.com](mailto:1millionturtles@1millionturtles.com) with 'Postcards' in the subject heading and provide your postal address and the number required, if this could be of use to your group or organisation.

## Research Update – La Trobe University

This spring the La Trobe turtle team has been trapping at a number of locations across Victoria to collect data on reproductive cycling in female turtles. By finding out when they ovulate and when the eggshell is produced we hope to better predict when nesting should occur.

To identify turtle reproductive stages, we have been using an ultrasound to see if females have ovarian follicles which have not yet ovulated, or fully-shelled ovulated eggs. In the images below, you can see the difference. The turtle on the left from Wodonga, VIC, has large, yolk-filled ovarian follicles which are very easy to see. The turtle on the right from a colder region at Bairnsdale, VIC, has a fully shelled egg, where the egg yolk and egg shell are both clearly visible, and the black space in between is the albumin (or egg white) layer.



Both turtles are eastern longnecks (*Chelodina longicollis*), so it is really interesting to see that longneck turtles from the colder area have already ovulated and have clearly shelled eggs. In contrast, the Wodonga

turtles, which should be a bit warmer and further along in spring, have not quite reached the point of ovulation. It will be interesting to see when turtles from both locations nest, and see if the turtles in Bairnsdale that ovulated eggs first will be the first to lay them.

One of the peculiar things about turtles is that they can carry their eggs for a long time before laying them. The fertilised embryos enter a state of 'diapause' where embryonic development is switched off, and they do not develop further until after the eggs are laid. Turtles can carry their eggs like this for many weeks, and potentially months. This is one reason why turtles can dig a nest but then abandon a nest attempt, leaving an empty hole, and then return from the water to try again the next time it rains, without it affecting the eggs and embryos.

### **Volunteer Help Still Wanted!**

Researchers are conducting turtle nest and trapping surveys in parts of Victoria, New South Wales, and South Australia this spring and summer. We will be active looking for and protecting turtle nests in November, and then will be doing trapping surveys throughout the summer. This is a great opportunity to get some hands-on experience and training working with wildlife and specifically for protecting turtle nests.



We will mainly be focusing on the following locations this spring/summer:

- Albury/Wodonga (NSW/VIC)
- Bairnsdale, VIC
- Benalla, VIC
- Gunbower, VIC
- Boort, VIC

Please contact James Van Dyke at [j.vandyke@latrobe.edu.au](mailto:j.vandyke@latrobe.edu.au) if you are interested in helping with turtle research at any of these sites and further details can be supplied. Some sites will require induction from grant partners.



We're really keen to share the turtle conservation achievements of groups and individuals around Australia. If you would like to share your group's activities in a future newsletter please let us know via [1millionturtles@1millionturtles.com](mailto:1millionturtles@1millionturtles.com) and include 'newsletter update' in your subject heading.

### **Find out more:**

<https://1millionturtles.com> website with information about the 1 Million Turtles program, the team members who support the project, links to event registrations, videos, training modules, some of the recorded webinars, and more.

Two Facebook pages; [TurtleSAT](#) which provides updates on interesting sightings and community alerts such as red-eared sliders, and [1 Million Turtles](#) which provides general freshwater turtle information, project updates and invitations.

### **1 Million Turtles Team Contacts**

Remember that if you would like one-on-one support from a team member please contact 1 Million Turtles [1millionturtles@1millionturtles.com](mailto:1millionturtles@1millionturtles.com), include 'Need 1 on 1 support' in the subject heading, provide us with some information on the nature of the assistance you require along with your location and best contact details, and a local contact with be in touch with you.

**New South Wales/ACT** – Assoc. Professor Ricky Spencer, Ms. Geetha Ortac, Dr Deb Bower (Armidale area)

**Victoria/Tasmania** - Dr James Van Dyke (and NSW Riverina)

**South Australia** - Dr Sylvia Clarke, Professor Mike Thompson

**Western Australia** - Mr Anthony Santoro

**Queensland** – Ms Marilyn Connell, Dr Deb Bower

**Northern Territory** - Dr Deb Bower

