

## What frogs are where?

This year, North Central CMA and the Arthur Rylah Institute (ARI) are testing a new method to understand what types of frogs respond to water in Gunbower Forest and where.

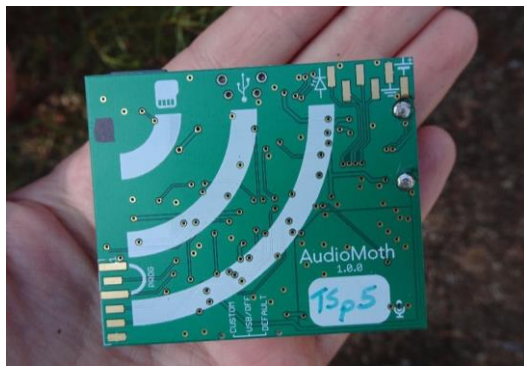
“Frog monitoring is undertaken every few years in Gunbower Forest. This time we have a new device called an AudioMoth which records frog calls instead,” North Central CMA project officer Sophia Piscitelli said.

“We can place AudioMoths at sites within the forest for several months and capture much more data than with call surveys.”

While recording devices for frogs and birds have been used in the past, older devices were very expensive and difficult to use. AudioMoths are much cheaper, much smaller and more user-friendly.

“We are also surveying tadpoles to look at breeding success across sites and for different species.”

“ARI has been monitoring frogs at other wetlands across northern Victoria as well as encouraging the public to capture data using the FrogID app,” ARI frog and turtle researcher Katie Howard said. “Data from this frog monitoring project can be used with other data from across the region to help us better understand frogs and their habitat management across the landscape.”



AudioMoth recording device for capturing frog calls



Chase and Annalise help Paul Brown with fish surveys at Long Lagoon

## Fresh faces at North Central CMA

In August, two secondary Indigenous students, Chase and Annalise, joined the North Central CMA for an 18-month traineeship as part of their Certificate II in Horticulture/Conservation and Land Management. The traineeship means they finish their Year 11 and 12 while gaining workplace skills and experience.

Chase and Annalise have been trying out work all across the catchment, including fish surveys at Gunbower Forest, revegetation and fencing at Kyneton, cultural training with Yorta Yorta, pest management in Kerang, pink-tailed worm lizard surveys with Dja Dja Wurrung, seed collecting, and water bug sampling in Campbells Creek.

Supervisor Robyn McKay: “It’s fantastic having them in once a week. They bring out the best in each other and remind me of the best parts of my job”.

## What has been the most enjoyable experience?

Working alongside the team here at NCCMA (Robyn, Glen, Nick, Rochelle and Pat) and learning so much about traditional culture.

## What career path are you looking to pursue?

I’d like to work as a Park Ranger with Auntie Sharnie and her team at Parks Victoria.

# Gunbower Island Community Newsletter

Edition 26: Summer 2020



**Welcome** to the 26th edition of the Flooding for Life community newsletter. This edition features the plans to reintroduce southern pygmy perch, fox control to protect turtles, a productivity study to understand and evaluate the capacity of Gunbower wetlands, frog monitoring with ARI, and work experience with secondary school students.

## Improving threatened pygmy populations

Southern pygmy perch were once common in the wetlands and slow flowing creeks of the southern-Murray Basin. They are now endangered in New South Wales and South Australian and their numbers are rapidly declining in Victoria.

The species was last recorded at Black Charlie Lagoon in Gunbower Forest in 1997, and is now considered locally extinct in the Gunbower and lower Loddon region. Since the 1970s, introduced fish such as redfin, trout and carp, as well as habitat destruction, altered flows, disconnection of floodplain wetlands have contributed to their decline. Small-bodied fish are an important indicator of wetland health, as smaller fish are more responsive to small changes in flow and water quality properties, and restoring locally extinct fish species is one of the ecological objectives for Gunbower Forest.

In 2017, North Central CMA received funding from the Department of Environment, Land, Water and Planning’s Biodiversity On-ground Action program to map the distribution of southern pygmy perch and identify suitable source populations for captive breeding and future reintroduction.

About 100 fish were collected and transported to a specialist pygmy perch breeder, Chris Lamin from Middle Creek Farm. After a salt bath to clear the fish of parasites, the brood stock was transitioned to a diet of black worms to get them in good condition for spawning. The fish have now successfully bred and the offspring (about 3cm length) are ready for release into wetlands. About 800 captive bred fish will be released into two wetlands around Gunbower Island this year.



Southern Pygmy Perch(Source: NCCMA)

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The North Central Catchment Management Authority acknowledges Aboriginal Traditional Owners within the region, their rich culture and spiritual connection to Country. We also recognise and acknowledge the contribution and interest of Aboriginal people and organisations in land and natural resource management.



## Giving Gunbower Forest turtles a helping hand

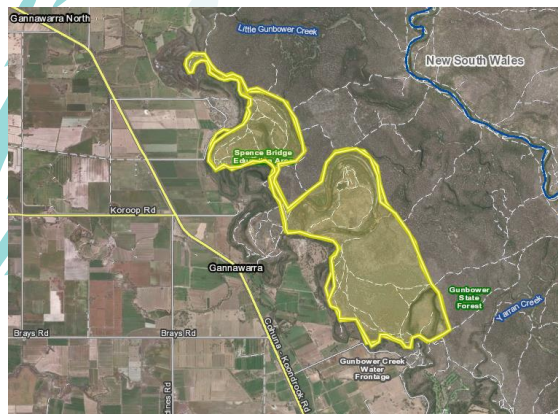
The fox control program to protect key turtle breeding sites within the Gunbower Forest Ramsar site has been completed.

The program consisted of mixed management methods and was carried out from November 2019 to January 2020, with a break in the program over the Christmas period. The program was designed and implemented using industry best-practice methodology which consists of identifying areas that will have the most impact on foxes at key turtle breeding sites, while also reducing the adverse impacts to non-target species and the surrounding environment.

The sites targeted included Black Swamp, Reedy Lagoon, Horseshoe Lagoon, Botches Lagoon and McCutchells Bend (see map below). Bait stations were established at strategic locations to ensure foxes and feral cats were targeted in a way that results in maximum impact on exotic predator numbers in and around the target areas.

Early results suggest that the program has had a significant impact on fox numbers in the areas targeted by the program. Thirty bait traps were laid with 22 taken. Nest monitoring will take place later in the year by Turtles Australia to determine how successful the program has been at reducing nest predation.

If you have any questions about this or other pest animal control programs coordinated by the North Central CMA in the Gunbower Ramsar site, please get in contact with the Ramsar Coordinator Rod White at [Rod.White@nccma.vic.gov.au](mailto:Rod.White@nccma.vic.gov.au)



Area targeted by the fox control program based on identification of key turtle breeding suites.

## How much food do our wetlands produce for wildlife?

A project investigating the seasonal productivity of three wetlands in Gunbower Forest is underway. The aim of the project is to quantify and compare how much food each of these wetlands produce throughout the year for wildlife, particularly waterbirds, after being watered in mid-2019.

“We know wetlands play a critical role in supporting native animals, but we want to know the volume and variety of food resources they produce and how different wetlands compare to each other”, North Central CMA project officer Alannah Jones said.

The wetlands being assessed include Reedy Lagoon, Little Reedy Lagoon and Little Gunbower Complex, which represent different habitat types. To evaluate productivity, surveys were done in winter, spring, summer and autumn for wetland vegetation, macro- and microinvertebrates and fish. The characteristics of the fish and waterbird communities recorded foraging during and after watering event is also recorded.



Paul (Fisheries and Wetlands) and Alannah undertaking a wetland vegetation survey at Reedy Lagoon (Source: NCCMA)

“Three seasonal surveys have already been completed with the final survey planned for autumn 2020. Overall, the results so far show that abundance and diversity peak during spring and decline somewhat over summer”, Alannah said.

This study will outline how the wetlands differ in food availability and will help inform future environmental water management for maximum environmental benefit. In particular, it will help to prioritise which wetlands to water during dry periods.



Broad-shelled turtle (*Chelodina expansa*) prior to release. A single Broad-shell has been caught twice at this site on Little Gunbower creek. (Source: Paul Brown)



Yabbies (*Cherax destructor*) were present in most samples, although not many were large adults like this one. (Source: Paul Brown)



Wavy marshwort (*Nymphoides crenata*) in full bloom at Reedy Lagoon (Source: Paul Brown)