## Field Trip to Olney State Forest 6/12/20



On the 6<sup>th</sup> of December 2020, while Covid restrictions had eased, ANGFA NSW met for one of the only times of the year. A fieldtrip to just south of Newcastle, where a population of Crimson- spotted Rainbowfish (*Melanotaenia duboulayi*) was known.

This population is contained in a single 20x5m pond, cut off from any other waterways. The pond is an old, abandoned sawmill pond, most likely used during the first half of the 20<sup>th</sup> century for logging in Olney State Forest. It is unknown why the rainbowfish are present in the pond. For what reason or when they were introduced is a mystery. It is possible they were released as mosquito control, but up until recently, Gambusia would have been used, so maybe this isn't the reason. Possibly someone locally is using the pond as a free breeding ground, but based on the numbers of fish present, and how adapted they are to the cold and tannin-stained water, this seems unlikely too. But they are there, and they are beautiful, so ANGFA will investigate!

At 9 am, a group of enthusiastic members met at the Wyong Caltex on the M1 North. From there, it was a 30-minute drive north into Olney State Forest. The road in begins as a paved road, and upon entering the forest, turns into a moderately maintained dirt road. Soon after entering, a sharp left turn (that even though I knew was coming up, I still missed it initially) takes you only a few hundred metres to the pond, right next to the road.

The pond looks innocuous at first, barely a ripple in the dark, tannin-stained water. And if some bread is thrown in, a few fish break the surface to grab a quick morsel. Even so, the shallow pond belies what it contains. Thousand, if not even tens of thousands of fish are present in the pond. Traps caught a few, and initial seine netting only caught a handful of fish. But this is probably because in setting up the nets and removing debris, we stirred up the muck at the bottom.



After moving to the other side of the pond, the net began to drag in hundreds of fish. This after only a few months prior where around 500+ adult fish were removed! The rainbows are extremely colourful, with bright green sides and stunningly red fins, they are an excellent example of the species. And being so close to Sydney are an amazing find.



Also present in the pond are a huge number of yabbies (probably Cherax destructor), and a handful of tadpoles. The tadpoles are what brought the discovery of rainbows to light. Frog researchers from the University of Newcastle were looking for a critically endangered frog species; Littlejohn's tree frog, (Litoria *littlejohni*) that is known from the area. And while investigating the pond found out the fish were present. It turns out that the fish are potentially having a highly detrimental effect on the endangered frog

species, eating the eggs before they have a chance to hatch. In the pond with fish, no Littlejohn's were found, yet in a pond only a few hundred metres away, with no fish present, the Littlejohn's were thriving.

While the fish may be interesting and worthwhile to those in ANGFA, they appear to be damaging the environment they now call home. It would be worthwhile, if possible, attempting to remove them from the site, while at the same time supplying members of ANGFA with an incredibly beautiful fish.

Having caught all the fish we needed, and beginning to return to Sydney, a quick stop off at Pearl Beach on the Central Coast was in order. Here, White Cloud Mountain Minnows live wild, having been introduced to the small stream behind the beach at some point in the past. Spending an hour or so at the creek, a handful of minnows were secured.

Otto with Derek and Ron in the background. In search of White Cloud Mtn Minnows at Green Point Ck Pearl Beach.







Minomiser in use at Olney State Forest Pond.

From there, Graham had invited the weary field trippers back to his home for a fish room tour and refreshments. A welcome relief to the hot day picked for the field trip. The fish room was a wonder, the cold water even more so, and party pies and sausage rolls were the icing on the cake. All in all, a fabulous day, fabulous fish, and excellent company.

Richard Blake.

Photos David Matheson