

ON THE ROAD TO NELLIGEN
(Report on the C.D.A.S. Habitat Surveying Trip, 11.03.90)

by Andrew Boyd

The Society has many activities that are traditional, whose origins are shrouded in the mists of time. They have always been performed and always shall be. Among these are the annual fish-buying safari to Sydney or Melbourne, the northside and southside tank tours, and the habitat surveying trip to Nelligen.

Observance of these traditions has fallen off a little of late. Sometimes the tank tours are in doubt until the last minute and we had to cancel the Sydney fish-buying safari last year, owing to lack of interest. Regardless, we were determined that the Nelligen trip should go ahead.

Four of us (Rodney and Deborah Ralph, Doug Williams and myself) piled into the Ralphs' station wagon, with our nets and buckets, and set off. Following a short delay at McDonalds, Queanbeyan, where the rest of the Society was to have met us (actually, the real reason, I suspect, that we stopped was that Doug wanted to sample an egg and bacon McMuffin). Eventually, we set off for the coast at 10.18 a.m.

The sun shone brightly, as it did in Canberra all that day, but not so at the coast, for by 11.40 the sky above us was overcast and dark with rain. Exactly 106 km and 1 hour 20 minutes later (we had a short break in Braidwood and were held up by a serious road accident), we arrived at our first collecting site, Cabbage Tree Creek. We stopped at a point where the old and new bridges over the creek are side by side. Science Officer Boyd ran amok with his little rucksack full of water-testing gear.

An isolated pool gave a temperature reading of 24°C, whereas the main creek was noticeably cooler at 19°. Approximately 60 cm of water was running in the creek; it tasted fresh, registered a specific gravity around 1, a calcite hardness of 45 ppm (Canberra tap-water varies from 5 to 20 ppm) and a pH close to neutral. Several species of skinks ran about under our feet. At first the site it looked to be fish-dead, but an excited Doug spotted a large galaxid (species unknown, but it looked like a Murray Jollytail) in the isolated pool. A fish at last! A beauty too, 15-20 cm long. Despite a great deal of splashing about and cursing, we were unable to catch this one. A school of Freshwater Smelt (*Retropinna* species) was noticed under the new bridge and a great feat of co-ordination resulted in the capture, with various nets, of about 20 of them. Also present in large numbers were small freshwater shrimp and tadpoles. At 12.50 we set off again for our main destination, the Shallow Crossing at Nelligen.

Ten minutes and 15 km down the highway, we reached Shallow Crossing. Water temperature was 22°C, hardness around 240 ppm, pH neutral, specific gravity 1, taste fresh. This was not surprising as the tide was fully out. The only fish to be seen were some Mullet -- a great disappointment as in previous years, Pipefish, Bulrouts, Pacific Blue-eyes (*Pseudomugil signifer*) and several other species have been noted there. Rodney hypothesised that the dearth was due to siltation caused by recent heavy rains. We moved on to the Nelligen Caravan Park, on the Clyde River.

After much gnashing of teeth and bemoaning the lack of fish, we searched around a bit further, finally arriving at the mudflats up towards the Nelligen Hotel. We were about to give up when I noticed something wriggling in a puddle not two inches deep, disturbed by my footfalls. This turned out to be a Bug-eyed Goby (*Redidogobius bikolanus*), about 1 cm long and my main reason for coming was to collect some of these little fellows. We leapt about with joy and Doug Williams soon found a larger

pool with some Blue-eyes in it. Apart from the Bug-eyed Gobies, we also collected Big-headed Gudgeons (*Philypenodon grandiceps*) and Dwarf Flat-headed Gudgeons (*P. 'species-1'*), and a translucent Gudgeon as yet unidentified by the local experts. A large school of some species that looked like Smelt inhabited a deep pool in the foetid mud and, despite our best efforts, they are there still. At the caravan park, Ben Gunn and his mother caught up with us. Temperatures in the shallow isolated pools ran from 22 to 28°C, the pH was 7.2, specific gravity about 1.01, hardness 200+ ppm, and the water had a definite salty taste. The six of us adjourned to the Nelligen General Store for some refreshment at 3.20 p.m. Next stop was the Shoalhaven River bridge.

The only fish to be found there was the dreaded *Gambusia*, which we netted out wherever we could. A juvenile Eastern Water Dragon (*Physignathus lesueurii*) was observed and it dived under a submerged rock when disturbed! An interesting aquatic fern was collected, as was a bog plant resembling *Echinoderus macrophyllus*, and a species of *Vallisneria* yet to be determined. At 5.30 p.m. we called it a day and headed for home.

As a habitat-surveying exercise, to be continued on an annual basis, to take note of variations in the biotype, the trip was a success, though as a club activity it was a failure. Those of us that went had a good time and I suppose that is the main thing.

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