# The lost world of trout cod and Macquarie perch fishing

## by Simon Kaminskas

Something I have come to realise, after years of reading historical extracts and scientific papers, is that there is a lost world that almost no one knows about, a world in which trout cod and Macquarie perch abounded in the larger upland rivers and streams in the south-east corner of the Murray-Darling Basin.

This was a world that some of our early anglers tasted and thoroughly enjoyed. They caught trout cod and Macquarie perch on fly-fishing and spinning gear meant for trout, raved about their fighting qualities, and admitted these upland native fish, particularly trout cod, were the best fighters in freshwater pound for pound, better than introduced trout or any other species.

However, this lost world is just that, lost. Introduced trout species have almost 100% displaced and replaced trout cod and Macquarie perch in these larger upland rivers/streams, and there are few records or memories of these upland native fish before their declines and disappearances. How has this happened?

## The virtual extinction of trout cod and Macquarie perch

Introduced trout species are exotic predatory fish, very different in biology to trout cod and Macquarie perch. There is no doubt there was intense competition at all life stages between introduced trout species and trout cod and Macquarie perch in upland rivers/streams. This competition was probably most intense at the larval and juvenile stages, and introduced trout species would have won most of these competitions because young-of-the-year trout hatch earlier, and therefore have a size and developmental advantage over young-of-the-year trout cod and Macquarie perch. Predation by adult trout on juvenile trout cod and Macquarie perch would also have been intense, and there are some records of this.

All of these processes would be made worse by non-stop stockings of introduced trout species – saturation stockings of introduced trout species occurred for decades with no controls and no thought of the impact on native fish.

The evidence also suggests there were two pivotal events that caused sudden, dramatic shifts in dominance in our upland rivers and streams from upland native fish to introduced trout species. The first event was the massive degradation of upland rivers and streams by gold mining in the late 1800s. The second event was the massive 1939 bushfires that burnt huge areas of south-east Australia. Both events knocked the fish populations over in many upland rivers and streams, and after each event the introduced trout species were restocked and re-established but the already pressured upland native fish were not. More recent research indicates that severe localised fires have caused similar sudden, dramatic shifts in some specific upland rivers and streams <u>since</u> 1939.

In any case, if we add these two pivotal events to the slow, steady attrition from repeated trout stockings and perhaps some excess fishing pressure, we get the situation we have today, where upland natives are virtually extinct and virtually 100% displaced and replaced by introduced trout species.

#### **Records and evidence**

Unfortunately, we don't have a large number of records because of the strong cultural cringe towards Northern Hemisphere plants and animals in the 1800s, and the total devaluing of native flora and fauna at the time. In fisheries, this translated into a strong cultural cringe towards introduced trout species, and enormous efforts to stock and establish them at all costs, while completely neglecting native fish including in the scientific sense. Our upland native fish were there, it's just that few bothered to record them.



**Photo caption:** Magnificent wild Macquarie perch like this are rapidly heading for extinction in the handful of upland streams where they still survive. Their co-inhabitant, wild trout cod, are already extinct in upland streams. Both need a few trout-free streams to survive, something that could be a boon, not a negative, for fishermen.

More surprisingly, very few memories or stories of catching trout cod and Macquarie perch in upland rivers/streams have been handed down in angling families. Because of this, and because these declines and extinctions for the most part happened a long time ago, we've now had 2 or 3 generations of fishermen who haven't seen or heard of these upland native fish in upland rivers/streams, and so now the extremely fallacious claim that "*they were never there*" seems true to them. These upland native fish *were* there, it's just that the people who saw and caught them are long gone and for some unfathomable reason, did not pass the memories of seeing and catching these upland native fish on to younger generations very well. Thankfully though we do have some accounts of anglers catching trout cod and Macquarie perch in what are now considered "trout streams", including the fascinating extracts from "*Fishing Yesteryear*" and "*Heads and Tales: Recollections of a Fisheries and Wildlife Officer*".

## Confusion

Confusion is caused by the fact that historically both species strayed in reasonable numbers down the extensive upland/lowland transition zone in the Murray River as far the Yarrawonga and even the Torrumbarry area. However, these are/were secondary populations in secondary habitats, made possible only by an extensive upland/lowland transition in the Murray River and ever so slightly higher temperature tolerances than introduced trout. The mix of historical, anecdotal, scientific and circumstantial evidence clearly shows these were upland native fish whose primary habitats were indeed larger upland rivers and streams. This is supported by the "biological fingerprints" of these native fish – spawning strategies, spawning temperatures, maximum lethal temperatures – that show very clearly that they are upland fish.

There is also much confusion about the role of dams and siltation. There is no doubt dams and siltation have knocked trout cod and Macquarie perch out of some upland rivers and streams. But to suggest these are the major cause of decline is simply not correct. Significant stretches of superb upland river and stream habitat exist for trout cod and Macquarie perch, much of it above dams such as Dartmouth, the problem is that these habitats are dominated by introduced trout.

### The way forward

Why do I raise this issue and what is the way forward?

Well, I don't like the idea of this world being lost to the modern fishermen of SE Australia. These were magnificent fighting native fish in magnificent upland river and stream habitats. They were part of our heritage. I want to catch trout cod and Macquarie perch in our beautiful upland rivers and streams, and I can't. They're not there any more!

The way forward will requires a bit of reasonableness and a desire to right an historical wrong. **Absolutely no-one is calling for "trout eradication", the dismantling of any major trout fisheries or anything remotely like that.** However, trout cod and Macquarie perch do need some sizable trout-free upland habitats if they are ever to get off the endangered list, and if we are ever to be able to fish for them in upland habitats. This process could be a boon, not a negative, for fishermen. There would still be thousands of upland rivers/streams dominated by introduced trout where people can fish for introduced trout, but we would have a few upland rivers/streams where we could fish for trout cod and Macquarie perch too, which are the superior sports fish to introduced trout, and are Australian too.

Until next time, see you on the water.

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