

## 10 Upper Murray River Catchment

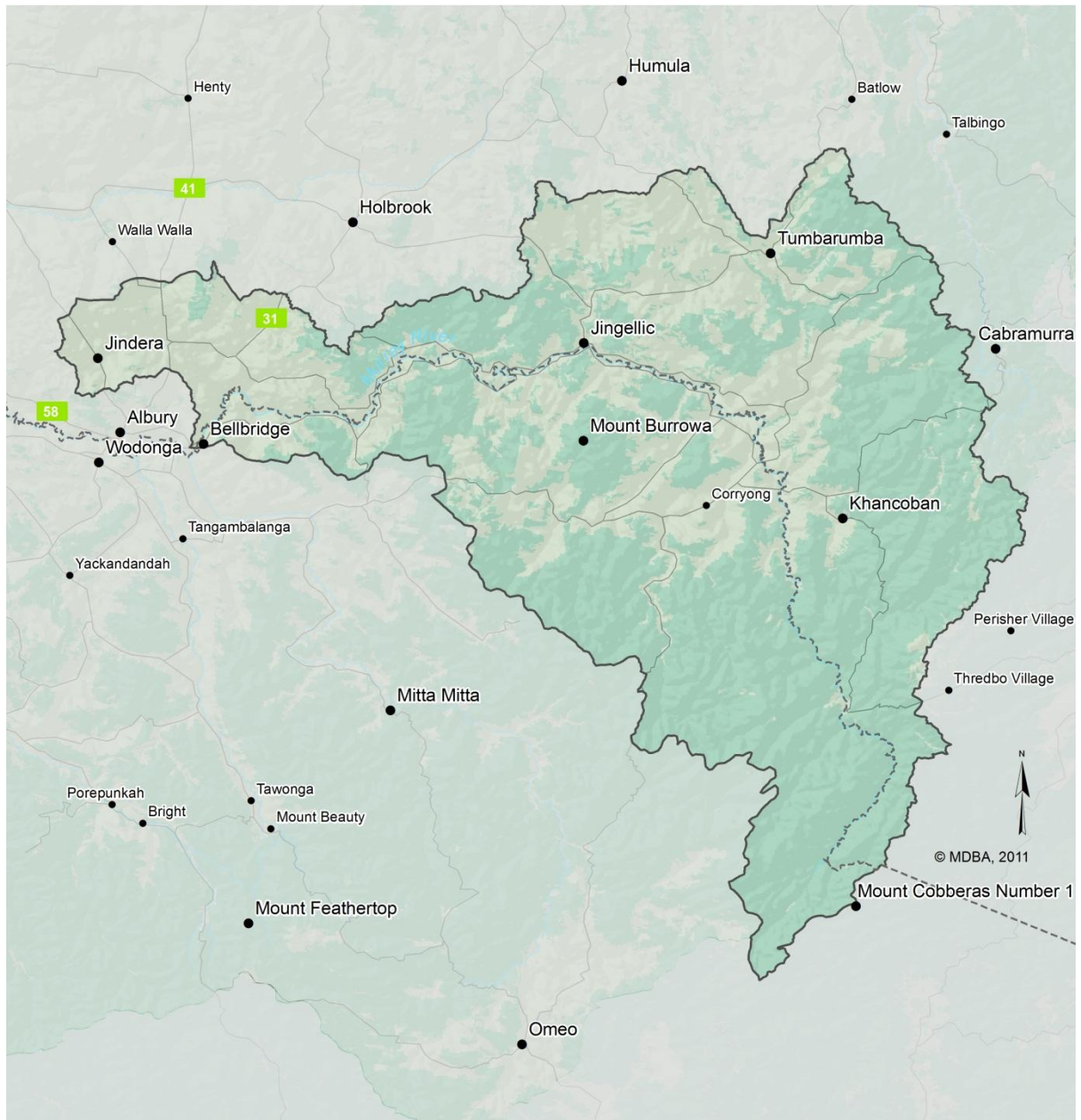
An hour's ferreting through the almost impenetrable scrub of this gully brought me at last to the valley, and I stood on the brink of the "young Murray." Those who have only seen this, Australia's finest river, in its ugliest portion—that is, where it flows through the level country from, say, Echuca to Swan-hill, or even further, to the junction of the Murrumbidgee—can have no idea of the beautiful, bright, mountain rivulet it is in this valley. I have travelled its whole length, even almost every mile, from its extreme source at Kosciusko's foot to its embouchure into Lake Alexandrina in South Australia, and a more interesting journey I cannot conceive any naturalist to take. In its mature age—that is, after the long Darling with its Queensland waters has joined—it is a magnificent navigable highway, some 300 to 400 yards wide, with rather a sluggish current of, since the advent of digging humanity, muddy water, and the bottom is of sand or mud ; up at the spot where I now stood, it, in its babyhood, was only some thirty yards across, the current, owing to its great inclination, running swiftly ; rushing, bubbling, tumbling along over a broken bottom of large waterworn boulders of granite, no mud or sand, and the water, crystal clear, foamed and sparkled as it was dashed about from rock to rock, with a merry noise as if apparently enjoying its liberty ; so different to the level, muddy, treacherous-looking streams of interior Queensland. How often have I sighed for this bright pebbly brook when hunting for water in our dry North-western district ! The clearness of the water enabled me to see distinctly the fine Murray perch and cod—the latter generally sheltered by some overhanging bank and in a back current of still water. (What a Paradise for your fish-loving "Redspinner !")

*The Queenslander*, 19 July 1879

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**Figure 10.1**      **The Upper Murray River Catchment showing major waterways and key localities**



## 10.1 Early European Accounts

The earliest European encounter with the Upper Murray occurred during the expedition of Hamilton Hume and William Hovell. They passed through the Wodonga area twice, in 1824 and 1825, on their journey to the Port Phillip District. The large river they sighted on the 16th of November 1824 was named in honour of Hume (Bland, 1831), and known as such until after Charles Sturt's expedition. The aboriginal indigenous people of the Albury area referred to the Murray River as 'Indi' and 'Millewa' while Sturt, who first reached the Murray River by travelling down the Murrumbidgee in January 1830, named it to commemorate Sir George Murray, the Governor of the British Royal Military College. Over time the name 'Murray River' was favored and the 'Hume River' fell out of use (Andrews, 1920). For many years, from the junction of the Swampy Plains River upstream, the Murray was known as the Indi River and, while not officially referred to as such, the name is still used by some residents (Andrews, 1920). There is some dispute, however, as to where the Indi is demarcated from the Murray. Hovell made a number of references to the fish found in the region in his journal, generally describing them as being abundant, and later reporting that the fish they caught in the same area the following January 'were similar to those in the Macquarie and Lachlan, described by Mr Oxley, were not less than thirty or forty pounds weight' (Bland, 1831).

Hovell also provided details of the fishing practices of the local aboriginal people in the lagoons near the Murray River. It is apparent from his description that fish were an important component of their diet. They constructed wooden fish traps on the upper Cudgewa Creek near Kalangee and other local streams (Carmody, 1981). A large stone trap once existed on the upper Murray itself (*Sydney Morning Herald*, 8 November 1933), reputedly near Brigenbrong. Mathews (1909) recorded several names for native fish in the language of the Dhudhuroa who lived along the upper Murray River, the lower Kiewa and Mitta Mitta Rivers, including 'Wunnumberu' for 'black bream', 'Yumboa' for cod and 'Murroanba' for 'perch'. To date, apart from Hovell's account, very few early references to the fish found in the upper Murray area have been located, and those identified make general statements without describing the types of fish.

The path blazed by Hume and Hovell was followed by graziers seeking their wealth through the production of cattle, and later the 'golden fleece'. The first was William Wyse who established pastoral properties at Albury and Bonegilla in 1835. Progressively, other pastoralists established runs further up the river (Andrews, 1920). The well watered fertile plains developed into renowned properties including Brigenbrong - taken up by members of the family of explorer Major Thomas Mitchell.

The 1850s saw Victoria's population burgeon, with waves of immigrants seeking their wealth on the goldfields. Gold miner Henry Morgan spent most of his life working the Buckland Valley goldfield and later became a road builder for the local shire. In 1874, Morgan left his permanent residence at Upper Buckland to try his luck on the Mannus Creek near Tumbarumba. His diary records that on a number of occasions he fished the creek where there were 'falls up to 7' high' recording the results of his efforts including the capture of cod. On the 6th of October Morgan wrote 'Mr. J. Brown gave us a fish that he had caught at the falls, which weighed 5 lbs' and on the 11th again went fishing to record 'I was out all night by a fire - but caught no fish, but at noon caught two, one weighing near a pound and the other about 5 lbs' (Morgan, 1908). A significant commercial fishery operated, catching cod and other species at Albury and at least as far upstream as Talmalmo in the early twentieth century. At Albury, such large quantities of fish were captured, that to satisfy the requests of recreational anglers, local closures to commercial fishing occurred in 1907 and again in 1912 (NSW Fisheries Reports 1907; 1911; 1928).

Victorian Fisheries and Game Department Inspector J. O. (Jack) Rhodes commenced his career in September 1956. He was transferred to the Wodonga office in December 1959 and undertook enforcement activities in

the region until December 1977. Rhodes himself was a keen angler, and during his sojourn at Wodonga interviewed many senior residents about the history of the fishing in his district, recording them in exercise books. He learnt a lot of detail on the fishery of the Murray River near Wodonga in the early years of the twentieth century, particularly from Alf and Rusty McFarlane born c1890 at Wodonga. Despite providing copies of his notes to senior officers in Melbourne and Wodonga, tragically most have not survived, representing the loss of an invaluable resource on the early fishery of the upper Murray.

Rhodes retained a small portion of his notes, and they formed the basis of a chapter in his autobiography *Heads or Tails: Recollections of a Fisheries and Wildlife Inspector* published in 1999 (Rhodes, 1999). In that work he provided a comprehensive account of the fish fauna of the Wodonga area at the dawn of the twentieth century and the subsequent changes that took place, including dates for the arrival of a number of exotic species. Of great interest are accounts of populations of native fish, including Trout cod and Macquarie perch, in upland and montane habitats in north east Victoria; as well as descriptions of some of his encounters with the fish. Rhodes was very familiar with Trout cod, having personally angled them from Lake Sambell at Beechworth, and from the Murray River at Gooramadda, prior to joining the Fisheries & Game Department. When he interviewed anglers who referred to 'Trout cod' or 'bluenose', he obtained detailed descriptions of the fish concerned in order to confirm their identity (Jack Rhodes, pers. com.). The relevant accounts have been reproduced here and subsequently referred to as OH 53.

Colonel John Langtry, while conducting his survey of the inland fishery during 1949/50, did not carry out netting operations in the upper Murray. By that time commercial fishing was confined to the Murray River from the Corowa area downstream, and it was this area that was the upstream limit of his survey work. Langtry documented the treatment of the newly constructed Lake Hume between 1929 and 1934 with copper sulphate to control a blue-green algae outbreak. He described the subsequent fish kills, changes to fish populations and overall impact on the downstream environment. In addition, Langtry recorded some anecdotal information on native fish populations in the upper Murray c1950 (Cadwallader, 1977).

## 10.2 The Past Distribution of Fishes in the Upper Murray River Catchment

Due to the length of the Murray River, the *Sustainable Rivers Audit* (Davies *et al.*, 2008) divided the river into three distinctive reaches. The Upper Murray Region was nominated as the area existing upstream of the wall of Lake Hume encompassing the river and its tributaries excluding the Mitta Mitta River catchment. The *Sustainable Rivers Audit* divided the Upper Murray Catchment into a slopes zone (downstream from Bunroy), an upland zone (upstream to Tom Groggin) and a montane zone beyond the latter location. The Murray River is highly confined downstream of Bunroy to near Towong Upper where a narrow floodplain develops, so it is appropriate to classify it as upland downstream to that point. While for contemporary management purposes the wall of the Hume Dam represents a demarcation, from the historical perspective it is more appropriate to treat the upper Murray as terminating at the bottom of typical slopes habitat. Below the dam downstream to Wodonga West, the river is largely confined between low hills, with a relatively narrow floodplain containing extensive areas of gravel substrate. The slopes zone for this reason has been extended, and is treated below as terminating at Wodonga West.

Most of the historical research in this catchment concentrated on the Murray River itself and nearby tributaries between Corryong and Wodonga. Much of the information presented below on the slopes zone is sourced from information recorded by Rhodes (1999), an extensive oral history of senior residents, some with recollections back to the 1920s, and the oral tradition of their ancestors (mainly OH 53-60). This evidence has been combined with observations in the Annual Reports of NSW State Fisheries, some newspaper accounts

and a significant number of historical photographs which include good quality images of Trout cod, Murray cod, Macquarie perch and Silver perch. In the upland and montane zones the limited information available has mostly been sourced from the oral history.

### 10.2.1 *The Montane Zone*

Very few historical accounts exist of native fish in the montane zone of the upper Murray, and this may possibly be the result of the area being isolated and sparsely settled. Blackfish have been captured at elevations up to 850m upstream of Tom Groggin (Gilligan & Rayney, 2007) confirming their presence in the montane zone, and they were previously abundant in some creeks near Tom Groggin (Len Lebner, pers. com.). There is evidence that cod and Macquarie perch were common near the top of the upland zone in the Indi River near Murray Gates (Lebner, OH 60) suggesting they may have had a historical presence in the montane zone of the Indi River. European carp and Redfin perch have reached Tom Groggin (Gilligan & Rayney, 2007) demonstrating the potential of native fish to also access the area.

Rhodes (1999) recalled meeting an elderly angler at Tom Groggin Station in the 1960s who reminisced of catching 'bluenose' and 'white eye' in the Indi River prior to the First World War. The person concerned has been identified as Charlie Mildren who worked at Brigenbrong Station (Albert Mildren & Ken Nankervis, pers. com.). His recollections almost certainly describe the fishery in the Towong/Bunroy area adjacent to that station, not in the montane zone near Tom Groggin. No cod have been taken at Tom Groggin since the 1940s, though captures have occurred immediately downstream (Nankervis, OH 59; Ken Nankervis, pers. com.).

Omeo historian Max Dyer informed the author that cod were occasionally caught in the Limestone area of the Indi River by mountain cattlemen early in the twentieth century (c1920) but he could not recall any details (Max Dyer, pers. com.). An early account of a journey from the headwaters of the Murray to Mt. Kosciusko written in 1879, confirms that both cod and perch were present in the montane zone of the Murray River (*The Queenslander*, 19 July 1879). At a location about four miles downstream of where the Murray River broke up into a series of small creeks it was recorded that 'The clearness of the water enabled me to see distinctly the fine Murray perch and cod – the latter generally sheltered by some overhanging bank and in some back current of still water' (*The Queenslander*, 19 July 1879). From other details recorded in the article, the locality where the fish were observed was upstream of Tom Groggin and about four miles (6 km) downstream of the Limestone Creek junction.

Famous Victorian explorer Angus McMillan, in a letter to the *Argus* in 1864, discussed the possibility of introducing salmon to the headwaters of the Gippsland Rivers. In that letter he outlined an earlier plan for translocating cod into the upper Tambo River from the 'Limestone River', and the details provided suggests that the locality being discussed was either the Murray River near its junction with the Limestone Creek, or the creek itself:

I recently had the intention to stock the eastern waters of Gipps Land with Murray cod, from the main source of the Murray, where I saw them in thousands. There would have been little difficulty in transporting them, as the distance is only about six miles (*Argus*, 25 June 1864).

The presence of Trout cod and Macquarie perch in similar habitat in the adjacent Mitta Mitta catchment, along with these two newspaper accounts, suggests that these fish species were also originally present and locally common in the montane zone of the upper Murray River.

### 10.2.2 The Upland Zone

In the uplands zone there are a number of good historical descriptions of the native fish fauna. Cod and Macquarie perch were common in the Mannus Creek near Tumbarumba (Morgan, 1908; Cockburn, OH 47; McGinnity, OH 58) and very common in the Indi River near Biggara around World War One (Lebner, OH 60; McKenzie, OH 54; Len Lebner, pers. com.). Trout cod, Macquarie perch and Blackfish were abundant at Brigenbrong Station at the bottom of the upland zone prior to 1914, as recalled by the late Charlie Mildren (Mildren, OH 53; Jack Rhodes, pers. com.). Both Trout cod and Murray cod were present near Bunroy, as well as Macquarie perch in the 1940s (McKenzie, OH 54).

In the upland zone of the Cudgewa Creek, the construction by aboriginal people of fish traps at Kalangee suggests the presence of a significant native fish population (Carmody, 1981). 'White eyes' (Macquarie perch) and greasies (Blackfish) were recalled by the late Jack Ottey as being regularly captured in the Berringama Creek, an upland tributary of the Cudgewa Creek, around 1910 (Ottey, OH 53). A few 'bluenose' (Trout cod) were also taken from time to time out of the Berringama Creek by Ottey, but were commonly captured by him from the Cudgewa Creek at Kalangee until about 1920 (Jack Rhodes, pers. com.). Cod were present at greater elevations in the Cudgewa Creek, being common at Lucyvale up to the end of the 1920s, with captures persisting into the 1930s (Turnball, OH 92; Alec Turnball, pers. com.).

The collective evidence demonstrates that Macquarie perch, Trout cod and Blackfish were once common in much of the upland habitat of the upper Murray catchment. They penetrated upstream to major barriers such as the Berringama Falls (Ottey, OH 53) and the falls near Flat Rock on the Koetong Creek (Grant, OH 55). Murray cod have been reported from the Murray (Indi) River as far upstream as Biggara (Tom Jarvis, pers. com.) and although it has not been reliably reported from the smaller streams, it is thought that they were probably present.

### 10.2.3 The Slopes Zone

For the slopes zone of the upper Murray there is a considerable amount of material available on native fish populations, with substantial oral histories provided by a number of individuals. Cod were abundant in the Murray River and a commercial fishery existed as far upstream as Talmalmo (Grant, OH 55). Their abundance is demonstrated by a number of photographs recording large catches upstream between Burrowye and Tintaldra (MR2, 3, 4, 5, 20, 23, 24 & NSW State Library 'At Work & Play' 00954). At Burrowye and Tintaldra, Trout cod were recalled by 90 year old Roy Grant up to the 1930s, to have been more common than Murray cod, though the latter were also very common to abundant (Grant, OH 55; Jarvis, OH 56; Walton, OH 57). Grant, who was the oldest surviving resident, was adamant that as a boy in the late 1920s he caught far more Trout cod than Murray cod at Burrowye, particularly small fish (Roy Grant, pers. com.).

Further downstream at Albury, cod were abundant and such were their numbers that in a large flood in 1889 they were observed swimming around the streets of the town (*Argus*, 16 September 1889). They were also present in large numbers in some lagoons (*Sydney Morning Herald*, 15 January 1930). Both cod species were recorded as being 'numerous' during a survey in 1928 (NSW Fisheries Report, 1928), though Trout cod were suggested to have been less common than Murray cod at Wodonga around 1900 (McFarlane, OH 53). The reported differences in the abundance of Trout cod at the bottom of the slopes zone may be the result of population changes over time, or local variations in abundance associated with habitat. A number of good quality photographs exist containing images of Trout cod originating from Brigenbrong (MR104 & MR105), Tintaldra (MR22) and Burrowye (MR1). These photos confirm the species presence, and are supported by a

number of other images of lower quality. Trout cod were also collected from the upper Murray near Tintaldra by John Lake during the early 1960s; this area was his main source of specimens of the species (Pratt, OH 41; Vick Pay, pers. com.).

Until the 1930s, Trout cod were very common in the slopes zone of the Cudgewa and Koetong Creeks. Murray cod were also present but less abundant, with the largest reported being a 37 lb. (16.8 kg) fish (Grant, OH 55; Grattidge, OH 97; *Argus*, 5 February 1935). Cod were also very common in other large creeks including the Corryong and Nariel Creeks, as well as being present in smaller streams such as Horses and Thowgla Creeks (Grant, OH 55; Jarvis, OH 56; Lebner, OH 60). The overall picture for cod in the upper Murray is that both species were abundant at the bottom of the slopes zone near Albury, and that the abundance of Trout cod relative to Murray cod increased progressively upstream. At Burrowye and Tintaldra, Trout cod exceeded Murray cod in abundance; in the feeder streams Trout cod were far more prevalent. In lagoons in the Wodonga area Murray cod were common but Trout cod were absent (McFarlane, OH 53; *Sydney Morning Herald*, 8 February 1907; *Argus*, 16 February 1912).

Macquarie perch were abundant in most habitats in the slopes zone. In the Murray River they were very common near Wodonga (McFarlane, OH 53; Jack Rhodes, pers. com.) and described as 'plentiful' during a survey near Albury in 1928 (NSW Fisheries Report, 1928). They were reported to have been abundant at Burrowye and Towong until the 1920s, with an account of the species filling nets (Grant, OH 55; Lebner, OH 60). A good quality photograph exists of a specimen taken near Towong (MR16). They were also abundant in the larger creeks such as the Nariel Creek (Nankervis, OH 59) as well as being present in lagoons (McFarlane, OH 53).

The oldest detailed account dating from the 1890s at Wodonga, described Golden perch and Silver perch being present in the Murray River and lagoons in 'significant numbers' (McFarlane, OH 53). Both species were captured at Albury during a survey in 1928, with Golden perch being described as taken 'at intervals and in the case of Silver perch eleven ripe males were caught in one net' (NSW Fisheries Report, 1928). Further upstream at Burrowye, Roy Grant's father regularly captured Silver perch in small numbers until the 1920s (Grant, OH 55; Roy Grant, pers. com.). A high quality photograph records the capture of a Silver perch at Burrowye (MR9) confirming their presence in the area. Golden perch were recorded by Langtry from Burrowye (Cadwallader, 1977) though oral history indicates that, while regularly taken, they had never been considered to be a common fish in the area; being a little less frequently captured than Silver perch (Grant, OH 55; Roy Grant, pers. com.). Occasional captures occurred near Towong (Lebner, OH 60) and in the lower reaches of the Mannus Creek (McGinnity, OH 58). Overall, Golden perch and Silver perch appear to have been fairly common near Albury, but steadily declined upstream to be rare. They were, however, regularly taken at the top of the slopes zone.

Newspaper accounts record Catfish being present in lagoons near Albury (*Sydney Morning Herald*, 8 February 1907) and abundant near Bonegilla (*Argus*, 16 February 1912). Oral history recalls Catfish to have been abundant in lagoons near Burrowye (Grant, OH 55) and Towong (Jarvis, OH 56; Lebner, OH 60). They were regularly captured in the river itself at Doctors Point near Albury (Grant, OH 55; Roy Grant, pers. com.), at Towong (Jarvis, OH 56; Tom Jarvis, pers. com.) and in backwaters in the Swampy Plains River near Khancoban (Lebner, OH 60). Blackfish were taken at Tintaldra (Jarvis, OH 56) and are recalled to have been abundant in the Murray River near Towong and in the lower reaches of nearby creeks (Lebner, OH 60; Len Lebner, pers. com.). A news story written by a Wodonga resident recalled catching Blackfish in 'small creek holes' in the 1890s (*Argus*, 27 May 1927); an Albury resident reported their presence in billabongs near the Murray River (*Argus*, 12 February 1926). Ogilby (1913) reported Blackfish to have been common in lagoons near Albury. Small numbers of eels were also captured in the Khancoban area in the early 1950s (Pendergast, OH 91).

#### 10.2.4 Estimates of Native Fish Abundance in the Upper Murray River Catchment at European Settlement.

Presented are the rarity scores used in the *Sustainable Rivers Audit* (Davies *et al.*, 2008) which were developed by an expert panel using historical evidence available prior to 2008. They indicate the probability of capturing a particular fish species using standardized survey techniques such as electrofishing. They are compared to those developed in the *True Tales* Project using more recently obtained historical evidence and are based on the typical size of angler catches in the oldest accounts.

**Table 10.1 Upper Murray River Catchment Rarity Scores (Main River Channels)**

| Species         | Slopes*<br>(Wodonga West to Towong Upper) |            | Upland*<br>(Towong Upper to Tom Groggin) |            | Montane<br>(Upstream of Tom Groggin) |            |
|-----------------|---|------------|--|------------|--------------------------------------|------------|
|                 | SRA                                       | True Tales | SRA                                      | True Tales | SRA                                  | True Tales |
| Trout cod       | 3   | <b>5</b>   | 3  | U3         | 0                                    | L3?        |
| Murray cod      | 3   | <b>L5</b>  | 1  | 1          | 0                                    | ?          |
| Golden perch    | 1   | U1         | 0  | 0          | 0                                    | 0          |
| Silver perch    | 1   | L3         | 0  | 0          | 0                                    | 0          |
| Macquarie perch | 5   | <b>5</b>   | 3  | U3         | 1                                    | L3?        |
| Catfish         | 0   | <b>L3</b>  | 0  | 0          | 0                                    | 0          |
| 'Blackfish'     | 3   | U3         | 5  | 5          | 5                                    | L5         |

#### Key

0 = Absent: no credible account reporting the species former presence

1 = Rare: a few individual fish could be expected to be taken by a resident angler each year

3 = Common: regularly taken by a resident angler in small numbers

5 = Abundant: frequently taken by a resident angler in good numbers

L = abundance at the lower end rating

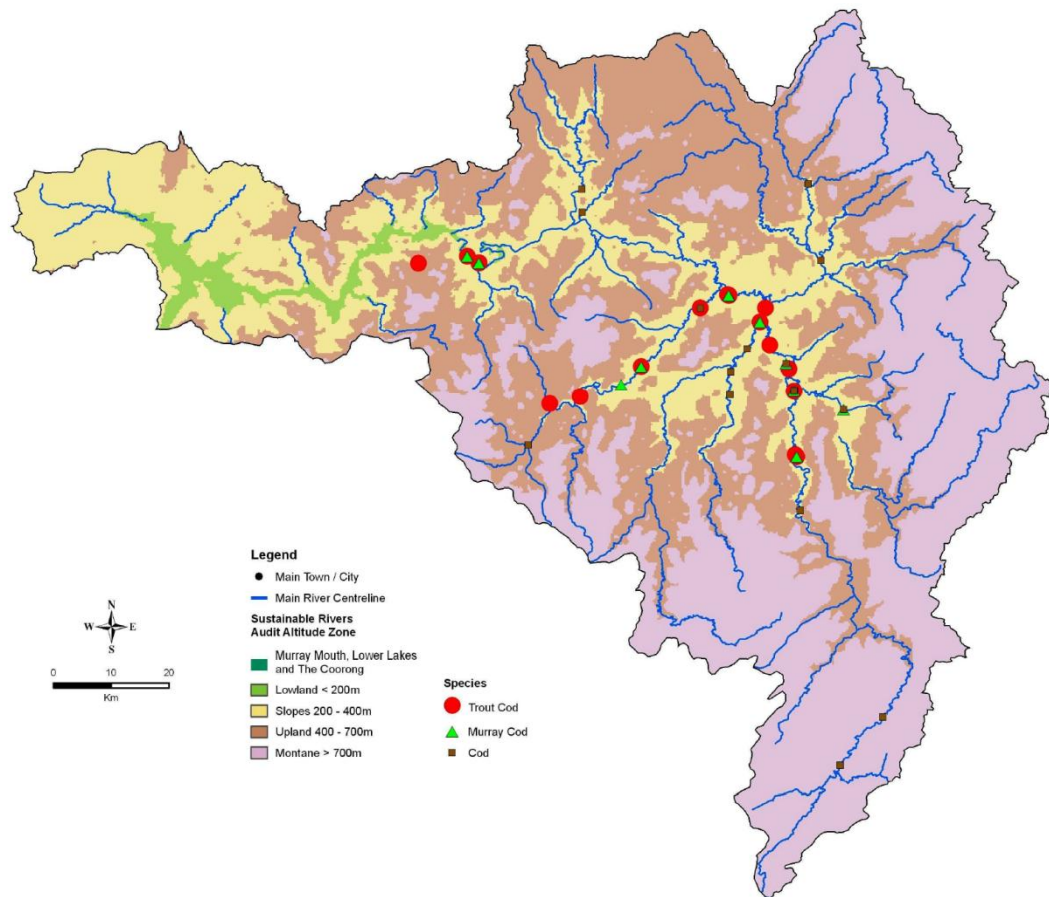
U = abundance at the upper end rating

Ratings in bold type supported by multiple accounts or lines of evidence e.g. oral history, newspaper accounts, photographs.

\* Note: The boundaries used for this zone differ slightly from those used in the *Sustainable Rivers Audit*

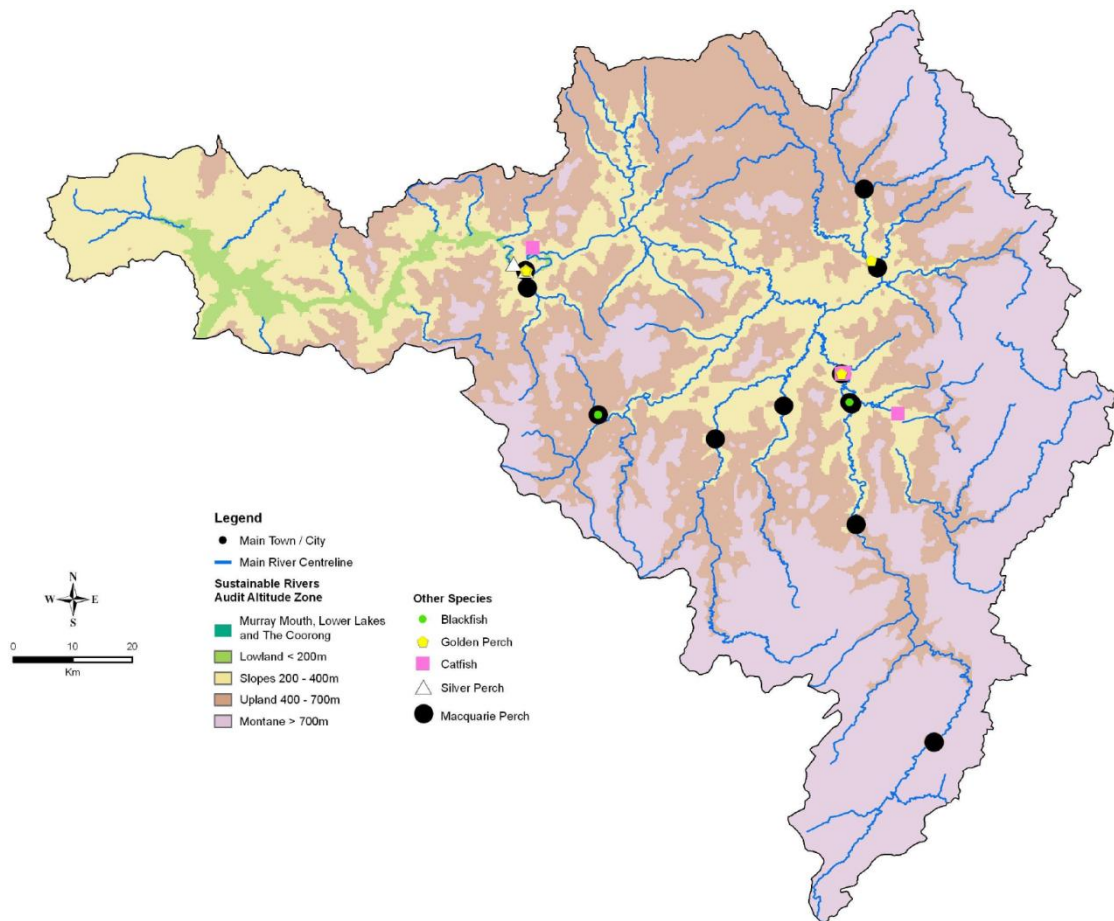
**Figure 10.2**      **Historical Records for Murray cod and Trout cod in the Upper Murray River Catchment**

(Note: Records in the Albury-Wodonga Area are presented in the map in the section on the Central Murray River Catchment)



**Figure 10.3**      **Historical Records for Native Fish Species other than Cod in the Upper Murray River Catchment**

(Note: Records in the Albury-Wodonga Area are presented in the map in the section on the Central Murray River Catchment)



**Photograph 10.1 Upper Murray Habitats**



Left, Photo MR 79: The Indi River in the Biggara area downstream of 'Murray Gates' c1910. At the time 'Lightwood' Bill Pendergast and Aussie Rickson enjoyed excellent angling for 'cod and bream' in this upland habitat as recalled by Len Lebner. Today the river looks much the same but native fish are now rare captures.

Right, Photo MR86: The Murray River from Farrans Lookout, Jeremal Creek Junction, between Towong and Tintaldra c1910. It is evident that by this time the slopes zone of the Upper Murray had taken on a familiar present day appearance with the valley floor and gentler slopes largely cleared. From the stories recalled in 1910 the river supported large populations of Trout cod, Murray cod and Macquarie perch with Catfish being common in the adjoining billabongs. Both photos courtesy of John Whitehead.

**Photograph 10.2 Indi River Catch**



Photo MR 16: Len Lebner's mother Nell Garing (background) is in this portrait containing two fish caught from the Indi River at Brays Point, near Towong Upper, c1927. The fish on the left is a Macquarie perch while that on the right is a cod which shows evidence of speckled markings (enlarged). Macquarie perch had once been abundant in the Indi River and nearby creeks including the Nariel and Cudgewa. During the early 1920 they underwent a dramatic decline with residents recalling them to be scarce by the 1930s. Photo courtesy of Len and Betty Lebner

**Photograph 10.3 Towong Cod**



Photo MR 15: Len Lebner's father with two cod captured from the Indi River at Brays Point c1935. The fish on the right may be a Murray cod suggested by the head profile, body morphology and the vague body markings while that on the left may be a Trout cod with a strongly pointed snout and evidence of speckled markings when the image is examined at high resolution. There is not enough detail to reliably identify either fish. Len described the past existence of beautiful sandbanks on the lower Indi as evident in this photo. Also apparent are well established Willows. Photo courtesy of Len and Betty Lebner.

**Photograph 10.4 Tintaldra Trout Cod**



Photo MR22: Tom Jarvis' brother Joe Jarvis (right) and Ian Russell (nephew of Tom Jarvis) with three cod caught from the Murray River at Tintaldra c1953. The fish on the right was recalled to be a Trout cod. An eye stripe is visible, very fine speckles are evident, particularly near the shoulder and head and a long caudal peduncle is obvious when compared to the other fish. Even though the mouth is agape the top jaw appears longer. The fish on the left is a Murray cod while that in the centre cannot be identified with certainty but is probably a Murray cod. By this time Trout cod, while still regularly captured, had undergone a significant decline in abundance in the region though Tom recalled the species to have been prevalent during his childhood. In the early 1960s the Tintaldra area was the source of most of the Trout cod captured by John Lake, which probably influenced him in concluding that the species preferred the upper reaches of the rivers. Photo courtesy of Tom Jarvis.

**Photograph 10.5 Tintaldra Cod Catch**



Top, Photo MR20: Tom Jarvis (centre) with his father Ivan Jarvis and six cod caught from the Murray River between Towong and Tintaldra, near the Jeremal Creek Junction c1943. The large fish on the right weighed 35 lb. (15.9 kg), while the smallest fish weighed eight lb. (3.6 kg). Tom reported some of this catch to be 'rock cod' (= Trout cod). Close examination of the photographs indicates that some may be Trout cod, distinguished by their long, strongly pointed snouts, long caudal peduncles and displaying dashed markings in the original photo when enlarged.

Bottom, part of Photo MR 21: This second image of the same catch shows the fish at different orientations. The blotches seen on the three fish on the left are mud and grass, this being more apparent in the lower photo. Photos courtesy of Tom Jarvis.

**Photograph 10.6 Trout Cod and Silver Perch at Burrowye**



Photo MR1: Stan Grant holding a 'rock cod' (= Trout cod) weighing about 17 lb. (7.7 kg) captured at the junction of the Burrowye Creek c1930/32. The overhanging upper jaw confirms its identity, with an eye stripe just visible. The fish is in superb condition, with fat layers visible in the dorsal region. Roy Grant told the author on several occasions that small 'rock cod' were abundant at Burrowye in the 1920s and more frequently taken than Murray cod. By the mid 1930s small cod had become scarce and the proportion of Trout cod in the total cod catch had declined.

Photo MR9: A Silver perch, labelled as 'unknown fish' on the photo, caught by Stan Grant at Burrowye, 1951. That the Grant brothers could not identify the fish demonstrates the rarity of the species upstream of Lake Hume after the 1920s. Both photos courtesy of Roy Grant.

Photograph 10.7 Burrowye Cod Catch

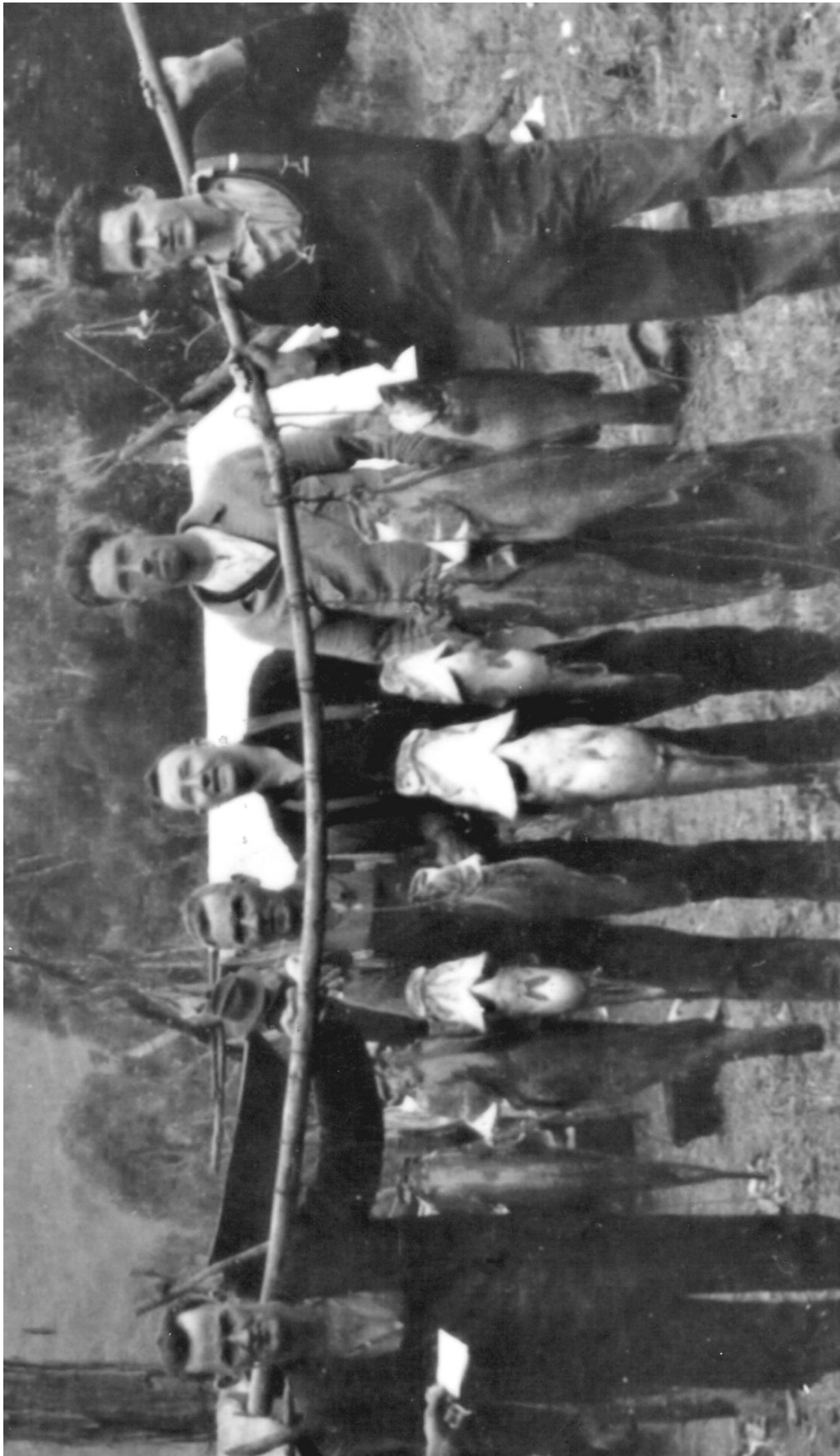


Photo MR2: A fishing party holding part of a catch of cod taken at Fred Dick's camp, Riverlea near Burrowye, c.1936. The catch included Murray cod and Trout cod. By this time the cod fishery was decline and Trout cod, while still regularly captured, were no longer abundant. Photo courtesy of Roy Grant.

**Photograph 10.8    Huge Cod Catch at Burrowye**

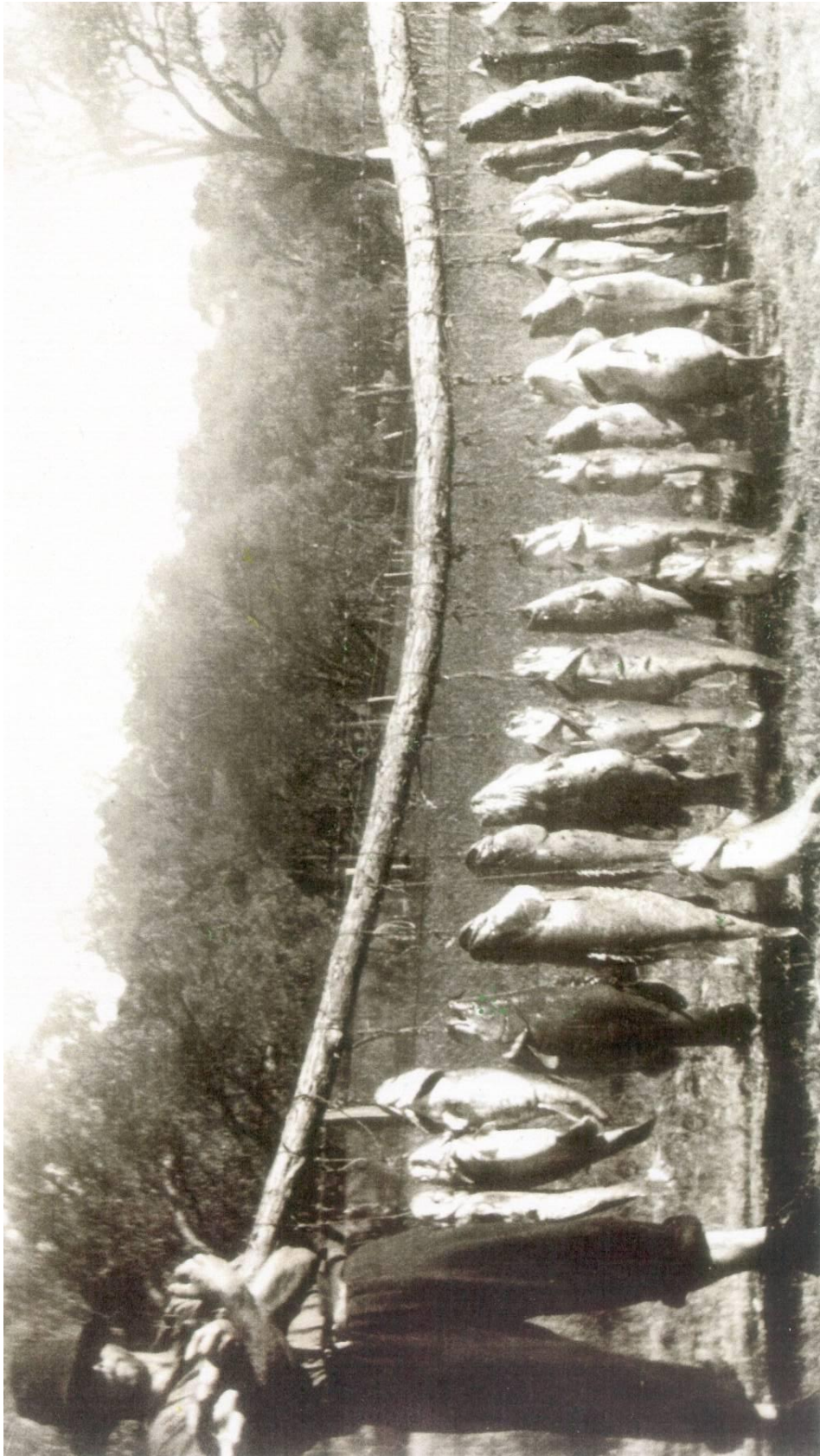


Photo MR5: Jack Brown holds a catch of 24 cod, including both Murray cod and Trout cod caught at Riverlea near Burrowye, c1939/40. Roy Grant identified the dark fish, facing side-on, 4th from left as a 'rock cod'. When the image is enlarged the animal is covered in black speckles. Murray cod can be identified by their flattened, rounded heads, while some other fish are probably Trout cod as suggested by their strongly pointed snouts (eg. 2nd and 4th from right) and other fish have long caudal peduncles. Roy recounted this to be the last of the big catches of cod of either species, with the proportion of Trout cod having been in decline for a decade. The image confirms emphatically that cod had once been abundant in the slopes zone of the upper Murray River. Photo courtesy of Roy Grant.

## 10.3 The Changes

### 10.3.1 *Changes to Native Fish Distribution and Abundance*

While concern was expressed about the fishery as early as 1870 (*Argus*, 12 December 1870), it is only around the time of World War One that major changes in native fish populations were first recorded in the upper Murray. In the upland zone Trout cod, Macquarie perch and Blackfish were abundant in the Indi River around 1914, but after that time went into serious decline (Mildren, OH 53). By the 1930s, Macquarie perch were scarce in the Indi River though still taken in small numbers, with the last reported captures occurring near Bunroy in 1980 (McKenzie, OH 54; Lebner, OH 60). Small numbers of Trout cod and Murray cod were still being captured near Bunroy in the 1940s (McKenzie, OH 54) but by the 1960s cod were rare in the Indi River (Len Lebner, pers. com.). Similarly, Macquarie perch and Blackfish disappeared from the Berringama Creek after about 1920 (Ottey, OH 53), and cod had vanished from the upper Cudgewa Creek by the 1930s (Turnball, OH 92).

In the slopes zone both Trout cod and Murray cod remained very common at Burrowye, Tintaldra and Towong until the 1930s, though several people noted by that time the juvenile cod had become scarce with fewer, larger, cod being caught (Grant, OH 55; Jarvis, OH 56; Lebner, OH 60). From the early 1930s Trout cod noticeably declined in relative abundance compared to Murray cod, though were regularly taken into the 1960s (Grant, OH 55; Jarvis, OH 56; Walton, OH 57; Handorf, OH 63). The last reported captures of Trout cod upstream of Lake Hume occurred near Burrowye in 1970 (Grant, OH 55) as well as near the Brigenbrong Bridge in 1972 (Rod Harrison, pers. com.). Murray cod became generally scarce upstream of Lake Hume by the 1960s, though occasional captures continued to take place (Roy Grant & Bill Willis, pers. com.). By the late 1930s, downstream of Lake Hume cod were rarely taken near Albury (McFarlane, OH 53).

Macquarie perch had been abundant near Burrowye and Towong in the Murray River, as well as being found in nearby creeks in the early 1920s, however, by the mid 1930s they were only taken in small numbers (Grant, OH 55; Lebner, OH 60). Further downstream the species was common at Albury in 1928 (NSW Fisheries Report, 1928) but then underwent a dramatic decline and were absent shortly after that time (McFarlane, OH 53). Golden perch and Silver perch had virtually disappeared at Burrowye by the 1930s, with the last Silver perch being taken in 1951 (Grant, OH 55; photo MR9). Further downstream at Wodonga, native fish were rare and Silver perch absent from the mid-1930s onwards, with the last Golden perch being captured in 1942 (McFarlane, OH 53).

During a drought around 1920, Catfish were reported to die in large numbers (Grant, OH 55) and after this time there are few accounts of the species in the catchment. A single specimen was taken from a lagoon at Burrowye in 1935 (Grant, OH 55), and a relic population of Catfish was reported as surviving in a lagoon near Albury by Langtry around 1950 (Cadwallader, 1977). There is also a report that a small population persisted in a billabong near Khancoban into the 1950s (Norris, OH 71).

### 10.3.2 *Changes to Habitat*

The upper Murray region itself was not particularly auriferous, with minor workings taking place near Tom Groggin, Corryong, Bethanga and Granya. More extensive alluvial mining did take place in the Tumbarumba area, and limited extraction of tin from the upper Cudgewa Creek occurred (Morgan, 1908; Flett, 1979). For the most part the catchment was largely spared from the extensive damage caused by broad scale alluvial mining. A major goldfield developed in the lower Mitta Mitta River valley and it appears that alluvial workings in that catchment may have impacted upon water quality in the Albury area from time to time (NSW Fisheries

Report, 1907). River boat traffic extended as far upstream as Albury, and the Murray River to that point had been largely cleared of snags by 1869 (*Riverine Herald*, 19 June 1869).

The first exotic fish species introduced to the upper Murray were Brown trout, which were provided by NSW State Fisheries to the Albury Municipal Council 1892. Where they were actually released is unclear (NSW Fisheries Report, 1892). By 1905, trout were prevalent in a number of upland streams including the Mannus and Bells Creeks, the Marangle Creek and tributaries in the Tooma area (NSW Fisheries Report, 1905). It appears that trout arrived in the Indi River at Brigenbrong around 1918 after which they proliferated and were linked to a decline in the Trout cod and Macquarie perch populations (Mildren, OH 53). Trout were first stocked into the Burrowye, Berringama, Nariel and Running Creeks in 1911 (*Argus*, 11 May 1911) and are reported to have replaced the Macquarie perch population in the Berringama Creek by the 1920s (Ottey, OH 53).

Goldfish carp were present in the Wodonga area by 1908, with Redfin perch appearing in 1912, and Tench in 1942 (McFarlane, OH 53). An anecdote, repeated by several senior residents of the area to the author, is that the first Redfin perch captured at Albury was obtained by a woman washing her clothes in the river. They were recorded as being present in great numbers at Albury by 1921, and are suggested to have had a major impact on native fish (NSW Fisheries Report, 1921; *Argus*, 3 July 1935). Redfin perch were common in the Murray River, billabongs and the lower reaches of the inflowing creeks in the Tintaladra/Towong area by the early 1930s, and were implicated by local anglers in the decline of Macquarie perch (Jarvis, OH 56; Lebner, OH 60; Len Lebner, pers. com.). Near Burrowye the appearance of large numbers of Redfin perch was linked to a decline in the native fishery, particularly in lagoons where they replaced Catfish (Grant, OH 55). English roach were present in the Albury area by the 1920s, but do not appear to have become common (*Argus*, 23 January 1923). In the early 1970s European carp became common in the upper Murray and, coinciding with their arrival, was a dramatic decline in the Redfin perch population and increased turbidity of the water (Jarvis, OH 56; Tom Jarvis, pers. com.).

As early as 1870 extensive illegal fishing is reported to have impacted on the fishery (*Argus*, 12 February 1870) and oral history recalls the use of illegal traps near Towong (Lebner, OH 60). Ongoing concern expressed by Albury residents led to some local closures to commercial fishing by 1907, but in 1928 it was still suggested that overfishing had further reduced stock (NSW Fisheries Reports, 1907; 1912; 1928). Extensive illegal overfishing near Burrowye had a serious impact on the cod population in the 1930s, though a decline of the cod fishery was already evident (Grant, OH 55). Further declines of the cod fishery in the region coincided with major bushfire events in 1939 and 1952, killing fish directly and modifying the aquatic habitat (Grant, OH 55; Bill Willis, pers. com.).

As early as 1863, controlling the waters of the upper Murray and storing them to guarantee water supply during droughts for pastoral and domestic use was contemplated. The first major project to do this was the construction of the Hume Weir upstream of Albury. Construction of the weir commenced in 1919 and was completed in 1931, with the storage filling in 1936 (Eaton, 1945). From around 1920 native fish populations upstream of the man-made barrier were isolated from the rest of the Murray-Darling Basin. After filling between 1929 and 1934, the dam was repeatedly treated with copper sulphate to control algae (Cadwallader, 1977). The copper sulphate killed cod in the weir (*Argus*, 17 January 1933) and caused massive fish kills as far downstream as Barmah (Cadwallader, 1977), Gunbower (*Argus*, 28 January 1930), Mildura and areas in South Australia (*Sydney Morning Herald*, 28 November 1929; *Adelaide Advertiser*, 30 July 1930). In one lagoon near Albury, 200 cod from 30 to 80 lb. (13.6 to 36.4 kg), as well as perch were killed (*Canberra Times*, 15 January 1930; *Sydney Morning Herald*, 15 January 1930). The high concentration of the copper sulphate caused extensive corrosion of the steel sluice gates necessitating their repair. This included coating with lead paint

and the complete draining of the weir in 1930 (*Sydney Morning Herald*, 2 April 1930). It effectively eliminated the resident native fish population in the dam, river and lagoons to Howlong (Cadwallader, 1977; McFarlane, OH 53; NSW Fisheries Reports, 1929; 1930). Below the dam, subsequent to the copper sulphate treatment, Redfin perch, Goldfish and Brown trout dominated the fish fauna downstream to Corowa (*Argus*, 3 July 1935; Cadwallader, 1977).

Work commenced on the enlargement of the Hume Dam during the 1950s, with construction being completed in 1961. In the 1950s, the construction of the Snowy Mountains hydroelectric scheme dams, resulted in changes to the flow and thermal regimes of the Swampy Plains, Tooma and Murray Rivers upstream of Hume Dam. The Murray River immediately downstream of Lake Hume has seen a reduction in summer temperatures of 5-7 °C when the dam is near capacity. The thermal pollution of the Murray by the dam is exacerbated by the cold water releases from the Dartmouth Dam on the Mitta Mitta River, and inflows into the upper Murray from the Snowy Mountains Scheme (Ryan *et al.*, 2001).

**Photograph 10.9 Last Upper Murray Trout Cod**



Photos MR104: This Trout cod was captured by angling writer Rod Harrison just downstream of the Brigenbrong Bridge near Towong Upper c1972. It was reported in the October 1976 edition of *Fishing World* magazine with the capture site being given as Hume Weir to mask the location of what was a relic population. This image represents the end of the wild Trout cod population in the Upper Murray, the Indi River as described by Charlie Mildren in the early years of the twentieth century as carrying 'a great number of bluenose'. Photo courtesy of Rod Harrison.

## 10.4 The Current Situation

The *Sustainable Rivers Audit* concluded that 'The Upper Murray Valley fish community was in Extremely Poor Condition. Less than half the predicted native species were caught, and alien species, mainly trout, were 96% of total biomass and 74% of total abundance' (Davies *et al.*, 2008). By the early 1970s, the native fish population of the region was restricted to relatively small numbers of Blackfish, and relic populations of Murray cod in the Murray River and Macquarie perch in the Mannus Creek. The populations of Trout cod, Golden perch, Silver perch and Catfish in the upper Murray had become extinct.

Today there is evidence of Blackfish returning to some creeks in the region. Macquarie perch have all but disappeared near Tumbarumba, but small numbers are still captured in the lower Manus Creek. Lake Hume contains a very good Golden perch fishery, created through ongoing stockings of fingerlings. Stockings of Silver perch have produced few captures. The Cudgewa Creek is receiving liberations of Murray cod fingerlings which have created a small fishery, and stockings have produced a reasonable population of Murray cod between Tintaldra and Lake Hume. Occasional captures have also taken place in the Bunroy area. A small Trout cod population, created by the liberation of a relatively low number of fingerlings in the late 1980s, exists downstream of Tintaldra. Reported captures of juveniles suggests that reproduction has occurred. Near Albury regular captures of Murray cod and Golden perch are taking place, with occasional captures of Trout cod. All of these fisheries in the upper Murray are shadows of those that once existed.

## 10.5 Newspaper Highlights

*Argus*, 12 February 1870

Country News. A fine bream of unusual size (7lb.) was caught a few days ago in the Upper Murray at Talmalmo. Fish of large size are becoming more and more scarce owing to reckless and wholesale use of nets and traps during the spawning season.

*Sydney Morning Herald*, 8 February 1907

Fisheries Matters. / The Municipal Council of Albury asked that the Horseshoe and Doctor's Point Lagoons, in the Albury district, might be closed against net-fishing on account of trout having been liberated in these waters. The board found that the lagoons were chiefly stocked with cod, catfish, and perch, and did not consider the places were suitable for trout.

*Argus*, 3 July 1935

Murray Cod Are Disappearing. Do Perch Eat Them? Hatcheries Suggested. Albury (N.S.W.). Tuesday – Anglers in the border districts are alarmed by the great scarcity of cod and bream in the River Murray and its tributaries, and are of the opinion that action should be taken to restock the Murray, at least with cod. The river is teeming with English perch, which, it is said, attack young cod.

## 10.6 Significant Extracts from the Annual Reports on the Fisheries of NSW

1907

Information was received from the Corowa Anglers' Club, that the waters of the Murray River were being polluted to such an extent by mining operations on the Mitta Mitta and Kiewa Rivers—tributaries of the Murray flowing through Victoria—as to cause the destruction of fish-life, and representations were made to the Victorian Government by the Premier of this State with a view to having the nuisance abated.

1921

Great numbers of English perch and carp were netted in shallow waters near Corowa and Albury, while indigenous fishes were in negligible quantities. The voracious English perch is rapidly increasing in numbers in the Murray River and adjacent creeks, &c., and becoming a serious menace to the fishery.

1928

Depleted Waters- Reiterated statements were received from shire and municipal councils and anglers that the Murray River was sadly depleted; few fish could be caught, and prohibition of net-fishing was urged. The anxiety so often expressed was proved to be groundless; investigations conducted by the Department in about 4 miles of the Murray River below Albury, in waters that have been consistently worked by net-fishermen for twenty years, resulted in the capture in thirty-six days of 756 fish, most of which were returned to the river after examination. No fish under lawful length were taken – they would, of course, escape through the 4-inch mesh nets employed; several Murray cod exceeding individual weight of 25 lb. And large numbers from 5 lb. upwards were captured. Macquarie perch were found to be plentiful.

Artificial Propagation of Western Fishes was the primary objective of the above investigations, which were undertaken during the close season – October and November. Almost every day Numerous Murray cod and trout cod, and at intervals golden perch, were caught in the nets, many of the females being ripe and actually extruding their eggs, but no ripe males of either species were taken. In the case of silver perch eleven ripe males were caught in one net, yet no ripe females were captured. Attempts were made to fertilise the ova of

trout cod with milt from male silver perch, but without success. No ripe Macquarie perch of either sex were captured. Operations were abandoned on 30th November, as the river had run down to the very low level and funds were not available for continuance.

1929

Fish Mortality and Pollution of Waters at Hume Weir, due to sudden submersion of lands hitherto untouched by floods, and release of silt from lagoons within this submerged area, is believed to have been the cause of considerable mortality among indigenous fishes in Hume Reservoir which occurred during November. Exhaustive inquiries and investigations at twenty-eight centres along Murray River showed that no serious mortality occurred between Hume Weir and Wentworth; dead fish were seen floating past Cal Lal in considerable numbers, but no information could be obtained as to whence they came; it is considered that the cause of death was merely local and confined to a small area.

/ Murray River was very seriously polluted due to Hume Weir storage, but fish were not affected thereby. Some mortality occurred due to muddy effluent after storms.

/ Many fish, estimated at 2,000 lb. aggregate weight, were destroyed presumably by explosives in Hawkesview lagoon. Among the dead fish were Murray Cod up to 40 lb. individual weight.

1930

Inspector's Report-

/ The quantity of fish consumed in Albury was between 300 and 400 lb. per week. No locally captured fish was consigned to markets / Murray cod and perch were generally plentiful; English perch were very numerous in Murray River. / During the year Hume Reservoir became seriously polluted by algae, but this did no harm to the fish. Owing to the financial position but few patrols were made: unlawful fishing was very prevalent. Several muddy freshets occurred, but without injury to the fishery and enabled fish to move upstream. Fisheries conditions at the end of the year were satisfactory. No diseases or pests were observed. Some very large Murray cod were caught by anglers – largest reported weighed 75 lb. English perch have become very numerous - more so than for some year; anglers report capture of as many as 200 in a few hours, up to 4 and 5 lb. weight. No golden perch are known to have been taken above Tocumwal for a number of years – these fish do not appear to travel above Moira Lakes. Since water has backed up by Hume Weir, cormorants have collected in great numbers, and new rookeries have been observed. These birds appear to destroy large numbers of the outlawed English perch.

## 10.7 Upper Murray River Catchment Oral Histories

The following oral histories (OH 53-60) mostly discuss the Upper Murray Catchment.

### OH 53

Jack Rhodes has kindly provided permission for these paragraphs from his book (Rhodes, 1999) to be re-published. Included are oral history provided by Alf and Erskine McFarlane of Wodonga West, Joe Ottey of Berringama and Charlie Mildren on Tom Groggin.

#### *The Changing Scene*

*Lingering in my mind over many years has been the question of whether some poaching activities really mattered. However, to retain, if not improve, our wild populations the law of the moment must be enforced. Fortunately, there is a growing recognition that for the wellbeing of all creatures, including man, we must restore and maintain all habitats at the best possible levels and reverse poor environmental practices. It has been almost as though we have believed that apart from our own little project area, nothing would be affected or changed regardless of whatever we did. Now there is abundant evidence that this is not true. These observations are born of that clearest of all vision, 'hindsight', which together with long-term observations creates a realisation that there have been serious changes. For fish and wildlife, the changes to original populations in some cases have been so slow and subtle as to be almost unnoticed, in others sudden and dramatic.*

*There is something of a parallel in what we each experience by looking at our image in a mirror on a day to day basis and then at the photograph of years ago. Each day we appear exactly as we did yesterday, however the photograph shows the accumulated change.*

*After hearing older men talk of the changes to the fish and wildlife populations and habitats in the north-east of Victoria, I set out to solicit and record the information. Although only anecdotal it was all first hand, but I was disappointed that what I compiled did not survive in the records of the department, either in Melbourne or Wodonga. So, I am left to rely only on a few scraps of my original notes.*

*Of immense value in particular were two brothers, Alf and Erskine (Rusty) McFarlane. It was the very good fortune of the Rhodes family to become close friends. Each born before the turn of the century, they spent the early years of their long lives on a hill property near the top of Ingrams Road at Wodonga West. Excellent bushmen, they were extremely observant and through necessity and circumstances, not to mention natural inclinations, were born fishermen and hunters. Having been taught by their elders, they brought forward a glimpse of yet an earlier generation.*

*In fishing, Alf and Rusty had the guidance, when boys, of a man of German origin named, Louie Haeusler. Louie also lived at Wodonga West and manufactured the fishing lines they used out of strands of horsehair, pulled only from the tail of a stallion or gelding. He would take the boys back into the hills to select long, thin stringybark saplings which when barked, stacked straight and dried, become their fishing poles. The lines were tied directly to the end of the poles and all fishing was with a float using worms, freshwater mussels, or cockchafer grubs for bait. Fishing mostly in lagoons, the bait was cast just beyond the band of aquatic plants that formed the universal margin of several metres around all flood plain lagoons before the appearance of European carp in the early 1970s. When hooked, small fish up to a kilo or so were subjected to an up country swing and a flight to the bank, while larger fish were dragged through the waterweed. If a very large fish was hooked, the rod was tossed onto the water allowing the fish to tow it around until it tired. The rod was then retrieved and the fish pulled to the bank.*

*Bearing testimony to environmental change in the Murray Valley over countless centuries is the mining or extraction of the very extensive and deep water worn gravel and sand deposits across the valley floor. Situated below several metres of overburden, the deposits extend deeper than the thirty-metre level to which they are usually worked. Below that level problems associated with the watertable and buried ancient timbers are two factors affecting the economics of extraction. Extracted in open pit style of operations the deposits support an industry supplying materials used in road-making, concrete mixing and building and site foundations.*

*As an example of relatively recent change, it is difficult to imagine, when standing on the concrete bridge over the top end of Travellers Creek at Wodonga West that this creek did not exist until a flood in 1917. Until that time, there was a chain of lagoons along the future course of the creek. From upstream these were Woodlands, Travellers, Rushy, Scott's, Noxall's, Willow Tree and Mother Langheim's Hole. The 1917 flood, which connected these lagoons with an at first small creek, was apparently recorded as being 25mm (one inch) higher than a very big flood in 1870. Until the formation of the creek, Alf and Rusty's father hauled red gum logs from the river flats up to the main road with a team of horses.*

*Successive floods and high irrigation levels in the river after the construction of Hume Dam, have enlarged the creek until it now diverts a very significant percentage of the Murray River's total flow for a distance of about five or six kilometres. There has been a need to build larger and better bridges where the concrete bridge now stands. Previously the structures had been of timber, and several alterations took place after I arrived in Wodonga.*

*Little evidence of the original chain of lagoons now remains. But they, along with the still existing Rushy, Horseshoe, Edwards and Circular Lagoons of that area, as did the other lagoons on the Murray flood plain, carried a variety of native fish – Murray cod, callop (yellow belly), Macquarie perch (white eye), Silver perch (grunter), and Catfish. In the Murray River the predominant fish was the Murray cod with a smaller number of Trout cod (blue nose), and a significant number of Macquarie perch, Silver perch and callop. Goldfish carp was first seen in the lagoons in about 1908 – this was an estimated time by Alf and Rusty, but it was before the recorded date of 1912, when Alf caught his first English perch (redfin) in the Murray River.*

*After completion of the Hume Dam when the reservoir started to fill, the rotting vegetation of the flooded forest created a problem by generating hydrogen sulphide. An attempt to solve the problem was made in 1932 by treating the reservoir with copper sulphate. This caused enormous fish kills down stream in the river and anabranches, then later in the lagoons when swept there by floods. Alf and Rusty helped to remove from some lagoons the many tons of dead native fish before the water became undrinkable to stock. By 1937, brown trout and redfin had become the predominant fish in the down stream waters below Hume Dam. Alf had a record of taking one brown trout weighing 5.4 kg (12 lb.) in that year. Until 1940 all the trout they caught below the dam, with the exception of one rainbow, were brown trout.*

*In about 1940, Alf and Rusty saw a tench taken from Rushy Lagoon near Travellers Creek. It was the first fish of this species they had seen. Then in 1942, during World War II, Rusty caught a callop from the Murray River at Dights Hill. Other than an occasional Murray cod from the river, they never again saw or heard of any native fish being taken from either the lagoons or the river...*

*... When boys, Alf and Rusty had seen koalas (monkey bears) in the red gums along the Murray flood plain at Wodonga West. They had known men who shot them for their skins, from which they made rugs. Joe Ottey of Berrigama, told me of catching Macquarie perch and Blackfish in the Berrigama Creek from 1910 until about 1930 after which time brown trout, which had first appeared not long after World War I, took over completely.*

*I regret not knowing the name of the man I met at Tom Groggin Station, a Victorian property on the Indi River near Mt Kosciuszko, who told me that he worked at Tom Groggin before he enlisted in the army and went to the first World War<sup>1</sup>. He had fished the Indi before he left and it carried a great number of bluenose, white eye and greasies. While he was at the war, he even dreamt about fishing the Indi. When he came home he returned to his old job at Tom Groggin and announced that before he did any work, he wanted to go fishing. Very quickly he caught a fish about a foot (30cm) in length, the like of which he had never seen before. So intrigued was he by this strange spotted but nicely shaped fish that he immediately took it to the homestead thinking it was something quite unique. At the homestead, he was told it was a brown trout.*

*From that time both the white eye and the blue nose numbers went into decline, while the number of brown and rainbow trout increased. To my mind, this man did do something remarkable, he had set a very positive time frame of a changeover of fish species in the Indi River.*

1. The unidentified angler from Tom Groggin Station was Charlie Mildren. Charlie spent the latter years of his life at Tom Groggin but during the period around World War 1 was employed as a rabbit trapper at Brigenbrong Station immediately downstream from Tom Groggin. His descriptions of the fishing in the Indi River are likely to be for the Towong Upper/Biggara area.

#### OH 54

The Late Bert McKenzie of Ruffy was interviewed in July 1982 at an age of 82 years.  
(From Trueman & Luker, 1992).

*I fished the Murray from locks eight and nine right up to the bridge over the Indi River. A cousin and I went right up to the top of the Indi as far as we could get by road and we camped there. I had scrub worms and an eight pound breaking strain line and it was only the other side that stopped it. I would gradually work him back in. I had nearly half an hour on it when he was sliding along the top towards the boat and there was a twig sticking up and he felt it and woof he broke the line. It was a big cod, a Murray cod; he was deep and a green colour. I saw a couple of Trout cod that were caught up there that were about six to seven pounds. That was about 1948-50. I met a chap that had been up there, carted his boat along; and went spinning and they caught a lot around sixteen and seventeen pounds. They would go up to one big pool and put the boat and outboard in. Away they'd go spinning and they had quite a good haul of cod. That's hearsay of course but I think it was correct.*

Footnote: Although Bert did not specify the precise location on the Indi River where he fished local knowledge sourced from Mr. Len Lebner of the roads in the area at the time suggests Bert fished in the Biggara or Bunroy areas. The highest bridge upstream was located at Biggara and reasonable gravel road access existed into the Bunroy area after World War Two.

#### OH 55

Roy Grant of Burrowye was interviewed in June 2006 at an age of 90 years.

*I was born at a place called Linton, near Talmalmo. My father, George Grant, when he was young lived in Albury. He used to fish with a lantern, caught a lot of Catfish, that was around Doctors Point. Then we moved over to Burrowye, but on the NSW side of the river. The river in an ordinary season when I was young it would run a banker in spring, but in a flood it went all over the paddocks. There were a lot of logs in the river from the trees and lots of gravel, beaches of it with deep holes. At Burrowye my mother told me about the big flood in 1912, my brother Stan was born in 1920 and at that time there was the big drought. Smithick's lagoon went dry and she told me there were thousands of dead Catfish. That happened about when Stan was born, so it puts a date on it. I saw the last Catfish that was caught opposite the Burrowye cutting, on Bob Smithick's Talmalmo Station, in a big lagoon, about 3 pound I reckon, in a gill net. That was in 1935 and the last one I saw, actually the only one I saw up there.*

*In 1930 when we were going to school, over at Talmalmo School, we would grab a Stringybark sapling with a chord, hook and sinker and away we would go down to the river with a few worms. We would get two cod nearly every evening. Cod was what we caught most at Burrowye. There was a 45 pound cod caught by an uncle, Jordie Butt, at Linten on a Rabbit. We would get both types of cod, the Murray cod and what we called the rock cod which they now call a Trout cod. They were mostly called rock cod back in the 1930s though some people called them a Trout cod, never heard of them being called bluenose. The rock cod was darker and looked slimier, shiny looking. The heads were different, pointed in the rock cod, and the top lip was longer than the jaw. Sometimes they were nearly black, with little spots on them, but commonly a grey, maybe even blue, but definitely darker.*

*When I was a boy the rock cod was very common, even more common than the Murray cod. The rock cod were throughout the river, in the same places as the Murray cod, but sometimes in the faster water, very common at Burrowye. They were about the same to eat as the Murray cod. They were commonly caught around the 15 pound, but were caught well over 20 pound. They went right up the river and into the creeks; they were caught up through Corryong and Brigenbrong. They were very common in the Cudgewa Creek. I saw one rock cod caught out of the Cudgewa that weighed 45 pound; yes it definitely was a rock cod. The biggest rock cod I caught out of the river on a fishing rod was at the mouth of the Burrowye Creek, in about 1940, it went 53 pound. Well I had him tethered in the mouth of the creek for 3 days and he never stopped moving, just backwards and forwards, not like a Murray cod, they would just lay quiet. That was the biggest. My biggest Murray cod was 81 pound, but my brother Stan beat me, he got one that was 83.*

*By the late thirties we caught less rock cod, maybe the same number of both types. There was a professional fisherman, Tom Brown who had a camp at Thologolong and you could buy fish off him at anytime, he was all right. But there was a fishing party with Allan Brown and his brother Jack; they fished a lot of the cod out. The Browns came from Brown's Island near Albury and they stayed at Riverlea, at Fred Dick's camp at Riverlea. They used a special decoy made by a bloke, a chemist in Albury to lure the cod, mixed things, I know it had black tailed grubs in it, and it was deadly. They took out a heap of cod in 1936. In one trip they put 43 cod on a truck to Melbourne; there was a lot of rock cod in them. Allan Brown got bitten by a brown snake on that trip. The truck broke down and they all went rotten, they had to tip them out in the creek here. But they kept coming back and they were successful, I last saw them about 1939, that was the last of the big catches. They never really got over it the cod; we never saw the cod in those numbers again, though we still caught plenty for ourselves, but not those big catches. By the 1950s the rock cod had become scarce, less than ten percent of the cod were the rock cod or Trout cod. The last two Trout cod I caught weighed about 10 pound each and were taken on cicadas. That was about 1970 at Burrowye.*

*The white eye bream, I caught one in the Burrowye Creek, and I gave it to Jack Sutherland. Years before they were very common, caught up to 6 pound my father said, but I saw very few and really only remember catching that one. There were a few caught later and they were all gone by 1970. There were supposed to have been a few grunter in the river, but they disappeared by 1935, maybe earlier. Stan got one here in 1951; we didn't know what it was! The yellowbelly had never been a common fish in the area, though there were a few caught. Dad got one that was 23 pound. There were cod well up the Koetong Creek, as well as trout. Yes there was a lot of cod well up the Koetong Creek, Jingellic Creek and Horses Creek. In the Koetong they went up past Jim Star's place 3 or 4 mile up to about flat rock, they were mainly rock cod in there. Just below Bluff Road, in the Cudgewa Creek down from Cudgewa my mate threw in a little spinner, he yelled 'come quick, come quick!' he played it in. He thought it was the biggest trout, but it was an 18 pound Murray cod. The native spotted mountain trout, Stan and I used to catch them right up Harveys Creek, and in the Burrowye Creek.*

*About 1930, 32 I remember all the algae in the old weir, the ducks were spreading the algae everywhere. They put the bluestone in and it killed everything, all the fish in the weir. The bushfires killed a lot of fish. We found one 37 pound cod dying below Thologolong from the ash on a beach after the 39 fires. But the 52 fires were worse, there was an 81 pounder found dead at Kennedy's and Stan saw one lying on top of the water with its nose poking out, opposite the home. It was well over 100 pound, and he was saving the cod, getting the ash out of their gills. The 52 fire killed all the native mountain trout out of the creeks. After that all we caught in them were redfin and trout.*

OH 56

Tom Jarvis of Tintaldra was interviewed in October 2006 at an age of 77 years.

*My father had told me how he used to go and fish in the Jeremal and always, well mostly get 3 to 4 cod on a spinner. He grew up at Towong. I grew up around there, ended up down here (at Tintaldra). He always talked about when he was young how he used to catch a lot of Catfish. Always talking about them. Yes lots of Catfish around Towong. If he were still alive he would be 99. I've never seen one here, or the grunter. I used to fish with the school teacher, George Downing. I left school when I was 12, so that tells you how long ago that was. Any of the creeks up here, if there was a hole 6 foot deep there was cod in them. If there was a willow tree or logs you were sure to catch a cod in them. The Jeremal, Cudgewa, Corryong, they all had cod in them. The locals talked about all the cod and bream in the Mannus falls. I've caught cod up to 9 pound out of the Mannus. I've caught cod years ago all the way up the Swampy Plains, nearly to Khancoban. Up the top of the Murray I've caught cod at Biggara, in a big long hole. That's a long way up; you have a look on a map and see where that is! The cod here, well we thought there were three types. There was the normal Murray cod, the usual green colour. Then there was the "mud cod" which was similar but a lot fatter and stumpier, with a blunt nose. And there was the "rock cod". You could pick them in the water as they had big white edges on their tails. Lots of white. And the head, well the nose was longer than the other cods, darker and pointier. There was plenty of them here, hundreds. We used to get hundreds of the rock cod here, down at the reserve here in Tintaldra. They were caught up to 20 to 30 pound, bigger. I once saw a big one lying on a sugar bag, a rock cod.*

*The cod were common when I was a kid. Up to 20 pounds, some up to 60. I've got a photo from about 65 years ago when we caught 6 cod from 35 pound down to 8. All strung along a pole. Caught a lot of cod using a long cane rod, on an aeroplane spinner with the feather on it. We used to set springers, used the carp that came in different colours. The old carp. And yabbies. My best cod went 78 pound. We never really caught small cod, down to 3 to 4 pound, got one that size we threw back the day we got the six in the photo. No, didn't ever get the very small ones like they used to talk about. The slipperies, well they were something slippery, like an eel! We used to get a few small ones. I've seen the odd eel up here in the past too. The bream? Which one do you call the bream? Well the Macquarie perch. I've never caught many of them. Hardly ever, be a long time ago. I've caught plenty of redfin, going back 60 years. They've always been common, heaps of them, going back as far as I can remember.*

*When the snowy scheme came in, well the water was too cold, and got too cold too quick. The cod can handle the cold if given the chance. It needs to get warmer in summer. Look at where we used to catch them! And the snags, well they pulled them out for the Snowy scheme, now they want to put them back in! When the water got cold, the trout, well that was nearly all you could catch. I used to catch a lot of trout on the spinners. Then the carp came in. The water used to be clean here. I've been on this property for fifty years. Now the water is dirty, you have to boil it to drink it. Never had to do that in the past. Some blamed the dams for the dirt, but that didn't happen. The water went dirty after the carp. Hume, well that became a breeding ground for the cormorants and pelicans. It's not natural to have them like that. At Granya, I used to watch the cormorants driving the fish. The pelicans would follow and clean up the big fish that the cormorants couldn't finish off. They would be fighting over them.*

OH 57

Betty Walton of Tintaldra was interviewed in September 2006.

*The late Jack Smerdon passed away in 1998. He was the local expert on the fish here. Spent time in Changi during the war. He could go a long way back, to the twenties. He often talked about catching the Trout cod in the Murray and the creeks upstream around Towong, prior to World War 2. He said they were prevalent, and could be reliably caught under the wattle trees, that's where the birds used to be. His theory was that the trees or the bird droppings attracted them. Jack told me that the normal Murray cod were more often caught further down the river, but are found further up near here today. Jack said that the Trout cod were prevalent up past here where the water was faster, Towong and further up, that they were a lot smaller than the normal Murray cod. He talked about how the Trout cod used to be so common up here, then disappeared. He could have told you all about them.*

OH 58

Jim McGinnity of Tooma was interviewed in November 2006 at an age of 70 years.

*For most of my life in the Tooma River there has been mainly trout and redfin. I'm on the Mannus Creek, and my grandfather's house is further down the creek. Going back to the 30s and 40s in the creek were trout, redfin, bream and the odd cod. In the early days my grandfather used to go cod fishing in the creek all the time, there was plenty of them. He caught one that was 60 pound, out of the Mannus. The cod and bream were common in amongst the falls between here and Tumbarumba and they went right up above the falls. I can remember catching the odd bream in the Mannus from Tooma back up into the hills. They weren't big bream, and I believe there is still the odd one caught further up. My father had said originally that there had been the odd yellowbelly in the creek too. There used to be beautiful trout fishing here, though it slackened off about 20 years ago. There is still the odd cod about 4 pound.*

OH 59

Ken Nankervis, formerly of Tom Groggin Station, was interviewed in June 2006.

*Cod were common in the upper Murray and it was widely known that the Trout cod was also caught. The cod were generally caught downstream of Tom Groggin, I'd say it was too cold for them further upstream. They were common in the Cudgewa Creek, some are still caught. After the Snowy Mountains Scheme the water became too cold and the Murray was desnagged to help the flow. The cod pretty well declined. I remember Charlie Mildren; he used to tell this story about how he caught the first brown trout from the river and took it up to the homestead to be identified. That wasn't at Tom Groggin, he was up there later. He worked at Brigenbrong back then. He told me the river used to be full of perch (Macquarie) as well as cod. In the Nariel creek he used to light a fire to attract the perch and could net them from the bank.*

OH 60

Len Lebner of Corryong was interviewed in December 2006 at an age of 80 years.

*I was born in 1927, so I am nearly 80. I grew up in Corryong; we had a property at Upper Towong. My father, when they were boys in the early 1900s, well they leased a bit of land there. They were off to do some fishing and they thought they would check their drum net. It was a homemade job, not real strong. When they pulled it out there were 2 cod in it, one was 20 pound and the other about 4 pound. They put it back in the river to keep the cod alive. When they dragged it back out on the Saturday the little cod was gone. They thought, well the drum net was not well made and so it must have worked out how to escape. When they cleaned the big cod they found the little one in it!*

*Dad told me that when they were boys, in the evenings, you could catch heaps of little cod, 6 to 8 inches long. Two or three or four of the boys would be fishing and the little cod were very plentiful. But from 1935 on it was unusual to catch the small cod, I never caught many, caught 3 to 4 pounders, but not many of the small ones. Back then you were aware there were the two types of cod, with the thinner ones in the moving water. But we*

never took much notice; they were all cod to us. There was an old fellow that lived next to us, Aussie Rickson, a stockman; he told us how he used to catch the cod at Bunroy, that's up past Biggara. He used to go out there helping 'Lightwood' Bill Pendergast on a grazing lease and he would go fishing on his way home on Saturday afternoon. They used a stringybark pole with a spinner which they used to leave hidden in the trees. The cod he told me weren't very big, up to 10 to 12 pound, but he got plenty of them. He lived at Biggara then with his parents, that was well before 1927, probably before the First World War when they were doing that.

Dad used to catch the Catfish out of the lagoons, he said once to me 'I wonder if there are any of them left in the lagoon? I used to stand on the bank and you could see the nest, where there was a slow flow, where the water came into it, out at Towong Hill'. But I've never caught one. Frank Anderson told me that the Catfish used to be quite common in the backwaters at Khancoban Station, he was there before the first world war, they later had the post office at Khancoban. When we were kids we could catch the redfin by the thousands, you would get sick of catching the things. The biggest 6 inches, down to 2 inches. In the Thowgla Creek, down near the junction of they Corryong Creek. One day I caught a Macquarie perch, about a pound, in amongst those things.

The perch, the Macquarie perch, we used to catch a few in the early 1930s, but we caught more cod than perch. My father said he would go down in the evening off a sandbank and with worms you could catch a sugarbag full. In the earlier days, up to the twenties, they were common in all the creeks around here. Bob Whitehead of Lighthouse told me he was once riding along the river bank and in the shallows on a beach he found a drum net. It was a seething mass of perch, he couldn't lift the net so he dragged it out, rolled it onto the shore. It was half full of perch! He took some home and to the hospital, the rest I think he let go. That was in the Murray at Lighthouse. They were much less common when I was a boy, nowhere near as common as the old bloke said they used to be. I reckon back then one 2 to 2 ½ pound was a good one. I saw two caught up at Bunroy about 1980, one of the girls that went with us caught two, out of a backwater. They were the first I had seen in a long time.

The greasies were common everywhere, even in the mountain creeks. You would catch them towards sundown. I was told there was an occasional Golden perch caught, not many, possibly up to the 1930s. I think the Cudgewa Creek was the best cod creek, and the Corryong Creek. We caught cod out of the Thowgla but it was not so good as it is only a small creek. There was a father and two sons down Granya way named Brown, he was a pro fisherman. This young fellow, one of the sons, told me if you wanted nice fish you could get 4 pound cod in the Koetong Creek, that they were beautiful fish out of there.

We used to go out fishing on the farm in the evenings; we would put a dozen set lines in. In the 1940s you would always get four cod, up to about 12 pound. Later I caught a 50 pounder in the same area, that was my biggest, though I got plenty around 20 to 30 pound. For the cod we used to use the yabbies and the old carp, and the aeroplane spinner. Sometimes we used worms. Parrot was a favourite. I remember catching one on half a parrot, that was 4 pound, in the fast water at Tintaldra. I think that was a Trout cod. Old George Lloyd told me that in the old days that the best time to catch cod was when the wattles were flowering, but that was the closed season. The cod are coming back, particularly in the Cudgewa Creek; they are catching quite a few.