BRIGHT .- A party of anglers from Bright, including Messrs. O. V. Briner, E. Harwood, J. Hepburn, and M. J. Dowling, had a very successul trip to the Kiewa River at Gundowring during the week, securing about 100lb, in weight, and bringing 80lb. back to Bright. The catch included a 26lb. cod, which attacked a 3lb. perch that had been tethered by Mr. Briner during Satur-The cod had almost swallowed the day. perch when found, and was secured by the hand being placed in its gills before the fish realised that it was a captive. Mr. Briner also secured an 811b. cod and a nice lot of perch, averaging 21b. Mr. Harwood captured a cod 1111b, and a cod 911b., besides several perch. Mr. Hepburn got some good perch. whilst Mr. Dowling had good sport amongst the fry fish. A dozen perch were brought to Bright, which averaged over 21b, each.

Argus, 13 March 1903

BRIGHT. - A party of anglers from Bright, including Messrs. O. V. Briner, E. Harwood, J. Hepburn, and M. J. Dowling had a very successful trip to the Kiewa River at Gundowring during the week, securing about 100lb. weight, and bringing 80lb. back to Bright. The catch included a 26lb. cod, which attacked a 3lb. perch that had been tethered by Mr. Briner during Saturday. The cod had almost swallowed the perch when found, and was secured by the hand being placed in the gills before the fish realised that it was captive. Mr. Briner also secured an 81/2 lb. cod and a nice lot of perch averaging 2lb. Mr. Harwood captured a cod 111/2lb. and a cod 31/2lb., besides several perch. Mr. Hepburn got some good perch, whilst Mr. Dowling had good sport amongst the fry fish. A dozen perch were brought to Bright, which averaged over 2lb. each.

Argus, 13 March 1903

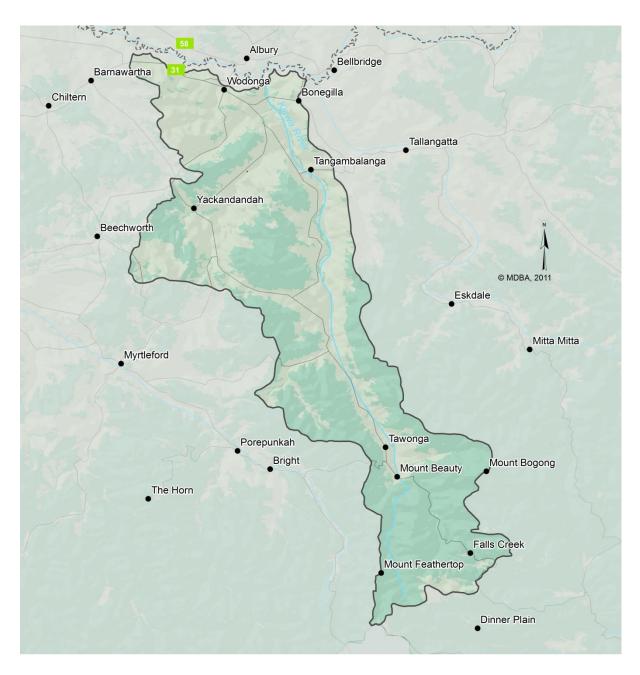


Figure 11.1 The Kiewa River Catchment showing major waterways and key localities.

### 11.1 Early European Accounts

Hamilton Hume and William Hovell explored the lower reaches of the Kiewa River in November 1824, Hovell recording the capture of fish from the river: 'In the river, they caught some of the Lachlan codfish, and in the ponds, a kind of fish, similar to carp' (Bland, 1931). In the early years of European settlement the Kiewa was known as the Little River, which was replaced by an aboriginal word 'kiewa' meaning 'sweet water' (Andrews, 1920). There was also one account, originating from one of the first white settlers that reported 'kiewa' to mean 'ever flowing' (*Argus*, 8 April 1882).

Apart from Hovell's account, very few early references to native fish in the Kiewa Catchment have been published. A few newspaper articles describe some catches, and from these it is clear that the Kiewa originally contained an abundance of fish. In 1903 a group of anglers 'had a very successful trip to the Kiewa River at Gundowring during the week, securing about 100lb. weight, and bringing 80lb. back to Bright. The catch included a 26lb. cod, which attacked a 3lb. perch that had been tethered' (*Argus*, 13 March 1903). John Langtry in 1948 noted the presence of Blackfish in the Kiewa River but, despite the fact that the habitat appeared good, that 'cod, callop and bream' were captured 'only on rare occasions' (Cadwallader, 1977).

Victorian Fisheries and Game Department Inspector J. O. (Jack) Rhodes published a brief account, sourced from the McFarlane brothers of Wodonga who fished the Kiewa River from 1928 until the 1940s, recording that 'they enjoyed magnificent fishing in the Kiewa River on white eye and blue nose'. He also recorded the presence of Murray cod and Blackfish in the Kiewa River and how the 1939 bushfires decimated the native fish population (Rhodes, 1999). Jack Rhodes has kindly provided permission for the McFarlane's account to be reproduced (OH 94).

# **11.2** The Past Distribution of Fishes in the Kiewa River Catchment

The *Sustainable Rivers Audit* (Davies *et al.,* 2008) divided the Kiewa Catchment into a lowland zone (downstream from Kergunyah), a slopes zone (upstream to Mount Beauty), a short upland zone (upstream to Bogong) and a montane zone beyond the latter location. The physical form of the Kiewa River downstream of Kergunyah to the Murray River is confined by a valley with a relatively narrow floodplain containing extensive areas of gravel and sand substrates. Effectively, true lowland habitat does not exist in the Kiewa Catchment, and the slopes zone is treated here as extending to the Murray River. All other habitat zones match those in the *Sustainable Rivers Audit*.

The information presented below is sourced from limited oral history dating back to the late 1920s and a few newspaper accounts. No historical photographs of catches of native fish in this catchment have been located.

### 11.2.1 The Montane & Upland Zones

There are no historical accounts recording the past existence of large native fish in the montane and upland zones of the Kiewa Catchment. Blackfish today are present and common in some upland streams in the catchment, but it appears that the steep gradients of the East and West Branches of the Kiewa River upstream of Mount Beauty prevented access of the other large native fish species into these zones.

#### 11.2.2 The Slopes Zone

Newspaper accounts record that cod were very common to abundant in the slopes zone of the Kiewa River, with large numbers of juvenile fish present in some areas (*Argus*, 13 March 1903; *Argus*, 11 July 1922; *Argus*, 22 February 1939). The McFarlane brothers' account of their catches from the Kiewa River between Tawonga and Dederang indicates that the main species captured were Macquarie perch, Trout cod and Blackfish, with lesser numbers of Murray cod being taken (McFarlane, OH 94). The brothers were very familiar with Trout cod and provided a detailed description to Jack Rhodes, leaving no doubt about the identity of the fish. The catches of Trout cod were consistent and at times large (Jack Rhodes, pers. com.) suggesting that the species was very common to abundant. The account is supported by additional oral history from 95 year old Myrtleford resident Walter Grattidge, the oldest surviving witness, who fished the Dederang area. He indicated that most of the cod taken were Trout cod and they were abundant. He stated that the river had a 'power of fish in it' (Grattidge, OH 97).

The McFarlane brothers caught relatively small numbers of Murray cod from the Kiewa River and were surprised at seeing more Murray cod than expected, including some large specimens, dead after the bushfires (McFarlane, OH 94). They indicated that a lot more Trout cod than Murray cod were observed in the kill (Jack Rhodes, pers. com.) but from their observations Murray cod were fairly common. Cod had been common upstream of Tawonga (Murphy, OH 95) and one Wodonga resident has recalled capturing both Trout cod and Macquarie perch in the lower reaches of the west branch of the Kiewa River near Mount Beauty (Simon Kaminskas, pers. com.).

Macquarie perch were abundant in the Kiewa River, with some large catches being taken (McFarlane, OH 94; Jack Rhodes, pers. com.). A news story described several catches of perch averaging two lb. (0.9 kg) near Gundowring (*Argus*, 13 March1903) and another reported that a hole in the Kiewa near Springvale (between Kergunyah & Kiewa) being 'full of small perch' and that they were 'as thick as flies' with larger fish up to 2½ lb. (1.1 kg) being taken (*Argus*, 11 July 1922). The perch were also common in anabranches and lagoons adjacent to the river in the same area (*Argus*, 26 October1928). The newspaper accounts do not provide a definitive identification of the type of perch but the evidence from the oral history indicates that they were Macquarie perch.

Oral history records that Catfish had been present during the 1930s in the Kiewa River near Kergunyah and Kiewa (Murphy, OH 95; Neville Hadley, pers. com.). The oral history is validated by two newspaper accounts, which described the presence of Catfish in the Kiewa River itself, near Springvale, and large numbers of juveniles in creeks and anabranches adjacent to it (*Argus*, 11 July 1922; 26 October 1928). Catfish were abundant in lagoons near the junction of the Murray and Mitta Mitta Rivers (*Argus*, 16 February 1912) suggesting that a similar situation would have existed in the lower Kiewa. Blackfish were very common in the Kiewa River, lagoons and creeks including the Bells Creek and Running Creek (McFarlane, OH 94; Murphy, OH 95; Grattidge, 97; *Argus*, 26 October 1928). Langtry suggested that 'callop' (= Golden perch) and 'bream' were present in Kiewa River (Cadwallader, 1977) but other historical information does not specifically record the presence of Golden perch or Silver perch. Both species were fairly common near Albury (McFarlane, OH 53) and there are accounts of both being present in the lower reaches of the nearby Mitta Mitta River (*Argus*, 4 July 1924; Moyle, OH 93). It can be inferred that both Silver perch and Golden perch were probably present in the slopes zone of the Kiewa River in small numbers.

### **11.2.3** Estimates of Native Fish Abundance in the Kiewa 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.

Species	Slopes* (Murray River to Mount Beauty)		Upland (Mount Beauty to Bogong)		<b>Montane</b> (Upstream of Bogong)	
	Trout cod	3	L5	0	0	0
Murray cod	3	L3	0	0	0	0
Golden perch	3/1 †	1?	0	0	0	0
Silver perch	1/0 †	1?	0	0	0	0
Macquarie perch	3	5	0	0	0	0
Catfish	0	L3	0	0	0	0
'Blackfish'	3	U3	3	?	0	0

### Table 11.1 Kiewa River Catchment Rarity Scores (Main River Channels)

#### 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

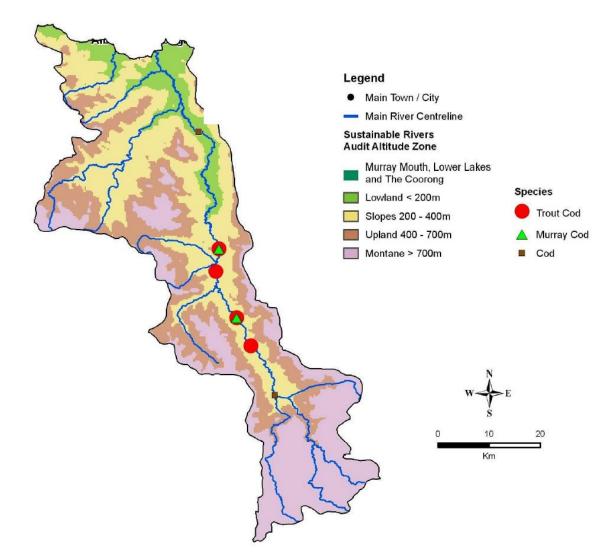
L = abundance at the lower end rating

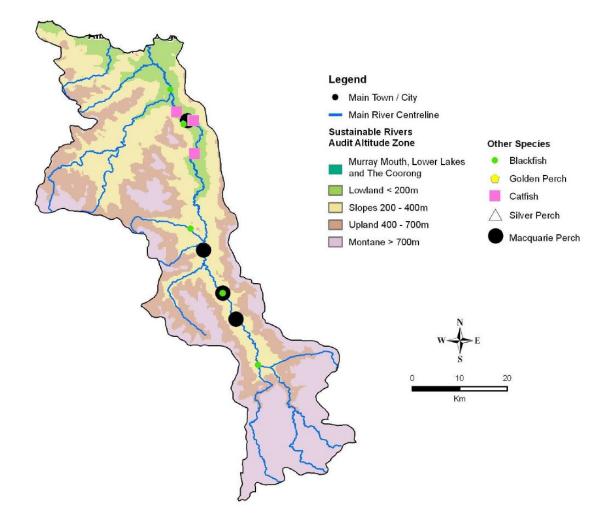
U = abundance at the upper end rating

Ratings in bold type are 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

<sup>+</sup> Note. The *Sustainable Rivers Audit* identified the existence of a lowland zone which has been treated here as part of the slopes zone. Different rarity scores were provided for Golden Perch and Silver Perch in the lowland and slopes zones of the Kiewa Catchment. Both are provided with the lowland score listed first.





### 11.3 The Changes

#### 11.3.1 Changes to Native Fish Distribution and Abundance

Native fish were abundant in the slopes zone of the Kiewa River until February 1939, when a bushfire event initiated a massive fish kill. After that time Trout cod, Macquarie perch and Catfish were not reported, though Blackfish populations recovered. There was also some recovery of Murray cod in the lower reaches (McFarlane, OH 94; Murphy, OH 95; Grattidge, OH 97; *Argus*, 22 February 1939).

### 11.3.2 Changes to Habitat

In the early 1850s gold was discovered in the Yackandandah Creek and, in subsequent decades, extensive alluvial workings occurred at Allan's and Osbourne's Flats. Hydraulic sluicing commenced in the 1880s followed by bucket dredging in 1905. In 1870 massive floods washed away much of the disturbed alluvium downstream into the Kiewa River (Flett, 1979). The mining operations in the Kiewa and Mitta Mitta Catchments are reported to have impacted on water quality in the Murray River as far downstream as Corowa (NSW Fisheries Report, 1907). The February 1939 bushfire produced a transient 'blackwater' event which caused an enormous fish kill (McFarlane, OH 94; *Argus*, 22 February 1939). Subsequent to the fire increased silting of the Kiewa River occurred (Bill Murphy, pers. com.).

Brown and Rainbow trout were introduced to the upper Kiewa River prior to the First World War and a volunteer hatchery operated, regularly stocking waters in the catchment (Clements, 1988). After the 1939 bushfire trout colonised much of the slopes zone of the Kiewa River and became abundant (McFarlane, OH, 94). Goldfish were first reported from this catchment in 1919 when shoals were said to be present in some lagoons (*Argus*, 16 September 1919). No precise date has been identified for the arrival of Redfin perch in the Kiewa River, though the species is reported to have been common at Albury by 1921 (NSW Fisheries Report, 1921) and were probably present in the Kiewa River at that time. They were abundant in the Kergunyah area by the 1940s but became scarce after large fish kills, attributed to a disease occurred in the 1980s (Murphy, OH 95). European carp became common during the 1980s (Bill Murphy, pers. com.).

During the 1950s construction commenced on the Kiewa Hydroelectric Scheme. In conjunction with the scheme, extensive snag removal occurred (Murtagh, OH 85). Operation of the dams has altered the natural flow regime of the Kiewa River and water temperatures have been reduced downstream (Ryan *et al.*, 2001).

### 11.4 The Current Situation

The Sustainable Rivers Audit concluded that:

the Kiewa Valley fish community was in Very Poor Condition. The Lowland, Slopes and Upland Zone communities were in Very Poor, Poor and Extremely Poor Condition, respectively. Alien species were 90% of total biomass and 57% of total abundance. The community had lost most of its native species richness and was dominated by alien fish (Davies *et al.,* 2008).

Today Blackfish are fairly common in some tributaries of the Kiewa River. A good population of Murray cod exists in the lower reaches, with some fish being taken as far upstream as Mongans Bridge. While a natural population of cod existed in the river it has been supported by extensive stocking. Some Golden perch have also been stocked with small numbers being taken by anglers. Macquarie perch, Silver perch and Catfish are

extinct in the catchment and, until recently, Trout cod were also absent. Recent captures of Trout cod have occurred, with the fish probably making their way into the Kiewa from the Murray River. A large sand slug in the lower reaches is an obstacle inhibiting native fish movement upstream in the river. While a fairly good Murray cod fishery now exists in the lower reaches there is no longer 'magnificent fishing in the Kiewa River on white eye and bluenose' (Rhodes, 1999).

### 11.5 Newspaper Highlights

#### Argus, 13 March 1903

Country News. / Bright:- A party of anglers from Bright, including Messrs. O. V. Briner, E. Harwood, J. Hepburn, and M. J. Dowling had a very successful trip to the Kiewa River at Gundowring during the week, securing about 100lb. weight, and bringing 80lb. back to Bright. The catch included a 26lb. cod, which attacked a 3lb. perch that had been tethered by Mr. Briner during Saturday. The cod had almost swallowed the perch when found, and was secured by the hand being placed in the gills before the fish realised that it was captive. Mr. Briner also secured an 8½ lb. cod and a nice lot of perch averaging 2lb. Mr. Harwood captured a cod 11½lb. and a cod 3½lb., besides several perch. Mr. Hepburn got some good perch, whilst Mr. Dowling had good sport amongst the fry fish. A dozen perch were brought to Bright, which averaged over 2lb. each.

#### Argus, 11 July 1922

Perch In The Kiewa. I am not certain to what particular perch S. Clapham refers as being plentiful in the Kiewa River. He says that his daughter persuaded him to go up the river to have a try for catfish, which were to him a novelty. The Kiewa has a good flow for part of the year, but in summer is merely a succession of waterholes. In one of these, which was about two chains long, 8ft. deep, and thickly bordered on one side with bullrushes they had a try and found that the pool was full of small perch about 3in. long and they were around the worm bait as thick as flies. Later in the evening they caught perch up to 2¼lb. weight.

#### Argus, 26 October 1928

Where Cod Spawn. Mr. S. Clapham mentions experiences on the Kiewa River, in the north-east, which lead him to believe that Murray cod spawn in still water. He sometimes went to lagoons when they were nearly dry to get crayfish for bait, and entangled with the weed brought up in the band net were always numbers of small cod, perch, and blackfish about an inch long. He could have got hundreds of these if he wishes. From the Kiewa River there is a creek which runs swiftly when the river rises, but in summer is only a chain of deep holes. In these small catfish, perch, and blackfish are got, but never cod.

#### Argus, 22 February 1939

Many Codfish Die. Yackandandah, Tuesday. Ashes and other rubbish washed by rain from the fire burnt ranges into the Kiewa River have been responsible for high mortality among fish. Mr. W. Keat of Gundowring discovered seven dead cod fish totalling in weight more than 100lb. Other landholders abutting the Kiewa River report similar mortalities.

## 11.6 Kiewa River Catchment Oral Histories

The following oral histories (OH 94-95) discuss the Kiewa Catchment.

### OH 94

Jack Rhodes has kindly provided permission for these paragraphs from his book (Rhodes, 1999) to be republished. Included are oral history provided by Alf and Erskine McFarlane of Wodonga West of the Kiewa River

However, from 1928 when Alf bought a Chevrolet truck, they enjoyed magnificent fishing in the Kiewa River on white eye and blue nose, mainly at Indians Hole near Red Bank and Keegans and Mongans bridges. In 1939 after bushfires in the Kiewa River catchment, heavy rains brought ash into the river and many fish of all species died. Noticeable in the mortalities was a larger number of both spiny crayfish and Murray cod than had been thought to exist in the river. From that time in the Kiewa River the small northern Blackfish (greasies) recovered in number, but the only other native fish ever caught there by Alf and Rusty was a small number of Murray cod. The white eye and blue nose were gone, and the river became noted for the excellence of its brown and rainbow trout.

### OH 95

Bill Murphy of Kergunyah was interviewed in April 2008 at an age of 73 years.

I was born in '35. I remember my uncle went down here and all the lobsters were in the back of the Ford. I saw the lobsters; they were coming out of the river after the fires. He was fishing down here and there was a 70 pound cod dead, down near Doug Austin's. Cliff Cooper told me there was cod all the way up past Tawonga before the fires. Apparently there was a few about 90 pound caught around here. There was an old bridge just below my boundary; there was a 90 pounder there. There used to be a few Catfish here, my father used to catch them in 'the old river', where it cuts through the paddock. He also talked about getting some other type of fish there. The Blackfish were in the little creeks, some people used to get a feed of them. There used to be some in the Bells Creek and the Running Creek. There were no yellowbelly here, not as I remember, and grunter, no.

When I left school the river was full of trout, you could catch them on worms up to 11 pound, then they started to disappear. The redfin then used to be thick, then they disappeared with a fish disease. I saw them dying in the river about 25, 30 years ago. I haven't caught a carp for two to three years. I once saw six about 10 pound each eating the leaves off the willows. Now the river is full of small cod, though they get a bit of a hiding. Felix Carmody was a character and a well-known poacher, he used to get a few ducks. He used to catch black snakes and once he tipped one out in the pub, that soon cleared the bar!