# Ovens







# Talking fish

Making connections with the rivers of the Murray-Darling Basin



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Aboriginal readers are warned that this publication may contain the names and images of Aboriginal people who have since passed away.

#### The rivers of the Murray-Darling Basin

The rivers and creeks of the Murray-Darling Basin flow through Queensland, New South Wales, the Australian Capital Territory, Victoria and South Australia. The 77 000km of waterways that make up the Basin link 23 catchments over an area of 1 million km<sup>2</sup>.

Each river has its own character yet these waters, the fish, the plants, and the people that rely on them are all different.

The booklets in this series are about how the rivers, fish and fishing have changed. The main stories are written from oral history interviews conducted with local fishers in 2010-11, and relate individuals' memories of how their local places have changed. They showcase three ways of knowing the Ovens River: personal experience, scientific research and historical research. Just as individual fishers do not always agree with one another, so their understanding might not necessarily agree with current scientific information or historical records. Similarly, specific items and events might be remembered differently by different people. These varied perspectives show the range in views about fishing and the rivers, each important in its own way. There are many other great stories out there about fishing in the Murray-Darling Basin. These booklets are just the beginning.

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#### Front page photographs – L-R

Source: Jodi Frawley.

Source of image: National Library of Australia (Ovens R Valley 1867 Guerard PIC S7723 LOC1241-B).

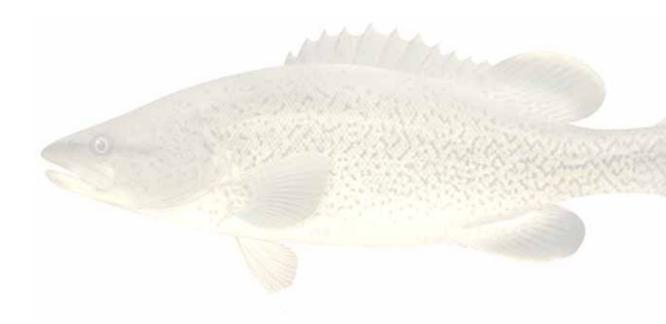
Source: Luke Pearce. Source: Scott Nichols.

#### Back page fish images

All fish images except two-spined blackfish: NSW DPI. Two-spined blackfish: DPI Fisheries Victoria.

Just before sunset they cross the **Ovens** and then immediately halt for the night; having travelled about fifteen miles. They caught an **abundance** of **fish** in the **river**...

31st December 1824; Hume and Hovell expedition in 1824–1825, from Bland (1831)



The Ovens River rises in the Victorian Alps where it is linked to significant freshwater meadows and marshes. It flows past Harrietville, Bright, Myrtleford and Wangaratta where it is joined by the King River on its way to meet the Murray near the top of Lake Mulwala. These the traditional lands of the Bangerang people and their neighbours the Taungurung and Yorta Yorta peoples. They have fished the river and surrounding waterways and hunted the wetlands. The ebb and flow of water guided their travels and featured in their stories. The Bangerang, Taungurung and Yorta Yorta have seen their land and the river change.

Since Europeans arrived the health of the river and its fish has been shaped by the people who came to live there and the industries that developed. Grazing, gold mining, tobacco and plantation forestry all needed different types of workers, bringing new people with new needs to the river and new ways to catch fish. The Ovens River is one of the last largely unregulated rivers in the Murray Darling Basin and is particularly important as a reference against which to assess the state of other lowland rivers in the region. There are areas where the riparian vegetation has been replaced by willows, there have been significant water quality issues and there are far too many pest fish.

These changes mean there are a lot less fish than there once were. Before the turn of the twentieth century, there are stories of large silver perch, Murray cod, trout cod, catfish and yellowbelly catches. There were no carp and no redfin.

There are still those who love the river and who love to fish the river. Their stories are part of the bigger story of changes to the Ovens and its fish. They help us remember that the river we see now is not what the river was and can be again. People want to talk about a future for the Ovens and their visions for a healthy river that is, once again, full of fish.

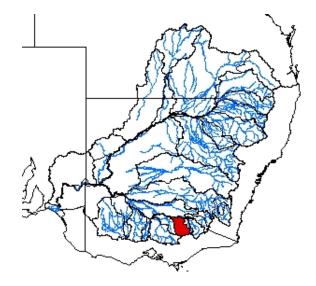
#### Introducing the river and its people

#### Baiame, Wiinya and Toonatpan

Bangerang men Kevin Aitkinson and David Edwards relay the Bangerang creation story, regularly retold while fishing on the riverbanks.

Long ago in the Dreaming, the river did not flow through Bangerang Country. So the people asked Baiame (Creator) for help. Baiame decided to send his Wiinya (wife) to help them. He asked his Wiinya to make a mark with her kunna (digging stick) in the earth to Tocumwal and Echuca. After his Wiinya had completed her task Baiame sent the Great Serpent Toonatpan and asked the Great Serpent to follow the mark his Wiinya had made in the earth. Baiame then created a great storm with much thunder, lightening and rain. The river was filled bringing life to the country. The people, the animals and the plants arose out of the country.

For the Bangerang people, living near the rivers was like living near a supermarket. When the Murray and the Ovens Rivers were in flood, fishing became a communal activity. Large groups of people netted fish and crayfish, speared fish and, as the river began to subside, built weirs to trap fish returning from the swamps to the main channel.<sup>2</sup>



Many dispossessed local Aboriginal people moved to the Maloga Mission from 1874, or later to the Cummeragunja Settlement, both on the Murray River. Those who remained worked and lived along the Ovens River.

#### The arrival of the Europeans

Hamilton Hume<sup>3</sup> and William Hovell<sup>4</sup> crossed the Ovens River in 1824, while seeking a passage from Sydney to Spencer Gulf. Cattle and sheep grazing followed, especially along the lower reaches of the river, then the population boomed after gold was found at Beechworth in 1852.



An unknown Bangerang man with his canoe and fishing gear featured on an early postcard. Image source: North East Historical Society Collection, Wangaratta Library.

The rush bought Americans, English and Chinese to live along the riverbanks. Fishing was an important way to supplement their diets. However, the sand and gravel unsettled by the gold dredging began to fill the river's deep waterholes.

The Chinese made market gardens along the river to supply fruit and vegetables to the goldfields. They were also the first to grow tobacco: 'chop chop' and 'stinky' were two forms of dark leafed tobacco grown in the Ovens and King Valleys. Tobacco remained a key industry in the Valleys over the twentieth century.

Plantation forestry and associated milling were also important local industries and both used the river for water. Excess poisons and siltation historically associated with the gold mining, tobacco and plantation industries caused devastation for fish and the river at different times.



Early industry had significant impacts on the river. Image source: Wangaratta Library.

Due to its proximity to the Alpine regions the Ovens River has always been a popular spot for visitors. Trout were introduced early and fly fishers along with other fishers, hunters, bushwalkers and, more recently, grey nomads have all enjoyed the distinctive river corridors of these picturesque valleys and plains.



**Tom Cameron**, with his grandson Archie Ward. Tom has lived all of his life around the Ovens River and learnt to fish from his Dad in the 'backyard' – the river. Photo: Jodi Frawley.



**Lyell Hogg** and **Ollie Evans** have been mates and fishing buddies for over 50 years. Photo: Jodi Frawley.



**Gary Daws** recalls that it was fishing for the mighty Murray cod that bought his parents together. And one of the biggest influences on his fishing was a Murray cod called 'Arthur'. Photo: Jodi Frawley.



**Keith Snowden** is carrying on a family tradition of fishing. He has also changed and adapted what and how he fished as he learnt to 'think like a fish'. Photo: Jodi Frawley.

#### Tom Cameron -110% freedom to use the river



Tom was born in 1937 and has always lived in the lower Ovens River area.

I grew up on a small farm. One of a family of eight. With none of the conveniences that people suffer today. No electricity, no motor car, only a telephone and a radio. We lived off farm produce. My father being of Scottish

descent and knowing how to obtain fish from the river, we had a lot of Murray cod, a lot of wild ducks and a lot of rabbits as well as good cooking.

#### River for a backyard

Tom's father was born in the area in 1907 and he taught Tom and his brothers how to fish.

My father could tell you where every fish lived in this river. He grew up on it. He could follow the fish all around the river and the lagoons and the creeks. In a raging flood he could go down there and successfully catch cod because he knew the river so well.

Living so close to the river meant that Tom could treat it like one big backyard. He would get home from school and head straight to the river.

As a kid we would run around down there, bare leg and bare footed. No fear of it.

Always had a dog with us. I was a bit of a pot hunter. I fished for food. In the war years we had an envious supply of Murray cod and redfin. My mates and I had a big camp down there every Christmas for a few weeks. We had 110% freedom to use the river.



A postcard showing a simple hut by the Ovens River, at Horse Shoe Bend. Proximity to the river in those days meant a plentiful supply of fish, as Tom and his family knew first-hand. Image source: Wangaratta Library.

The Camerons lived close to where the Ovens River meets the Murray. Over Tom's life the waterways have shifted and changed, especially in response both to small and large floods and to droughts.

#### Acclimatisation Societies

As the gold rush dwindled, Victorian governments were left with the challenge of finding ventures that would keep people in the colony. At this time, it was common to transport plants and animals to and from all the continents of the world for economic, medicinal, social and scientific purposes.

What were known as 'Acclimatisation Societies' formed in local communities and brought many animals and plants, including foxes, rabbits, willows and blackberries, to Victoria. Roach, tench and Atlantic salmon all arrived this way.<sup>5</sup>

An acclimatization society formed in Beechworth in the 1860s where a special reserve was set aside to assist in the naturalization of plants and animals. Many of these plants and animals have had long-term adverse impacts on the Ovens River, and indeed across the Murray-Darling Basin. Plants, such as willows, have altered the riparian areas and had a profound impact of how and when organic matter enters the waterways. Rabbits have caused massive and irreversible erosion and soil loss, which has contributed to sediment loads and the siltation of wetlands and rivers. Fish, like carp and redfin, have different but significant impacts on native fish and managing these impacts – if not actually controlling the spread and number of the fish themselves - remains a high priority in the rehabilitation of the rivers.

Tom explains how the river channel, lagoons and wetlands change:

We grew up calling the backwaters 'lagoons' but they are not a lagoon in the true sense. They are old river bends that were cut off by the river changing course and I can show you a spot within half a mile of here where one day it's going to change course again because it's cutting heavily into the bank and it's got a natural course to follow after it does that. So the Ovens River is a moving target. There's several hundred acres in there. If I took you down to Puzzle Bends and left you and you didn't follow the road track out, you would stay there. Every time you crossed a loop you'd think you were looking at where you've been before. It was all so similar.

The shifting banks and watercourse meant that snags were plentiful in Tom's fishing world. And snags meant lots of cod – a specialty of his father's fishing prowess.

I did actually see them catch 91 and 96 pound cod— probably dozens, if not hundreds of 50, 60 pounders. I tell the people that all those Murray red gums leaning over into the river aren't from the floods. It's where my father used to tether his bigger fish! They had them tethered all 'round the river and then he would give them to people. A very generous man.



Snags are a natural and vital feature of a healthy Ovens River. This area of the so-called North Beaches is a reserve where there are large remnant river red gums, as well as young trees, and a natural 'snagging' of the waterway is occurring. Photo: Scott Nichols.



A Murray cod in amongst snags, the place where Tom's Dad knew he would find these fish. Murray cod use snags as territorial marks, ambush and spawning sites and as shelter. The majority of Murray cod will be found within 1m of a snag! Photo: Luke Pearce.

# Riparian vegetation food - and more -for fish

Riparian vegetation refers to the trees, shrubs, herbs, grasses and vines found in the 'riparian zone', the 'land which adjoins, directly influences, or is influenced by a body of water'. This mix of vegetation is important because it:

- is a key source of organic material for the aquatic system. Aquatic invertebrates feed on decaying material and in turn provide food for fish and other invertebrates. Woody material falling into the water provides fish with shelter and forms a substrate for food, such as algae, and for depositing eggs
- is a direct source of food for fish. Insects falling from overhanging vegetation can be a significant part of some fish species' diet during the warmer months
- provides shade which reduces daily and seasonal extremes in water temperature
- stabilises riverbanks, helping to reduce bank erosion
- intercepts and slows surface runoff and filtering or taking up pollutants and nutrients
- contributes to habitat diversity, including woody debris, rock ledges, overhanging vegetation and undercut banks.

The Ovens River has areas of good riparian vegetation. For example, the riparian zone downstream of Wangaratta is rich in perennial native grass and herb communities around billabongs in the river red gum forest-woodland. This is more like the natural state of the river than other areas upstream which are more affected by weeds, such as blackberry and willow, and by so-called 'river improvements' of the past. 11

#### Water plants



Watershield, a native water plant that is now uncommon, in the Tahbilk Lagoon, Goulburn River. Photo: Fern Hames.

There are many different types of water plants; some of which float on the surface, while others are submerged and attached to the gravel, mud or rock of the riverbed.

Water plants provide habitat, food, refuge, spawning and nursery sites for fish and invertebrates. They also stabilise sediments, act as a physical filter and influence physical and chemical components of water.

While there are many native water plants, there are also introduced species some of which can cause problems, particularly when abundant.

While historical information about many native water plants is limited, there appears to have been a significant decline in the abundance of some native water plants in many inland rivers of the Basin.

#### The impact of people

Since Tom was young the population around the Ovens River has increased. He has seen the impacts of this increase on the Ovens River and in particular what ends up in the river.

First of all, you get rubbish which is washed down from upstream. I've chased people and had some rather big confrontations for dumping garden prunings down there. There's a bit of briar there that's come down from upstream. A few miles upstream there are blackberries. Just all sorts of weeds. Maybe some of them are native. A great stash for vermin: foxes and other little animals – lots of cats. It's pressure of people.



Small boats are a feature of family fishing. Tom argues it's not these that are a problem so much as the bigger boats. Bigger boats, he says, and more people on the river have not been good for the birdlife in and around the river.

Photo source: John Douglas.

However it's not just the number of permanent residents that's increasing. There are also many more tourists and travellers from other areas who bring their boats to the Ovens so they can enjoy going fishing. Tom recalls:

Up until about 1970s, early '80s I would take the wife and kids down in the boat to have a look at the bird nests that were in every backwater. On a little sapling that had fallen down that was out in the water, or the top of a tree that was in the water there'd be a nest, just bobbing in the water, but now they're all gone. In my opinion it's not because of any action except too many people on the water. Row boats didn't do any damage. Small boats did very little damage, a bigger boat makes waves. They don't have to be very big to upset a birds nest.



Ibis nests are typical of bird species that live and breed in and around wetlands and floodplains. Photo: Peter Terrill.

#### Lyell Hogg and Ollie Evans - *Myrtleford mates*



Lyell was born in Merbien, west of Mildura, in 1929. He had older brothers and sisters, lots of aunts and uncles and a whole bunch of cousins who lived around that part of the Murray. But Lyell was the only one who was born in Australia; everybody else migrated from Scotland.

#### Getting to know the river

Lyell moved to Myrtleford in 1953 to be closer to his wife Pat's family, working in the district as a carpenter. He had to learn to adapt to a very different river than he was used to in his childhood.

Up there, in the Murray, we used heavy gear most of the time and sometimes a hand line wound around our hands. We could plant it a mile out in the river. I fished on my own most of the time. But it's a different style of fishing in the Ovens. We used the light gear there. Mainly I fished for trout and used a five, six or seven pound line. Light rod. You wouldn't think of using seven pound line in the Murray.



Lyell with some of his collection of fishing gear, including his half-sugar bag used to keep the fish he caught. Photo: Jodi Frawley.

#### Fishing mates

Ollie, born in 1936, started fishing with Lyell as a young man and they have been fishing companions ever since.

I was living next door to Lyell in 1958. So we've been fishing together a few years. As a matter of fact, I did learn a lot off him – especially spinning in a small creek because he was an expert at it.

One of the things that Lyell and Ollie always took fishing was a hessian keeper bag. Hessian bags were used to pack sugar, wheat and potatoes in different parts of the Murray-Darling Basin. Fishers, like Ollie and Lyell, have adapted them to use as keeper nets, cushions for long spells on the river, and as tackle bags. Lyell explains how he and Ollie used them to keep what they caught:

We always had about three of them – a bit over half sugar bag each. You'd catch a fish, and put it in the bag after you'd dipped it in the water and you would hang it on your back. You were wading in the water anyway and we would put a few gum leaves in among the fish and they'd keep all day. The leaves more or less just kept them separated.

#### Poisons in the river

From the 1960s until 2006, tobacco was one of the main crops grown in the Myrtleford area. Ollie remembers how dangerous poisons were commonly used in the early days in this industry and the effects this had on the fish:

About 1968, I took the kids over the Ovens River and I was going to fish the Buffalo Creek and the Junction up at Maloney's Bridge. I went up a hundred yards, and there was a couple of dead fish and I thought 'now that's very strange.' I went up a bit further and there was a log across the creek and I went to step over it and I'm not telling lies, there would have been thirty or forty greasies (blackfish) and trout backed up against the log and they were dead. They sprayed for the tobacco with the aeroplanes, and that was high up at Buffalo Creek. And about seven mile of that creek was completely buggered because the poison got in.



Sandy bend on the Ovens. Photo: Fern Hames.

#### Tobacco farming

Tobacco was initially grown in the Chinese market gardens of the gold rush. An export market emerged when tobacco cropping was interrupted during the American Civil War. By 1929, tobacco crops took up half the cultivated land along the Ovens River. The post war era added many new migrants, mainly Italian, to the tobacco farming mix.

In 1952 a Tobacco Research Station at Merriang employed extension officers to provide up-to-date information about fertilizers, insecticides and improved varieties. In line with advice of the time, DDT and Dieldrin were commonly applied, in some cases by aerial spraying. These poisons drifted into riparian zones and had terrible consequences for fish and other animals in the river. As the impact of these poisons was better understood, agricultural practices changed.

By 2006, due to changing market demands, tobacco was replaced by other crops.



A tobacco farm at Myrtleford. Image source: http://en.wikipedia.org/wiki/Ovens\_River.

Community awareness and concern helped to change these practices. Improved pest control techniques also reduced the impacts to the river. Ron Dawson, who lives downstream from Ollie and Lyell at Everton, recalls how people make a connection between the changes in chemical use and the changes in the fishery:

Anecdotally people associate the improved cod fishery with the demise of the tobacco industry. Old timers here will talk about big unexplained fish kills in years past and they've put that down to chemical spillage. The tobacco industry has now closed down and whether it's coincidental or not the cod, or native fishery, has improved in recent years. So some people, anecdotally, will be saying there's got to be a connection. Whether there is or not, I don't know.

#### Fire and water

Fires, perhaps surprisingly, can be detrimental to river health. Ollie and Lyell have seen the damage that can follow a fire, particularly when there is heavy rain after it. They recalled a specific incident when fish were affected:

They had a cloud burst in the Buckland. And the river was down to holes and the fish died because there was that much charcoal washed in. They suffocated. Gary Daws also remembers the effect of the combination of a big fire followed by a heavy rain event:

After the 2006 fires, there was a downpour up in the Buckland Valley and the river at Myrtleford was like liquid chocolate, it would just go 'blop, blop' like boiling mud pools. The interesting thing was, the first things to die were the trout and the carp. After a while, you'd walk down to the edge of the gravel and there'd be a little run of very clean water right against the edge there. And the little blackfish would actually have the top of their heads out of the water just in that bit of clean water. The shrimp were exactly the same. The birds were having a ball!



The aftermath of a large fire can be catastrophic for waterways – and fish. Image source: MDBA.

#### Two-spined blackfish

(Gadopsis bispinosus - slippery, slimy, greasy)



Image: Gunther Schmida.

- Small to medium sized fish, reaching 35cm but usually less than 20cm
- Pair of fine, white, soft rays located under the throat and body has very fine scales and thick mucous coating
- Nocturnal fish restricted to larger, deeper, cool, clear upland or montane streams with abundant instream cover – usually boulders and cobbles.
   Very small home range of about 15 metres
- Spawn in November-December, laying adhesive eggs in rocky areas. Males guard and fan the eggs
- Eat aquatic insect larvae and occasionally other fish and crayfish
- Threats include cold water pollution, smothering of eggs and spawning sites by sediment, and predation by pest species, particularly redfin and trout
- Listed as 'Vulnerable' in the ACT

#### Ovens River Improvement Trust

The Ovens River Improvement Trust was established in 1953. Premier Thomas Hollway argued for the River Improvement Act 1948, saying: It is a sad commentary on our civilization that since the advent of white settlement our rivers have actually deteriorated. The trust set about removing obstacles in the river that were thought to impede flow and cause erosion. The decision makers believed they were rehabilitating the rivers by allowing the water to flow away quicker, thus protecting farmers from flood. 10

This misunderstanding of the role of timber debris ('structure') as habitat for fish and other animals led to continual de-snagging works within the river. As scientific and community understanding of river environments and their wildlife increased, advocacy mounted to reverse these policies.

Many locals began to call the organisation the 'Ovens River Destruction Trust'. The trust was disbanded in 1997. Re-snagging programs are now improving habitat for fish.



The river blackfish (*Gadopsis marmoratus*). This and the two-spined blackfish are both found in the Ovens River, Photo: Gunther Schmida.

#### Gary Daws - Snorkeling for Arthur



Gary grew up at Gunbower, five kilometres from the mainstem of the Murray River between Cohuna and Torrumbarry. His mother also grew up there but his father was originally from Bendigo.

It was fishing for the mighty Murray cod that brought his parents together.

My father met my mother because he used to regularly go up there fishing. He lived in Eaglehawk, Bendigo, and fished in the Loddon. In his 20s he went further afield cod fishing. Gunbower was the place to go. During the Depression, after two or three days fishing, he used to load the cod up on the running boards of the old car. He'd stop at all the pubs, like Dingley Inn, all the way through on the plains to Bendigo, selling cod.

#### Exploring the river

In the 1960s Gary moved to Myrtleford and started working a tobbaco block – right next to the Ovens River. He set out exploring the river, on foot and in a boat.

It used to be you'd get in a boat, you'd know what was underneath you without a sounder because we used to swim in there. We'd know that a cod lived there because we would see him. It was the sort of thing you'd do on a hot day and then in the evening. You'd go and throw a lure in because you saw him that afternoon. We used to do a fair bit of that. It was good fun.

#### Meet Arthur

Then, in the late 1960s, Gary met Arthur.

The fellow over the road and I spent five years trying to catch one particular fish in the pump hole. The fish was called Arthur. Five years we tried to catch him. He was 98 pound and didn't live in a lot of water.

Big cod like Arthur were something to behold.

They're just like pigs. You take them out of the water and put them on the ground, there's just nothing to support their guts, you can sit them upright because their belly just goes out. They just look like an old, fat pig.

#### fish traps

The many creeks that run into the Ovens River were perfect for traditional Aboriginal fish traps. These were often thatched with wattle and set across a running channel, catching fish as they moved.

Fishers, both Aboriginal and non-Aboriginal, also used nets that could be dragged through the wider parts of the river. Aboriginal women continued to make nets from reeds, but everyone also used the new European materials. For example, drum nets were sometimes made of knitted mesh, but could also be made with wire and hessian. These nets could also have wings to direct fish into the trap.

In 1948, Inspector Howe caught 1 cod, 5 trout cod, 5 Macquarie perch and 14 redfin in the Ovens River, even though the conditions were not ideal for using a drum net. 9 Shrimps, crays and yabbies were caught with smaller nets called drop nets.

Aquatic ecologists have developed specialist nets, including fyke nets and box traps, for the collection of fish for research purposes.



There are rules about the types and size of nets that can be used which vary from state to state. Photo source: http://new.dpi.vic.gov.au/fisheries/about-fisheries/legislation-and-

regulation/illegal-fishing/illegal-fishing-nets-destroyed.

But Arthur was better than the pair of them.

You'd be there in the boat, dragging an aeroplane spinner, then came floppies, so everybody had floppies, they were about the only lure that you used. You'd get him on the line and he grabbed this thing and there'd be just nothing left of it.

Arthur was foiled by a different sort of fisher.

Some young blokes from Melbourne came up spear fishing. They had all the gear. We didn't know they were there until it happened. Arthur ended up getting speared but it wasn't a good thing because he was a bit of a challenge to us.



No, not Arthur, but any large Murray cod is an aweinspiring fish, especially close up. Photo: Gunther Schmida.

#### Trout cod

(Maccullochella macquariensis - blue nosed cod, blue cod)



Trout cod (background) and Murray cod (foreground) look quite similar and have been known to hybridise. Photo: NSW DPI.

- Large deep bodied fish, growing to 85cm and 16kg, but mostly less than 5kg
- Associated with deeper water, pools with cover such as logs and boulders and faster flowing water
- They move less than 500m from their home snag, with occasional explorations of 20-60km before returning home
- Adhesive eggs probably laid on hard surfaces
- Eat other fish, yabbies, aquatic insect larvae, and shrimp
- Potential threats include interactions with trout and redfin, habitat modification, such as desnagging, sedimentation, removal of riparian vegetation, barriers to migration and cold water discharges from large dams
- · Listed as 'Threatened' in Victoria

#### Seeing the river like a fish

This got Gary thinking:

Before that, the only snorkelling I'd ever done was looking for gold. I'd never thought to look out for fish. It's amazing how close you can get to them.

So Gary started to explore underneath the river, adding this knowledge to what he knew from walking around, going swimming and being out on his boat.

You'd sort of climb down through the branches of a snag. It was only about 10 or 12 foot of water. It was sitting right on the bottom and the light was dappled and now I know why Murray cod have got that pattern on them. He was only a small fish, but he was impossible to see, 'til his eyes moved. Marvellous camouflage.

Gary still fishes for a feed whenever he can, but now he has a different outlook, partly thanks to Arthur.

I don't think I'd ever take a fish out of the water that was more than 20 pound now.

#### Keith Snowden – Thinking like a fish



Keith Snowden was born in 1948 and grew up on the Ovens River just upstream from Wangaratta. Keith's father and son are both builders like him, but the fishing gene goes back at least one more generation.

#### What about a fish?

As a youngster he would fish with his grandfather on the riverbanks right near the house.

I'd go up and see Pa - he was a Gallipoli veteran and he'd say 'what about a fish?' I'd be across there probably an hour, and come back with a bag full of redfin. We were always supplying fish to everyone. There was another house up the road, where dad's brother's got an acre of land off the farm as well, so dad would take fish up there.

He enjoyed many fishing excursions with his family, including his mum, dad, uncles and grandmother. But he has one treasured memory of his grandfather, from when he was twelve years old.

I was out there fishing away, using a hog back which is a rotating blade spinner with red wool behind it and all of a sudden, between two holes, where the water runs a bit quickly it went 'bang', took off and I thought 'Jeez, I got a big cod'. I got it out and didn't know what it was. It would have been four or five pound. I was so proud. Something different. I took it straight up to grandad who by that stage was bedridden.

His grandfather, who always called him 'Doc', made out that he was disappointed not to get a redfin.

But things were not as they seemed.

He said 'oh look, don't worry about that Doc', leave it here, I'll get out of bed and cut it up for the cats' I said 'Okay Pa, sorry I didn't get you a redfin' but I thought this would have been alright to eat.' So I left it there and went home. I described it to my father, and he shot up the road in the ute. Anyway, he walked into the bedroom and my grandad was just finishing the tail part of the fish!

Keith doesn't know what sort of fish it was that he had caught, but he thought it looked like an estuary perch. It's possible that what Keith had landed, and his Pa had eagerly eaten, was a Macquarie perch.



A Macquarie perch – possibly what Keith caught as a youngster. Photo: Luke Pearce.



Members of the Snowden family with their catch. Photo source: Keith Snowden.

#### Snakes - a fisher's friend

Keith may have inherited his grandfather's sense of mischief as well as his love of fishing. He liked to keep his good fishing spots from getting too well known. So Keith and his mates took advantage of the local abundance of snakes. The swampy land around where Keith lived is a haven for little frogs when the rain comes, but this attracts the venomous tiger and brown snakes. Keith used most people's wariness of these creatures to his advantage:

We spread the rumours around Wangaratta to all the fishermen: 'You can't go fishing down there, there's too many snakes'. Worked for years.



Black snakes are also frequent hunters around wetlands and riverbanks. Photo: Alan Lugg.

#### A snake goes fishing ...

It appears that even early European use of the Ovens River had quite dramatic impacts on local fish populations – and unexpected benefits for some local snakes.

A newspaper report of 1871 describes large numbers of small and large fish being incidentally captured by a water-wheel driven bucket irrigation system:

We have heard a good deal ... of the extraordinary number of fish taken out of the Ovens River by the baskets of Mr Henley's wheel ... which he uses for lifting water for irrigation. ... The buckets are rather deep and as the fish endeavour to make their way up the river they get into them as they pass, evidently to escape the force of the down current and are thus lifted and emptied with the water into the [river]. Large and small fish keep constantly turning up, and of all kinds, ... within half an hour some two dozen fish, chiefly bream [silver perch], weighing from a few ounces to three and four pounds each. The small ones are of course returned to the river, but ... at least a hundredweight of saleable fish in 24 hours is the rule and not the exception.

(The Argus (Melbourne, Vic.), Wednesday 25 January 1871)

The large fish were kept in a enclosure with flowing water and 'caught' for sale whenever needed! The article goes on to note that an observant tiger snake had also identified the ready source of abundant small fish and regularly fished for a meal at the site where the small fish were released from the buckets.

#### Learning to think like a fish

Keith learnt from his dad about how to get the best results when he was out in other parts of the Ovens River.

We didn't just go into the water and fish. As my Dad would say 'think like a fish, and where would you want to stay predominantly in the river'. We would read the water. The river was always changing. We would look for an area where we thought fish would be looking for an easy feed. We knew they were going to get an easy feed in the swift current. Or we would look for where cod would lay in the eddy of the river, in other words in the backwater or still. It was always very predictable where to get a cod.

Reflecting on the sorts of fish that he has caught over his lifetime, Keith remembers how he adapted his fishing depending on what was abundant at different times. He remembers what the old timers told him about the fishing 'in their day':

When I was really young, before I started really fishing, the rivers were full of catfish, yellowbelly, cod, and silver perch. I don't know about Macquarie perch. The old timers of that era say there was no problem to catch yourself a feed.

When redfin arrived, it changed what fish were available. Keith adapted, then changed again when the redfin population dropped.

Then it went through a period when the redfin took over and they just cleaned all the native fish totally out – they had the river to themselves. Then in my lifetime, we went through an abundance of redfin to nearly zero. The carp came into the system and they cleaned the redfin out. That's when I started changing my fishing methods to go after cod. So it was sort of a thing you did. Switching from one to the other. What I've noticed now is that the King System and the Ovens System are abundant with cod and trout cod. There are still big fish in the system, but I don't know whether there are as many as there used to be. Whether their dying out happened by accident or by nature, I don't know.



Catching redfin was also a feature of John Douglas's childhood fishing experience in this part of the Basin. John (front) pictured here with his brother Ray. Photo source: John Douglas.

#### Redfin FAQs

(Perca fluviatilis - English perch)



#### Are redfin native?

No, they are a native of Europe and Asia and were introduced to Australia in the 1860s. They are now widespread throughout temperate regions of the Murray-Darling Basin.

#### Why were redfin introduced?

Redfin are a sport fish popular with recreational anglers. Non-native fish were thought to be better sport and better eating than native species.

#### What sort of habitat do redfin prefer?

Redfin inhabit a variety of habitats, but prefer slow flowing or still habitats, particularly those where there is aquatic vegetation.

#### Are redfin a problem?

Yes. Redfin eat native fish and compete for food and space. Redfin are also a host of the eipizootic haematopoietic necrosis virus (EHNV), which many native fish species are susceptible to.

#### What are the control options?

Although not listed in Victoria, in NSW waters, including the Murray River, redfin are now a Class 1 noxious fish. This means it is illegal to keep them alive or use them as bait.

Don't transfer them between waterways, stock them in dams or return redfin to the water alive.

#### Think like a fish ...

Where some of us see mess, fish see protection and refuge. In the photo below woody debris will provide protection from predators when water levels rise, as will the scour hole that forms around it.



Photo: Fern Hames.

Where we see beautiful reflections on the dark water, fish will sense low dissolved oxygen levels and will try to avoid these areas.



Photo: Scott Nichols

#### Making connections

Greg Sharp, is a Fisheries Officer based in Wodonga and his duties take him to many northern Victorian rivers. He is a passionate fisher and can see the value of community involvement in helping the rivers.

There are some people who wish they wouldn't take the willows out because they believe that erosion is a result of the willow removal. But people are definitely more conscious of fish habitat and streamside habitat. There's an area called Tatong just above Benalla. In the early 1990s I was involved with this fishing club through some funding for planting of vegetation and stock exclusion on Hollands Creek and Ryans Creek. Here an angling club could see the benefit of having good vegetation along the sides of the stream.

Adam Pascoe, Gary Daws' son-in-law, is a passionate advocate for catch and release fishing. His interest in both fishing and the environment led to being involved in riparian rehabilitation activities along the Ovens River and its tributaries.

I became involved with the CMA and doing works down here to replant native species around the place and putting logs back in the river. I don't know if it's so much fishing, but it's just an enjoyment of the environment and things like platypus and birds and the sugar gliders.

#### Fishing - an essential part of life

Keith Snowden enjoys his busy and social life in Wangaratta, but there is nothing he loves more than the chance to go fishing.

I like to go to Rotary on a Monday night. I enjoy that, but I get more enjoyment being on a river system with a mate, or my son, or by myself, it doesn't matter. When you're at home the phone's going in the office or your mobile phone's going for work. It's just the peace.

Recreational fishing is not just a part of life on the weekends or holidays for Gary Daws. At his farm, right on the Ovens at Myrtleford, Gary found a way to make it a part of daily life.

When we were working all the time fishing was my relaxation. I didn't even like people coming with me. I'd go down the river with two or three stubbies and sit on a log, just catch fish and think about things. It was just having a quiet time at the end of the day. It was good.

Sometimes I brought fish home, sometimes I wouldn't worry about it. If I thought we needed a feed I'd bring home a fish but most of them went back in the river, which is good. I'm quite happy for the purists never to take a fish and only ever use a lure. Good luck to them. I like to catch a fish to eat.



Lyell Hogg with his fishing gear. Photo: Jodi Frawley.

A love of fishing can build a deep understanding of a river and its fish – as well as provide an enjoyment and satisfaction than spans decades.



John Douglas as a youngster fishing on the lower Darling. Photo source: John Douglas.

#### Visions for the Ovens

The fishing people who contributed to this project have all talked about their hopes for the future of the river. Many felt they had seen some improvements but most don't feel the river is as healthy yet as they would like to see it. Each of these fishers suggested ways to help the river and in turn help provide healthy habitats for fish.

# Changes in how we look at things

One of the biggest changes that Lyell Hogg and Ollie Evans have seen is in the way that the younger generation fish. Where once fishers would take everything that they caught, there has been an intergenerational change that will be good for the future of the Ovens River. Ollie says:

My grandson does catch and release fishing. If he gets a cod, he'll keep the first one. We went out one morning on the Ovens River a couple of years ago and he got five and he kept one.

One of the changes that people would like to see for the rivers is the management of introduced species – and not just those in the river.



A growing understanding and celebration of native fish, like Murray cod, are contributing to changing attitudes towards fish and rivers – and what they need to be healthy. The photo above was taken at the Yorta Yorta youth event at Shepparton weir during Native Fish Awareness Week activities in 2010. Photo: Jodi Frawley.



A postcard showing children swimming in the Ovens River at Bright. Image source: Wangaratta Regional Library.

#### State of the river - 'poor'

The Sustainable Rivers Audit (SRA) is an ongoing systematic assessment of river health of 23 major river valleys in the Murray-Darling Basin. Environmental indicators (themes) include hydrology, fish and macroinvertebrates, which are monitored and will highlight trends over time. <sup>12</sup>

The Ovens Valley fish community was surveyed in 2007. The Ovens Valley fish community and Ecosystem Health were both considered to be in Poor Condition. Only 59% of predicted native species were caught; these were only half of the total catch and a quarter of the biomass. The community had lost much of its native species richness and alien fish were abundant.

Several native species were recorded however, dominated by the two blackfish species, carp gudgeons, flat-headed gudgeon, Australian smelt, trout cod and Murray cod. Of the introduced species, Eastern gambusia were sometimes abundant and there were moderate numbers of carp, redfin and the two trout species.



Australian smelt, one of the more common native fish in the Ovens River. Photo: NSW DPI.

Pat Larkin, who lives near Wangaratta and the Ovens River says:

One thing I don't believe we've paid enough attention to is the introduced predators and the introduced plants that are pests in our aquatic systems. We used to see a lot of swans nesting around the edge of Lake Mokoan. Very few actually hatched because foxes were getting the eggs, if not the parent. We also have pigs, not far from here. If you show 'em water they will catch fish. The deer predate on plants I suppose, but they seem to be manageable. Foxes, cats, and pigs, I think, have made a massive difference to our ecology. And to the availability of other species. If you take certain species out, other species dominate. I believe the whole ecology is related.



Areas like this, with good riparian vegetation overhanging the river and only a few introduced willows can still be found along the Ovens River. Photo: Fern Hames.

Ron Dawson is an environmentalist and a fisher. For a number of years he served as a ministerial appointee on the management board that replaced the Ovens River Improvement Trust. Over the years he has seen a general change in attitude that he believes will help in the future.

There has been a hell of a change now in terms of environmental issues people are aware of: issues like fish habitat. It's very different really. I'd love to see the demise of European carp. I think they've really changed the river and environment. Their biomass in the waterways is just horrendous really. I'd just like to see the continued improvement in water quality and increase in breeding of native fish, as well as the promotion of catch and release.



Ovens River Demonstration Reach sign. Photo: Fern Hames.



Photo: Anthony Wilson.

In the Ovens River near Wangaratta snaggy habitat is still present naturally (above) and is being reinstated where it was once removed (below). Both old and new snags act to provide shelter and spawning sites for native fish like Murray cod and trout cod, helping them to survive.



Photo: Fern Hames.

#### Bringing back the fish

A number of local projects aim to bring the fish back to the rivers of the Murray-Darling. These compliment large scale programs such as the MDBA's *Native Fish Strategy* and *The Basin Plan* that continue to work with a wide range of stakeholders to ensure positive outcomes for the environment and fish of the Murray-Darling Basin.

#### (a) Ovens River Demonstration Reach

Activities are being undertaken to improve conditions for native fish like the Murray cod and trout cod by maintaining, creating and restoring habitat within the river and reducing the effects of land use.

The North East CMA and Arthur Rylah Institute are working with community groups, LandCare, landowners and schools to control weeds and erosion, revegetate and install fencing along the river edge and map and reinstate snags in the water. Fish populations, water quality and riparian vegetation are being monitored to see what changes occur. Education activities including electrofishing-survey demonstrations have also been held.

To find out how you can get involved, contact the North East CMA on (02) 6043 7600.



An electrofishing demonstration on the Ovens. Photo: Fern Hames.

#### (b) Restoring Our Waterways (ROW)

This group works with community groups and government agencies on programs such as Adopt a Waterway, Water Week and National Tree Planting Day to raise awareness of water issues and provide opportunities for practical restoration of our waterways.

The group has several projects on the Ovens River and nearby One Mile Creek, working with local students to produce the *Croaker* newsletter and participate in local events. The group is part of the Wangaratta Sustainability Network. Get involved by contacting Di Farmer on (03) 5722 3823.

## (c) Wangaratta Urban Landcare (WUL) Group

Wangaratta Urban Landcare group is working to improve river habitat in urban Wangaratta. The group has restored the degraded riparian (river edge) woodland in Kaluna Park Reserve, published a vegetation guide for riparian areas, and undertaken platypus and owl surveys.

To find out more, and get involved contact Elaine Jacobsen: jacobsen@netc.net.au.

### (d) Upper Ovens Valley Landcare Group

The Upper Ovens Valley Landcare group has been actively clearing willow and blackberry along the Ovens River from Porepunkah to Germantown over the past few years and is planning several projects including a native fish survey, Waterwatch and Adopt-a-stream programs.

To find out more or get involved contact Trevor Danger 0439 393 019.

#### River resources

- Native Fish Strategy Coordinator, Victoria: Fern Hames: (03) 5772 0273
- Bangarang Goulburn Murray Tribe Aboriginal Corporation, Shepparton: marlenea@mcmedia.com.au
- Yorta Yorta Nation Aboriginal Corporation, Barmah:
   (03) 5869 3353 or reception@yynac.com.au
- Taungurung Clans Aboriginal Corporation, Tarneit: taungurung@gmail.com
- Murray Lower Darling Rivers Indigenous Nations: (02) 6051 9948
- North East Catchment Management Authority: (02) 6043 7600
- Seymour Angling Club: (03) 5792 3260
- Alexandra Angling Club: (03) 5772 1773
- Nagambie Landcare, Peter Robinson: (03) 5794 2274
- Wangaratta Historical Society: (03) 5721 2957
- Bright and District Historical Society: (03) 5755 1949
- Australian National Library: www.nla.gov.au

#### **Abbreviations**

DPI Department of Primary Industries (Victoria or NSW)

DSE Department of Sustainability and Environment (Vic)

MDBA Murray-Darling Basin Authority

#### About the Talking Fish project

The *Talking Fish* project arose from an increasing realisation that many different groups of people, including fishers, Indigenous communities, tourists and landholders have developed unique relationships with the rivers of the Murray-Darling Basin. There is also the growing recognition that the health of the Murray-Darling Basin is at risk. Accessing and recording different people's stories about their experiences of a river, its fish and how both have changed will contribute to our collective knowledge and help shape future management decisions. These stories also have the potential to give people a sense of just what these magnificent rivers and their fish were once like - and could be again with ongoing rehabilitation efforts.

The *Talking Fish* project focussed on 12 reaches within the Basin: Namoi River (NSW), Upper Condamine River (Qld), Katarapko Creek (SA), Upper Murrumbidgee River (NSW / ACT), Culgoa - Balonne Rivers (Qld / NSW), Paroo River (Qld), Goulburn River (Vic), Darling and the Great Anabranch (NSW), Ovens River (Vic), Mainstem Murray River (NSW / Victoria), Darling River (NSW) and The Coorong and Lower Lakes (SA).

The *Talking Fish* project is a starting point to share local knowledge and learned experience with others to improve the health of the Murray – Darling Basin. Project information is available at: www.mdba.gov.au.

Note: The term *Talking Fish* is also being used by the Australian River Restoration Centre as a way of sharing knowledge about people's connection to fish and waterways.

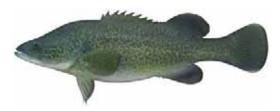
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#### Some fish of the Ovens River

Murray cod / Cod



Golden perch / Yellowbelly / Callop



Trout cod / Bluenose cod

Catfish / Eeltail catfish / Jewie



Blackfish / Slippery / Muddy

Murray cray / Spiny cray

Native (Not to scale)



Silver perch / Murray bream



Macquarie perch / Black bream / White eye



Yabby / Craybob



rabby / Ci



Introduced (Not to scale)



Redfin / English perch



Rainbow trout / Brown trout

















