

TROUT

IN WESTERN AUSTRALIA

GLEN POWER

PREFACE

A landscape in watercolour dated 16 September 1897, *On Mongers Lake, near Perth, WA* by Robert J Haddon, depicts two anglers in a rowing boat with rods cast and set on a starlit evening. A small bushfire burns in the background, along steeper ground adjacent to the West Leederville shore. A fine sheet of freshwater bounded by extensive reed beds and in close proximity to the settlers of Perth, Monger's Lake (now known as Lake Monger; and known to the Whadjuk Noongar people as *Galup*) was the focus for the acclimatisation of a range of introduced freshwater fish species in the late 1800s and early 1900s. Haddon, one of Australia's great early architects, emphasises in this painting not only the beauty of nature in the Art Nouveau tradition but also humankind's manipulation of it during the colonial era, through his capture of lakeside fire clearing and angling for the newly acclimatised fishes.



Robert J Haddon's *On Monger's Lake, near Perth, WA* (1897). This work, by one of Australia's great early architects, is one of the very first depictions of angling for introduced freshwater fishes in Western Australia.

SOURCE: HELD BY THE STATE LIBRARY VICTORIA.

The numerous lakes close to colonial Perth were the focus of energetic efforts at fish acclimatisation by the new settlers during the last decade of the 1800s and the early 1900s. The settlers imagined a relationship to urban waterways in these new dominions much like that enjoyed across the villages and towns of England. In the old country, ponds, lakes and streams were essentially permanent features of the landscape and contained myriad endemic large, catchable fish species to be enjoyed as sport, for the table, or both. In late nineteenth- and early twentieth-century Western Australia, the colonists found a landscape blessed with numerous fresh waterways, but these were deceptively shallow and in many cases intermittent. The native fish species within these waters were at that time abundant, being perfectly adapted to the seasonal nature of their habitat, but most were small in size and thus unsuited to angling or as food.

As early as 1876, Perth newspapers proclaimed the colony's natural waterways as being perfectly suited to fish introductions. Claise Brook in East Perth was identified as one place where 'the tea-tree swamp flowing into the brook' ought to be cleared, and its waters 'confined in a narrow channel so as to form a pretty rivulet terminating in a pond ... stocked



Claise Brook in 1860s Perth. A wild stream draining the lakes and swamps to the west, Claise Brook was one of the first streams considered for the introduction of freshwater fishes.

SOURCE: STONE FAMILY ALBUM, STATE LIBRARY OF WESTERN AUSTRALIA, SLWA_B2203447.

with varieties of fish such as have been successfully acclimatised in the neighbouring colonies'.¹

The surge of interest in freshwater fish acclimatisation in Western Australia coincided with some of the wettest years ever recorded, with rains inundating much of the Swan Coastal Plain north and south of Perth, imparting in settlers a strong impression of abundance and permanence with regard to the region's inland waterways. Many of the years between 1900 and 1940 saw Perth experience annual rainfalls reaching or even exceeding 1,000 millimetres—unheard of totals today.²

The hydrology of the region at that time was in fact very problematic for the Group Settlement Scheme—a 1920s government-assisted migration drive—as the submerged land of the

Swan Coastal Plain was thought to be the most fertile. Perth's metropolitan lakes are fed by both surface water (rain and run-off) and subterranean groundwater, resulting in the formation of vast contiguous water bodies at times of high rainfall. Historically these lakes were interconnected by creek lines and shallower wetlands, the remnants of which can still be seen today skirting busy roads and freeways.

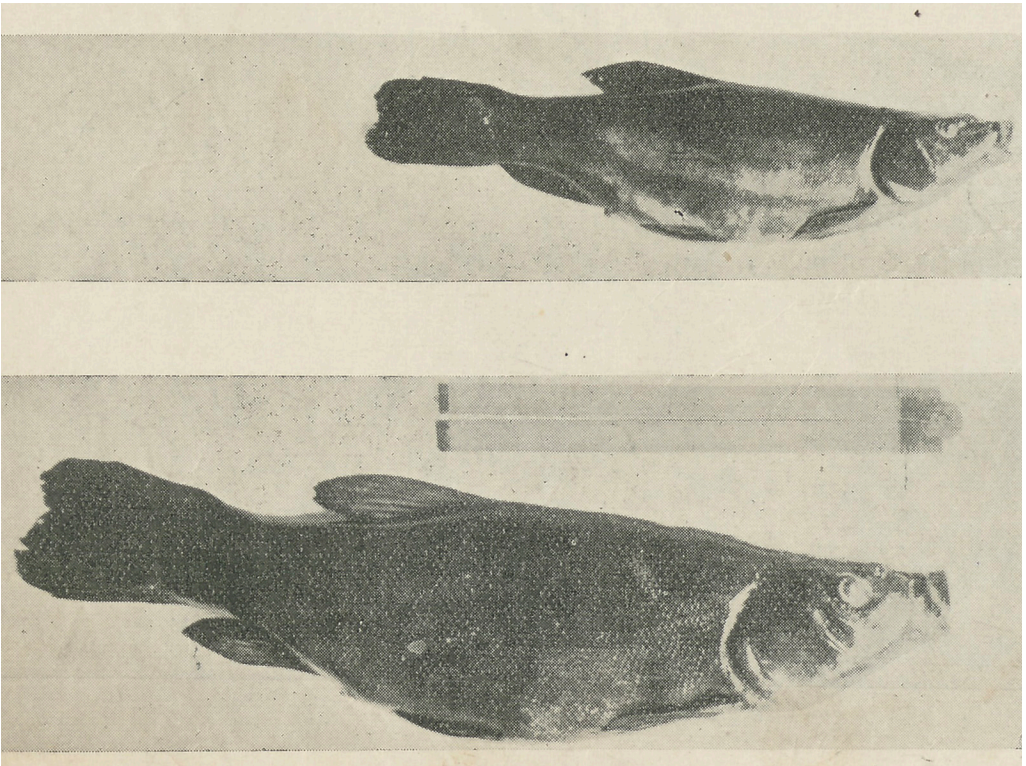
To overcome this inundation, aggressive canalisation and drainage schemes were undertaken to yield more arable land. To the south of Perth, a new system of drains was conceived to carry away much of the standing water on the flatlands between the coastal dune system and the Darling Scarp.³ Initially, consideration was given to cutting a channel through the dune system from the Baldivis region to Point Peron, but this was abandoned in favour of drainage in a southerly direction to the Serpentine River channel. Earlier attempts to thoroughly explore and map the southern wetlands of the Swan Coastal Plain had been confounded by the lack of definitive and navigable channels heading upstream along the Serpentine River. Indeed, the main wetland complex running northwards from the Serpentine was named 'Folly River', after the difficulty in determining its upstream course. The deep drains of the modern-day Wellard area are remnants of that natural wetland system, representing a straightening and canalisation of the old Folly River.⁴

The renowned chief engineer of the Group Settlement Scheme, RJ Anketell (after whom the southern Perth suburb is named), was commissioned by then premier



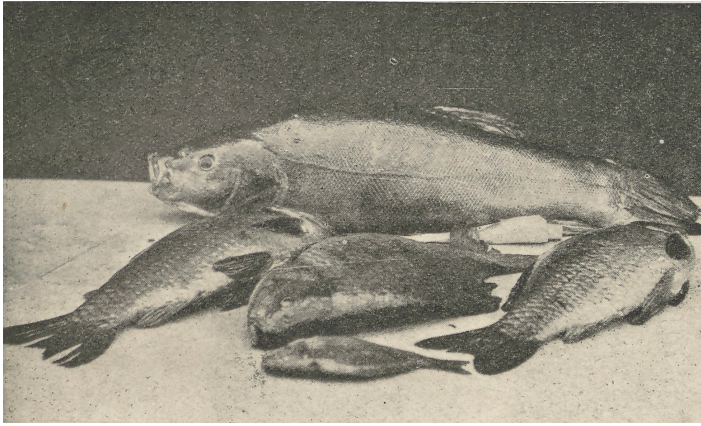
Monger's Lake in Leederville at its opening for angling.

SOURCE: *THE WESTERN MAIL*, 5 NOVEMBER 1904, P. 30. STATE LIBRARY OF WESTERN AUSTRALIA.



A large tench (*Tinca tinca*) of 5½ pounds (2.5kilograms) caught at Monger's Lake at its opening for angling.

SOURCE: *THE WESTERN MAIL*, 5 NOVEMBER 1904, P. 30. STATE LIBRARY OF WESTERN AUSTRALIA.



A 5 pound (2.3 kilogram) tench (mislabelled as a carp) taken at Monger's Lake more than a decade after the introduction of the species. The accompanying smaller fish appear to be crucian carp (*Carassius carassius*).

SOURCE: *THE WESTERN MAIL*, 6 MAY 1911, P. 29. STATE LIBRARY OF WESTERN AUSTRALIA.

By the following year, the people of Perth had become highly protective of what had been achieved at Monger's Lake, commending the 'Acclimatisation Society' for establishing edible species such as carp, tench and perch, which were noted to now attain lengths of 'a couple of feet'.²⁶ Plans by the Public Works Department to draw down the lake were vigorously opposed.²⁷

In a 1910 lecture given by the Hon Mr Walter Kingsmill MLC of the Acclimatisation Committee, carp were said to be doing well in Monger's Lake, with tench, 'about whose reputation as an edible fish there was not entire agreement', also flourishing there.²⁸ Kingsmill enthused that he had no doubt that English perch would grow to 'eight or ten pounds' (approximately 3.6 or 4.5 kilograms) in Western Australia, having already been caught regularly at up to 6 pounds (approximately 2.7 kilograms).²⁹ Fascinatingly, a photograph was published in *The Western Mail* on 6 May 1911 of 'carp (5 lb) and three tench (1¾ lb each) caught in Monger's Lake recently by the caretaker'.³⁰ However, the photograph was mislabelled—the 5 pound (approximately 2.3 kilogram) fish is undoubtedly a tench, while the three smaller fish, at approximately 795 grams each, appear to be carp of the *Carassius* species, most likely crucian (or 'Prussian') carp.

The following decade saw acclimatisation efforts focus on other lakes in the Perth metropolitan area, particularly those to the north of Perth (see below). By 1924, some were questioning the value of the carp introduced into Monger's Lake. One correspondent suggested that carp had multiplied to such an extent in the lake that they had almost wiped out the tench and perch. While the carp did not eat the other two species, the writer noted, it was 'the accumulation of their filth [that] suffocated the cleaner fish'.³¹

CHIDLOW'S WELL (LAKE LESCHENAULTIA)

In April 1907, Secretary Lancelot Le Souef accompanied committee member the Hon Walter Kingsmill MLC on a fishing trip to the Chidlow's Well railway dam (now known as Lake Leschenaultia), for the purposes of catching stocks of perch for distribution elsewhere.³² Around 200 fish were caught by rod and line, initially being stored in a whisky barrel on the jetty at the dam before being transferred into



Njookenbooroo Creek in the Osborne Park district, 1913. This natural perennial stream, long since canalised but still observable in places today, was one of the first locations in Perth where trout, perch and carp were caught by settlers. Fish were said to teem in the creek for more than two decades.

SOURCE: STATE LIBRARY OF WESTERN AUSTRALIA, SLWA_B5999420_2:BA1200/319.

The source of these trout was most likely stocks held at the Canning River and Whitby Falls hatcheries.

Indeed, another report in 1932 describes the Njookenbooroo Canal as being fed by numerous freshwater springs ‘at Yambago’ (now Innaloo/Osborne Park), with an estimated daily flow of more than 1 million gallons (more than 4.5 million litres, or 4.5 megalitres). An effort was being made ‘by the local drainage board’ to restock the permanent stream with ‘perch, roach and rainbow trout’.⁶¹ Successful experiments with fish in the canal were said to have seen some species thrive in the main stream.⁶² It is thought that the original watercourse, now aggressively canalised, is the creek line that can still be seen today running through Innaloo and under the Mitchell Freeway, draining the lakes and swamps across the suburbs of what is now the City of Stirling.

Again, in 1935, an account of a meeting of the Osborne Park Drainage Board makes reference to the Njookenbooroo Canal being ‘full of fish’, to the extent that locals regularly enjoyed freshwater fish as part of their diet.⁶³ Mention is made of Mr Le Souef and the ‘Acclimatisation Society of WA’ as the source of this stock, which had been brought in tanks and released around ‘King Edmund-road’ in the presence of Acclimatisation Society and Drainage Board officials.⁶⁴ Fish weirs were constructed for the retention in this area of the young fish, with the canal itself described as ‘a running stream of fresh water [exhibiting] ample growth of watercress, with aquatic plants and [insect] larvae’.⁶⁵ It was suggested that the ‘streams’ be restocked, while also being noted by the secretary of the Drainage Board that there was also a large supply of fish in ‘Lake Guelup’ (Lake Gwelup).⁶⁶

A separate second account appeared in 1935, referring to success with trout



Wilkinson's Pool on the Avon River in 1899, where Murray cod were seen following introductions of the species in 1894.

SOURCE: GORDON & GOTCH. ROYAL WESTERN AUSTRALIAN HISTORICAL SOCIETY, P1999.1035.44A.

(more than 3.6 kilograms) and that another of 14 pounds (almost 6.4 kilograms) had been procured from the river a few days earlier, the correspondent attributing the species' existence to the releases made many years prior.³³ A single other report was made in 1900 of a small Murray cod being handed in to the local newspaper office by a Mr WT Craig, who had found the fish 'half dead' in shallow water at Mile Pool.³⁴

Then in May 1901, the *Daily News* reported that a very large cod weighing 21½ pounds (almost 9.8 kilograms) had been discovered floating on the surface of Gwambygine Pool, about six miles from York on a property owned by Mr Hicks.³⁵ The article, which made page 3 of the Perth daily newspaper, added that employees of Mr Hicks had also seen smaller specimens of this species in the same pool.³⁶ News of the giant cod find was even carried in regional newspapers as far afield as Coolgardie.³⁷ The next day, the *Daily News* interviewed Fisheries Chief Inspector Gale about the matter, who confirmed that his department had received reports some time previously that Murray cod 'were flourishing, and abounded in the pools in large numbers'.³⁸ Another article on the find, this one in *The Western Mail*, mentioned that the origin of the fish could have been the original '45 fish' received by Magistrate Hare from Mr Saville-Kent.³⁹ The *Inquirer and Commercial News* also ascribed the find to the original stockings by Hare and Saville-Kent.⁴⁰

A second huge cod was reported by York's *Eastern Districts Chronicle* to have been captured in early November 1901, this time at a pool at Cold Harbour, near York.⁴¹ The 30 pound (more than 13.6 kilogram) fish measured 31 inches (almost 79 centimetres) in length, and 29 inches (almost 74 centimetres) in girth. Intriguingly, the article attributed this fish to releases of Murray cod and perch made five years



A sizeable rainbow trout that I took from Lake Leschenaultia in 1986. The lake, known in earlier times as the Chidlow's Well railway dam, yielded one of the very first verified captures of a large trout in Western Australia, by the caretaker of the dam in 1904.

SOURCE GLEN POWER

as well as domestic water supply. Prior to construction of the vast Canning Dam in 1933 and numerous other smaller water-supply dams on tributaries to the Canning (including Victoria Reservoir, Churchman's Brook Dam and Bickley Brook Dam), the Canning River was an extensive and unimpeded river system arising well back from the escarpment in jarrah country near Mount Cooke.

Chapter 1 recounted the very earliest efforts in 1898–99 to establish trout in the Canning River, including brown trout of Tasmanian origin.¹⁶³ In January 1899, a group of distinguished visitors comprising the Hon John Winthrop Hackett MLC, Waterworks Board Chairman Mr W Traylen and his board members F Craig and C Renwick, had journeyed together from Perth to Kelmscott to view the substantial new Canning River hatchery.¹⁶⁴ Perth Zoological Gardens director EA (Ernest) Le Souef was also present. The party viewed the water supply to the hatchery and all the troughs, boxes and ponds that contained trout in varying sizes. They noted that the fish were all thriving admirably, and that 4,000 trout had recently been liberated there.¹⁶⁵

These efforts were followed in 1900 by a large release of 35,000 trout, after the successful hatching of ova at the Acclimatisation Committee's substantial hatchery at Lamb's Spring Brook on the upper Canning.¹⁶⁶ The Hon John Winthrop Hackett MLC visited this hatchery on many occasions, riding a horse-drawn 'trap' up the gorge of the Canning from Kelmscott on a journey that took one-and-a-half hours.¹⁶⁷ The hatchery was carefully attended to by its caretaker, 'Mr Hobbel', who lived in purposely constructed quarters alongside the numerous ponds, until the entire facility burned down in a bushfire in around 1904.¹⁶⁸



A large rainbow taken from Little Dandalup Creek in 1981. This small stream remained undammed until 1991, when a water supply pipehead dam was completed at Conjurunup. It yielded many large trout over a fifty-year period as a small stream fishery, but is now closed to angling.

SOURCE: GLEN POWER.

and its tributaries below the main water-supply reserve. During 1975, a report appears of good bags of rainbow trout being caught in the South Dandalup River ‘below the new water supply dam’ (South Dandalup Dam).¹⁰¹ These trout were reported to have been in good condition, in spite of the riverbed at that stage being ‘encrusted with mud and brown algae’.¹⁰² The Water Authority, it was indicated, was obliged to maintain the flow in the river throughout summer.¹⁰³ It was also envisaged that stream improvements might be made, with the permission of authorities, to create more suitable habitat in the river, noting that there were some feeder streams to the lower South Dandalup River that were well suited to spawning.¹⁰⁴ The river yielded a surprising nineteen rainbow trout in annual angler returns collated by WATFAA for the 1974–75 season, comprising 2.1 percent of all trout taken by members that year. Its tributary Little Dandalup Creek also yielded twelve trout.¹⁰⁵ By comparison, some seventy-seven rainbow trout and two brown trout were taken in the same season from the Murray River.¹⁰⁶

The North Dandalup River also remained a reliable fishery throughout the 1970s, as only a small pipehead dam had been constructed on it for water-supply purposes, leaving many kilometres of water with naturally reproducing rainbow trout. Trout could be found in the scrubby headwaters above Scarp Road as well as below the pipehead dam, and even down below its sizeable falls at the escarpment. In 1972, Morrissy records that Cronin Brook, Wilson Brook and Fosters Brook in the North Dandalup headwaters contained wild-spawned rainbows.¹⁰⁷

The large average size of the North Dandalup rainbows was no doubt a great temptation for some. I remember vividly an occasion in 1983 when I stopped with

of these species with native fauna is undertaken', it still stated that the permissible level of stocking was not to exceed '43,000 rainbow trout fry annually and/or 3,500 rainbow trout yearlings per year'.¹³² This management plan is historically interesting in that it contributed to a questioning of the value of a trout fishery in Western Australia relative to that of the preservation of environmental values.

By 1989, Michael Hutchison's PhD research at UWA was beginning to reveal some interesting results from his fieldwork in the Murray Valley. Netting and electrofishing surveys of the main river and some adjacent perennial tributaries had found that trout moved into feeder streams during the long, hot summers. Densities of around twenty-six trout per kilometre of stream were evident in Nanga Brook, Davis Brook and Murray Ford Brook.¹³³ Stream surveys also showed the strong preference of trout to inhabit areas of the Murray River where cool water plumes (created by inflowing streams) were evident in the main river, as identified through thermal imaging studies undertaken in the valley using an aircraft-mounted camera.

Dr Hutchison's observations and conclusions about historical fish catches and species movements throughout the Murray system were also fascinating. English perch (redfin) were found to have progressively invaded the lower sections of the river from upstream areas of traditional abundance, probably in response to reduced summer flows, increasing salinity and higher annual stream temperatures in the upper reaches. The initial mass downstream movement of perch was thought to have occurred between 1979 and 1982, when salinity levels in the Hotham and Williams Rivers peaked to levels lethal to perch, and been further assisted by an unseasonal major flooding event in January 1982.¹³⁴



A good bag of solid Hotham River perch taken just above Boddington in the very early 1980s. Before significant rises in salinity pushed the Murray system's perch population downstream, large perch could be caught throughout the upper tributaries of the Murray, including in the Hotham and Williams Rivers.

SOURCE: GLEN POWER.



A 2.4 kilogram brown and a 3 kilogram rainbow that the author took in one morning.

SOURCE: GLEN POWER.



Mr Marshall ‘Aussie’ Power with a humpbacked rainbow taken in the backwater of the dam.

SOURCE: GLEN POWER.

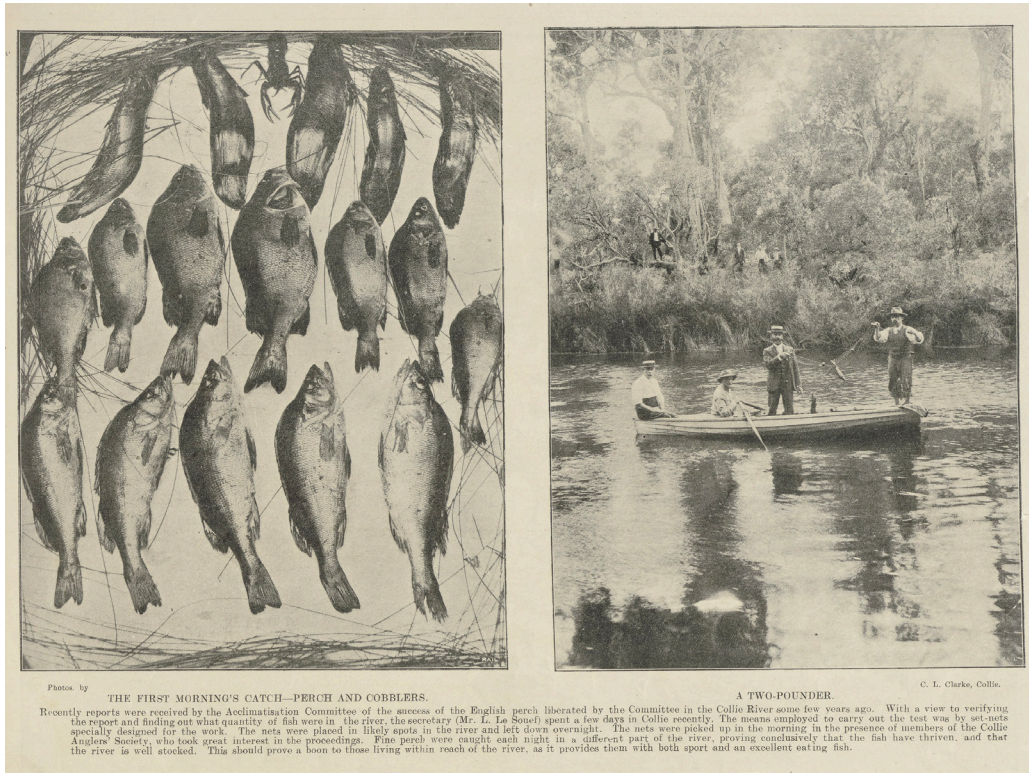
full tails and deep, silvery flanks—were ultimately mounted by Perth taxidermists.

At its peak, stock estimates concluded that the dam held more than 3,000 trout, with around one-quarter of these being more than 1.5 kilograms in weight. While a lack of perennial inflow resulted in fish never surviving much past the three- to four-year age cohort, restocking occurred annually. Survival of stocked fingerlings was very high, with only around 5,000–10,000 fingerlings required annually to maintain a very high density of large catchable fish. Following the first stocking, Bob deployed the farm’s trailer-mounted firefighting tank for fingerling transport, with no fish losses at all in transit.



The wild Collie River rapids, before the construction of Wellington Dam, in 1910.

SOURCE: STATE LIBRARY OF WESTERN AUSTRALIA, SLWA_B3507767_1:024974PD.



One of the earliest photographs of a fine catch of perch and cobbler netted by a party of Collie townfolk, 1908. The accompanying article also refers to the acclimatisation work of Mr Lancelot Le Souef and the Acclimatisation Committee.

SOURCE: THE WESTERN MAIL (PERTH), 29 FEBRUARY 1908, P. 24. STATE LIBRARY OF WESTERN AUSTRALIA.



Mr Graham Whitehouse's 5 pound 5 ounce (2.4 kilogram) silver-flanked brown trout on the tailgate of his Land Rover at the Warren River in 1979.

SOURCE: ANDREW FINK.

Mr Cliff Leggoe landed nine brown trout of between 1.4 and 3.2 kilograms while fishing with streamer flies.¹⁰⁵⁶ In anticipation that a trout weighing in at double figures would soon be taken, WATFAA decreed that the very first trout caught locally of above 10 pounds (4.5 kilograms) would attract a cash prize of \$100—enough in those days to pay for the full taxidermy of a large trout.¹⁰⁵⁷ Local publisher West Australian Newspapers Limited joined in the big-fish quest, announcing in December that year that it would award a \$10 gift voucher each month to the angler who caught the largest trout, redfin perch and marron.¹⁰⁵⁸ In addition, it would make available a \$100 prize monthly for the fish that was considered the 'best catch' among all the monthly winners.

At around that time, Perth taxidermists Mr Jamie Stuart and Mr Martin Thompson began making some beautiful fibreglass replicas of large trout from the southern forests, and this relatively new technique steadily replaced the traditional skin mount approach of earlier times. Their artistry was often to be found on proud display at WATFAA annual general meetings, where up to a dozen mounted big fish were shown off each year.

Then, in the spring of 1982, a huge fish was taken by local angler Cliff Leggoe that fell just short of the magical 10 pound (4.5 kilogram) mark. The big brown trout, which eclipsed the previous state record for the species, was caught on a black and orange 'Pegron Minnow' spoon worked within a very fast run on the Warren River.¹⁰⁵⁹ Leggoe later reminisced that on account of the strength of the huge trout in the very fast water, he had actually had to follow it some distance downstream before he could

eventually land it.¹⁰⁶⁰ There was some speculation in trout angling circles that this fish might have been a sea-run brown, as its phenotype was very silvery and only sparsely spotted.

The great economic boom of the 1980s stimulated widespread interest in the development of more sophisticated resort-style accommodation in Western Australia, and the attractions of Pemberton—with its soaring forests and excellent trout and marron fishing—soon saw many new holiday accommodation options emerge.

A substantial new investment was made in redeveloping the old Bunn family hops farm at Beedelup—the original source of beer hops for the Swan Brewery—which would soon be rebadged as the Karri Valley Resort. The property was acquired by a consortium that included Western Mining magnate



Mr Sylvester Smeschkal shows a fine brace of fish from the Warren River, August 1980.
SOURCE: ANDREW FINK.



Mr Cliff Leggoe with a new state record 9 pound 2 ounce (4.1 kilogram) brown from the Warren River in October 1982.
SOURCE: CLIFF AND DALE LEGGOE.

work soon commenced on the clearing of 1 kilometre of vegetation along one bankside of Beedelup Brook.

The Karri Valley development quickly became renowned as the ‘mecca’ for trout anglers across Western Australia, with its large, well-stocked lake, manicured stream fishery and guided angling excursions by Cliff Leggoe into the deep forest streams adding immeasurably to the attraction. Celebrity anglers including Australia’s John Sautelle Snr and Britain’s Fred J Taylor were hosted at Karri Valley to stimulate interest from more distant angling and travel markets, and articles about the new resort appeared in Australia’s *Modern Fishing* magazine, coinciding with the Easter 1983 opening of its tourism and angling operations.¹⁰⁶²

The Karri Valley Resort also went on to supply significant quantities of



Mrs Dale Leggoe lands a 1 kilogram rainbow at Heartbreak Crossing in 1982.
SOURCE: CLIFF AND DALE LEGGOE.



Famous Australian angling author Mr John Sautelle Snr casts a fly on the Warren River in 1982.
SOURCE: CLIFF AND DALE LEGGOE.



Dale and Cliff Leggoe with Warren River rainbows in 1982.
SOURCE: CLIFF AND DALE LEGGOE.



Messrs Terry Cabassi, Tony Church, Glen Power and Dr Noel Morrissy examine fish for ripeness at the Pemberton Trout Hatchery on the day of the first triploid trout production in Western Australia. Heating water baths were borrowed from the biochemistry labs at Murdoch University to undertake the experiment, which yielded 15,000 sterile triploid trout for release in local dams.

SOURCE: GLEN POWER.



Mr Roland Venables with a magnificent trout approaching 3 kilograms in weight from Robbie Omodei's dam at Eastbrook.

SOURCE: GLEN POWER.

into their private waters to trial their growth and ultimate catchability. The limited-scale trail was of great interest to Western Australia's Department of Fisheries, as it would determine the potential of triploid trout for greater hatchery production and assess the use of these fish as a 'tool' in fisheries management. Western Australia has an abundance of freshwater bodies in which trout cannot reproduce naturally, and triploid fish are ideal as they do not waste energy on attempts at reproduction, growing larger and more consistently through the year.

End-of-year WATFAA catch statistics for 1989 revealed that some excellent trout had been taken from other waters around Pemberton, and particularly from the Warren River. The largest trout taken on fly by a WATFAA member that year was a colossal