Edward John Eyre

Journals Of Expeditions Of Discovery Into Central Australia And Overland From Adelaide To King George's Sound In The Years 1840-1: Sent By The Colonists Of South Australia, With The Sanction And Support Of The Government: Including An Account Of The Manners And Customs Of The Aborigines And The State Of Their Relations With Europeans.

Preface by Simon Kaminskas

These are extracts relating to native fish, river conditions and aboriginal fishing practices drawn from Edward John Eyre's journals. They document what Eyre observed on the SA reaches of the Murray River (Morundie region) when it was still relatively pristine, and are fascinating reading. The time frame covered by these observations is September 1841 to December 1844.

I put a lot of emphasis on the historical accounts of rivers and fish from the early explorers and settlers. I believe they are vital in learning about the original condition and functioning of our rivers.

There are a lot of inaccurate beliefs about the nature of our inland rivers, i.e. claims of them being turbid and sluggish.

For instance, people have the issues of flows out of perspective. Sure, the inland rivers reduced to a chain of water-holes in a bad El–Niño drought, but these were only once or twice a decade. People forget that in the normal years, let alone wet La–Niña years, and BEFORE white man extracted 70% of average annual flows, these were big rivers with a lot of water coming down them.

Similarly, the business about inland rivers always being turbid is inaccurate. Unfortunately, it's a popular idea/dogma. Historical accounts like this make it clear that most inland rivers, especially the Murray and southern tributaries, were pretty much crystal clear and had rich weed growth in the summer/autumn low flow period.

This has been lost thanks to massive amounts of constant land disturbance through agriculture, high irrigation flows in summer and particularly the advent of exotic carp.

Big deal, people may say. Does it really matter if people have got it wrong, and think the inland rivers were always turbid when they were actually clear in summer/autumn?

Well, yes it does. First there's the question of historical accuracy. Secondly, these low flow/clear water/rich weed growth conditions were very important in the ecological functioning of our inland rivers. The loss of these clear water conditions has had serious effects.

These clear water/rich weed bed conditions were enormously productive. They allowed the rivers to alternate between a flooded floodplain type of productivity in winter/spring and an aquatic weed (macrophyte) based form of productivity in summer, thus allowing the river system to support massive numbers of native fish, including massive numbers of the apex predator Murray cod.

These rich weedbeds were also, in season, massive areas for biofilm production and feeding sites, breeding sites and shelter for aquatic invertebrates and around 18–23 small native fish species. It's therefore not surprising that with their habitat lost some of these small native fish (i.e. olive perchlet, flathead galaxias, pygmy perch, purple-spotted gudgeon) have been quietly dying out of vast tracts of the Murray-Darling basin over the last 30–40 years.

Anyway, read on and find out what the SA reaches of the Murray River were like when it was pristine.

Simon

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Relevant extract from preface:

"... the author ... soon after his return to South Australia upon the close of the Expeditions ... was invited by the Governor of the Colony to remain, and undertake the task of re-establishing peace and amicable relations with the numerous native tribes of the Murray River, and its neighbourhood, whose daring and successful outrages in 1841, had caused very great losses to, and created serious apprehensions among the Colonists.

Hoping that his personal knowledge of and extensive practical experience among the Aborigines might prove serviceable in an employment of this nature, the author consented to undertake it; **and from the close of September 1841, until December 1844**, was unremittingly occupied with the duties it entailed. It was consequently not in his power to attend to the publication of his travels earlier, nor indeed can he regret a delay, which by the facilities it afforded him of acquiring a more intimate knowledge of the character and habits of the Aborigines, has enabled him to render that portion of his work which relates to them more comprehensive and satisfactory than it otherwise would have been.'

An Account Of The Manners And Customs Of The Aborigines And The State Of Their Relations With Europeans

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Of these [food] articles, many are not only procurable in abundance, but in such vast quantities at the proper seasons, as to afford for a considerable length of time an ample means of subsistence to many hundreds of natives congregated in one place; and these are generally the kinds of food of which the natives are particularly fond. On many parts of the coast, and in the larger inland rivers, **fish** are obtained of a very fine description, and in great abundance. At Lake Victoria, which is filled with the back waters of the Murray, I have seen six hundred natives encamped together, all of whom were living at the time upon **fish** procured from the lake, with the addition, perhaps, of the leaves of the *mesembryanthemum*. When I went amongst them I never perceived any scarcity in their camps. The **fish** were caught in nets.

At Moorunde, when the Murray annually inundates the flats, **fresh-water cray-fish** [yabbies] make their way to the surface of the ground from holes where they have been buried during the year, in such vast numbers that I have seen four hundred natives live upon them for weeks together, whilst the numbers spoiled or thrown away would have sustained four hundred more. This **fish** is an excellent and nutritious article of food, and would be highly prized by the epicure. It is caught by the women who wade into the water in a long close line, stooping down and walking backwards, whilst they grope with their hands and feet, presenting a singular, and to the uninitiated, an incomprehensible spectacle, as they thus move slowly backwards, but keep the line regular and well preserved, as all generally occupy the same position at one time. When a **cray-fish** is caught the large claws are torn off to prevent the animal from biting, and both claws and body are put into a small net suspended from the neck for that purpose. In two or three hours a woman will procure as many **fish** as will last her family for a day. The men are too lazy to do anything when food is so abundant, and lie basking under the trees in luxurious indolence, whilst their wives, mothers, or sisters are engaged in cooking for them.

An unlimited supply of **fish** is also procurable at the Murray about the beginning of December, when the floods, having attained their greatest height, begin again to recede; and when the waters, which had been thrown by the back water channels of the river into the flats behind its banks, begin again to reflow through them into the river as it falls in height. At this time the natives repair to these channels, and making a weir across them with stakes and grass interwoven, leave only one or two small openings for the stream to pass through. To these they attach bag nets, which receive all the **fish** that attempt to re-enter the river. The number procured in this way in a few hours is incredible. Large bodies of natives depend upon these weirs for their sole subsistence, for some time after the waters have commenced to recede. Fish are procured in different ways. They are caught with weirs or dams, as already described; and also with large seines made of string manufactured from the rush, and buoyed up with dry reeds, bound into bundles, and weighted by stones tied to the bottom. This is used just in the same way as the European seine, being either shot from a canoe, or set by swimming or wading, according to the depth of the water. Great numbers of fish of various kinds, and often of a large size, are caught in this way. Fresh water turtles [Murray shortnecks], varying in weight from three to twelve pounds, are also taken in the same way, and are excellent eating.

Another kind of net (*ngail-le*) used in fishing is made of slender twine, and has a large mesh. It is long, but not more than from two to three feet deep. A string is passed through the loops of the upper part, and is then stretched across a lagoon, or any other sheet of still water, the upper part being nearly level with the surface of the water, and the lower part dangling loose below, without weight. In setting it each extremity is fastened to a pole or spear, stuck firmly in the mud to keep it in its place, whilst a third pole is occasionally put in the middle. A few dry reeds are sometimes fastened at intervals to the line, running through the upper part to prevent the net from sinking too low. When set, the native either remains by it to take the **fish** out as they are caught, or leaves it there all night. The **fish** swimming about the lagoon, or sporting near the surface, strike against the net, and get their heads fast in the meshes. The net swinging loose, yields to their pressure, and entangles them the more as they struggle to extricate themselves from it. This is a most destructive mode of catching **fish**, and generally secures the finest and largest.

Fish are sometimes taken in another way. A party of natives proceed to a lagoon, or lake of still water, each carrying in his hand a small net (*ken-de-ran-ko*) of a semi-oval shape, about twenty inches long, from seven to nine inches across, and from five to seven inches deep. This net is kept in shape by a thin hoop of wood running round it in the upper part. With this the native dives to the bottom, and searches among the weeds until he sees a **fish**; he then cautiously places the net under it, and, rising suddenly to the surface, holds his victim at arm's length above his head; and then biting it to kill it, he throws it on the shore and dives down again for another.

The natives are very skilful in this mode of fishing, and it is an interesting sight to see several of them in the water diving together, and exerting themselves against each other in their efforts to catch the best **fish**, whilst the affrighted inhabitants of the water swim wildly and confusedly about, seeking shelter in the mud and weeds, only to become an easier prey. I have even seen natives dive down in the river, without net or implement of any kind, and bring up good-sized **fish**, which they had caught with their hands at the bottom.

Another method of diving with the net is conducted on a larger scale. The net itself is made of strong twine, from six to eight feet long, oval at the top, about two feet across, and two deep. It is

looped to a wooden hoop or bow, with a strong string drawn tightly across the two ends of the bow, and passed through the loops of the straight side of the net. With this two natives dive together under the cliffs which confine the waters of the Murray, each holding one end of the bow. They then place it before any hole or cavity there may be in the rocks beneath the surface, with the size, shape, and position of which they have by previous experience become well acquainted; the terrified **fish** is then driven into the net and secured. **Fishes** [Murray cod] varying from twenty to seventy pounds are caught in this way. It is only, however, at particular seasons of the year, when the female **fish** are seeking for a place to deposit their spawn that this mode of fishing can be adopted.

Other kinds of hoop-nets are used for catching **fish** in shallow waters, or for taking the [*Macrobrachium*] **shrimp**, and a small **fish** like the white-bait [hardyhead species], but they need not be particularly described.

The next principal mode of procuring **fish** is by spearing them, and even this is performed in a variety of ways, according to the season of the year, the description of fish to be taken, and the peculiarities of the place where they are found. In the shallow waters upon the sea-coast the native wades with his spear and throwing-stick, and follows the windings of the **fish** with singular rapidity and skill, rarely missing his aim where he has an opportunity of striking.

In the larger rivers, when the waters are low and clear, a party of natives varying in numbers from five to forty plunge in with their spears, which for the purpose are made of hard wood, with smooth, sharp points, and about six feet long. Forming themselves into a large semicircle in the water, they all dive down, simultaneously, with their weapons, accompanied sometimes by a young man, a few yards in advance of the middle of the party, and without a spear. For a considerable time they remain under water, and then, if successful, gradually emerge, and deliver the **fish** that have been speared, to their friends on the shore. If unsuccessful they swim a few yards further down, and dive again with their weapons. And thus they frequently go on for a mile or two, until they are either tired or satisfied with their success. I have known a party of thirty natives kill seven or eight **fish** in the course of an hour, none of which were under fifteen pounds [i.e. Murray cod], whilst some of them were much larger.

The regularity with which they keep their relative positions, notwithstanding the current of the river, and the dexterity and order with which they dive under the water, are truly surprising to a person who witnesses them for the first time.

At the period of floods, and when they have nearly attained their height, and the young reeds and rushes begin to show themselves above the surface of the water, near the bank of rivers or of lagoons formed by the floods in the alluvial flats behind, another method of spearing **fish** is practised from a canoe (*mun*) made out of a solid sheet of the bark of the gum-tree (*eucalyptus*).

To these reeds the **fish** are very fond of resorting, probably to feed upon the insects that are found upon the tender leaves; in moving about from one place to another they strike against the reeds, and produce a vibration in the tops above the water; this indicates to the native, who is sailing stealthily along in his canoe, the exact place where they are passing, and suddenly raising his arm with great energy he strikes forcibly among the reeds with his spear, without letting it go out of his hand. If the first blow does not succeed, it is rapidly repeated, and seldom fails in securing a prize. When a large **fish** [Murray cod] is speared, it is pressed downwards to the ground, and the native leaps out of his canoe and dives to the bottom to secure it. The spear (*moo-ar-roo*) used in this method of fishing varies from ten to sixteen feet in length, and is made of pine, pliant, and of nearly a uniform thickness; it is about an inch and a half in diameter, and has two short pointed pieces of hard wood lashed to one end, projecting about five or six inches, and set a little apart, so as to form a kind of

prongs or grains. This instrument is also used for propelling the canoe. It is used too for spearing **fish** by night, which is by far the most interesting method of any.

Having previously prepared his canoe, straightened his spear, and hardened and sharpened the points of the prongs, the native breaks up his fire-wood in small pieces, and loads his canoe with a stock calculated to last the time he intends to be absent. An oval piece of bark, about three feet long and two broad, is then coated over with wet mud and placed in the stern of the canoe, on a framework of sticks. One or two sticks are stuck upright in the mud, and others placed around them in the form of a cone. A fire is then put underneath, and the native, stepping into the bow of his canoe, pushes steadily into the stream, and commences his nocturnal employment. The wood of which the fire is made is of a particular kind, and, as only one description of tree will answer, it has frequently to be brought from a considerable distance. It is obtained among the brush of the table-land stretching behind the valley of the Murray, on either side, and its peculiarities are that it is light, brittle, and resinous, emitting when burning a most agreeable fragrance and a powerful and brilliant light, almost wholly free from smoke.

Two men usually accompany each canoe, one to attend to the fire, and keep it always burning brightly, and the other to guide the canoe and spear the fish. As soon as the fire begins to blaze up the scene becomes most beautiful. The low black looking piece of bark floats noiselessly down the middle of the stream, or stealthily glides under the frowning cliffs, now lit up by a brilliant light. In the bow is seen the dark, naked, but graceful form of the savage, standing firm and erect, and scarcely seeming to move, as with the slightest motion of his arms he guides the frail canoe. His spear is grasped in his hand, whilst his whole attitude and appearance denote the most intense vigilance and attention. Suddenly you see his arm uplifted, and the weapon descending with the rapidity of thought, a splash is seen, a struggle heard, and a **fish** is slowly and cautiously drawn towards the canoe pierced through with the spear. If it is a large one, the native at once plunges into the water, still retaining his hold of the spear, and soon reappears with the trophy in his arms.

Among the rocks under the cliffs, or among logs or roots of trees, or on a clayey bottom, large **fresh-water lobsters** (*poo-ta-ron-ko*) [Murray crays] are procured in the same way, weighing from two to four pounds each, and of a most delicate and excellent flavour. I have frequently been out with a single native, and seen him spear from ten to sixteen of these in an hour or two.

It has a singular and powerful effect upon the imagination, to witness at midnight a fleet of these canoes, gliding about in the distance like so many balls of fire, imparting a still deeper shade to the gloom of darkness which surrounds the spectator, and throwing an air of romance on the whole scene. Occasionally in travelling at night, and coming suddenly upon the river from the scrub behind, I have been dazzled and enchanted with the fairy sight that has burst upon me. The waters have been alive with brilliant fires, moving to and fro in every direction, like meteors from a marsh, and like those too, rapidly and inexplicably disappearing when the footsteps of strangers are heard approaching.

A few other methods of catching **fish** are sometimes resorted to, such as stirring up the mud in stagnant ponds, and taking the fish when they come up almost choked to the surface. Groping with their hands or with boughs, etc. etc.

There is also a particular season of the year (about September), when in the larger rivers the **fish** [Murray cod] become ill or diseased, and lie floating on the surface unable to descend, or drift down dead with the current^{*}. **Fishes** weighing nearly eighty pounds are sometimes taken in this way.

^{*} This refers to the phenomenon, still occasionally observed today, where the occasional large Murray cod dies during spawning time, seemingly from the stress of spawning and possibly the stress of conflict with other Murray cod for mates and spawning sites.

The natives are always looking out for opportunities of procuring food so easily, and never hesitate to eat any **fish**, although they may have been dead for some time.

I have never seen the natives use hooks in fishing of their own manufacture, nor do I believe that they ever make any, though they are glad enough to get them from Europeans.

The large **fresh-water lobster** [Murray cray] is sometimes procured by diving, in which case the females are generally employed, as the weather is cold, and night is the best time to procure them. It is extraordinary to see a party of women plunge into the water on a cold dark night, and swim and dive about amongst logs, stumps, roots, and weeds without ever hurting themselves, and seldom failing to obtain the object of their search.

Turtle are procured in the same way, but generally by the men, and in the day time.

Muscles of a very large kind are also got by diving. The women whose duty it is to collect these, go into the water with small nets (len-ko) hung round their necks, and diving to the bottom pick up as many as they can, put them into their bags, and rise to the surface for fresh air, repeating the operation until their bags have been filled. They have the power of remaining for a long time under the water, and when they rise to the surface for air, the head and sometimes the mouth only is exposed. A stranger suddenly coming to the river when they were all below, would be puzzled to make out what the black objects were, so frequently appearing and disappearing in the water.

Cray-fish of the small kind (u-kod-ko) weighing from four to six ounces are obtained by the women wading into the water as already described, or by men wading and using a large bow-net, called a "wharro," which is dragged along by two or three of them close to the bottom where the water is not too deep.

Frogs are dug out of the ground by the women, or caught in the marshes, and used in every stage from the tadpole upwards.

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