

Lynton.G.Barr
P.O.Box 23
Swan Reach 3903
Victoria
Phone 03 5156 4674
Emaildelbarr1@bigpond.com

Around the Jetties
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On Fishing

"The charm of fishing is that it is the pursuit of something elusive but attainable, a perpetual series of occasions for hope."

John Buchan 1875-1940

Editorial.

This issue of Around the Jetties has focussed on Lake Tyers, and some issues associated with species targeted by recreational anglers in this estuary. The angling pressure on this estuary has changed in recent years with new launching access to the estuary encouraging far greater numbers of anglers, and this together with a decline in black bream stocks in the Gippsland Lakes has encouraged many anglers to fish Lake Tyers. No statistics are readily available on this change but many long time anglers of Lake Tyers suggest the number of anglers fishing this estuary may have increased by as much as 80% in the last decade. Some of those changes are identified in the following material on species targeted in the estuary.

Recently I wrote to Fisheries Victoria, seeking a copy of a summary of the commercial catches in Lake Tyers 1978-2003, when commercial fishing in Lake Tyers ceased. I received a response that indicated that this sheet was not available and that I should examine a number of papers on black bream and Lake Tyers that had been published, and these reports were listed. The problem with this advice was that all papers suggested were at least ten years old and none provided a summary of the commercial catch in the last few years of netting in Lake Tyers. One of the Fisheries Victoria representatives at this assessment meeting suggested these requested statistics were a "work in progress" which hardly seems likely, given that the last statistics available on this topic were tabled in 2003 but obviously were not available today for recreational anglers.

My intent was to examine the commercial catch of estuary perch, and to try and understand why Fisheries Victoria seemed to have little interest in stocking Lake Tyers with this species. When this information was not released I decided to look at Lake Tyers and the recent changes that have taken place or seem to be currently affecting fishing in this wonderful estuary, however I only had commercial statistics from 1978 to 1993, and the last ten years of commercial netting in Lake Tyers strangely remains unavailable to recreational anglers.

1994 Lake Tyers Report - Dr Murray Macdonald

This was one of the quoted reports that was suggested should be examined, and 1994 was at a time when 10 commercial fishermen were able to net lake Tyers over 5 months between Easter and September annually. I had studied this report previously and found it interesting that the main species being taken commercially at this time were bream 36%, luderick 17%, yellow eye mullet 10%, silver trevally 7%, tailor 6%, and sea mullet 5% of the

total commercial catch, and the total catch varying between 3 and 47 tonnes per annum. Now this has an effect on today's consideration of estuary perch, dusky flathead and black bream in Lake Tyers but it also graphically illustrates the relative unimportance of dusky flathead to the commercial fishery of that time. The dusky today is a much sought after species by recreational anglers.

Estuary Perch in Lake Tyers

From commercial statistics while not a major catch, it is evident that estuary perch were taken in commercial nets every year from 1989 to 1993, and one would suppose the estuary perch catch continued to 2003 when netting ceased; we have no access to the statistics to confirm this. In 1989 the largest perch catch in the period 1978-1993 was taken in commercial nets and this amounted to 1.530 tonnes. Now this substantiates an anecdotal report provided to me of a commercial catch in 1989 near Blackfellows Arm when a number of boxes of estuary perch were netted. I was told these fish were all 28-30cms. This was noted in "Around the Jetties 31."

This information also raises the issue as to why the suggestion of restocking of Lake Tyers with estuary perch, included in several submissions, was rejected by the committee preparing the Lake Tyers Management Plan, given this estuary has a history of a small population of estuary perch evident from commercial catch statistics. Dr Murray MacDonald (Fisheries Victoria Manager of Bays and Inlets) who prepared the 1994 Report on Lake Tyers which included statistics on estuary perch, was also a member of the committee preparing the Lake Tyers Management Plan 2007.

Despite the commercial catch 1989-1993 of estuary perch in Lake Tyers I have not had one report of a recreational angler catching estuary perch in Lake Tyers in recent years, although in the mid nineties Fisheries Officer, John Moore, indicated he had caught several estuary perch between Burnt Bridge and Cherry Tree.



The story of estuary perch is fascinating in that between 1979 and 1988 in eight years no estuary perch had been recorded in the commercial catch, but then in every year from 1989 to 1993 catches of estuary perch in commercial nets are recorded, indicating a small yet stable and significant population of estuary perch. The question arises today as to what has happened to the estuary perch population of Lake Tyers, and should a trial restocking of this estuary with estuary perch be considered by Fisheries

Victoria. I would have thought such a stocking would have far more chance of success than the stocking of Lake Hamilton in the western district in 1999 or the proposed stocking of Lake Bolac with estuary perch, when water returns to that lake.

- (1) The estuary perch in Lake Hamilton were thought to have escaped in a flood; however there seems to have been no reports of any catches of this species.
- (2) The application to stock Lake Bolac was approved by the Director of Fisheries Victoria in February 2009 following an application from the Lake Bolac Angling Club, and approval of the Translocation Evaluation Panel, however Lake Bolac has been too low to be stocked with estuary perch in recent years.
- (3) The anecdotal information on the estuary perch catch in 1989 was obtained from Frank Molito whose father was the commercial fisherman making that late 1980's recorded catch according to Frank.

Response of Fisheries Victoria to the Estuary Perch Question in Lake Tyers

Recreational anglers who wrote submissions to the Lake Tyers Management Plan Committee received a response from the Executive Director of Fisheries Victoria Dr Peter Appleford (18/5/2007), which stated on estuary perch,

"Feedback from recreational fishers indicated that estuary perch is currently not amongst the most popular target species in Lake Tyers. The limited available resources have therefore been focussed on black bream and dusky flathead, which were clearly highlighted as the most targeted recreational species"

I doubt whether any angler has caught an estuary perch in Lake Tyers in recent years so it is somewhat difficult to understand the Executive Directors comment regarding this species as a recreational target. He also suggests the catch of estuary perch along with other species will be monitored in Lake Tyers, again difficult if no catches are taking place, and finally that some research being undertaken on estuary perch at Anderson Inlet may be applicable to Lake Tyers.

Dusky Flathead in Lake Tyers

In the period 1979 to 1993 dusky flathead only provided 3% of the commercial catch in Lake Tyers, and according to Hall and MacDonald (Survey of Recreational Angling 1985) the major species targeted by recreational anglers were bream and river garfish. This was based on the only survey of recreational fishing in Lake Tyers carried out in 1984/5. In that survey bream and garfish accounted for 90% of the recreational catch whilst the only other significant catch by recreational anglers was 0.6 tonnes of yellow eye mullet.

In the 1994 Report dusky flathead receive no mention at all in either the commercial or recreational catch reports. In 2007 a Fisheries Assessment on Lake Tyers was undertaken and in the background information provided by Fisheries Victoria is the statement, "The catch of dusky flathead has been very low in recent years, but this is a by catch species dependent on recruitment from outside the estuary." This statement would now be disputed, as dusky flathead whilst they can move between estuaries are thought to largely live within the estuary and breed within that estuary so that recruitment is dependent on the survival of fish in that estuary as a breeding stock. I think the statement quoted indicates how little was known in this state about the life cycle and requirements of dusky flathead to survive in our estuaries.

The report of the 2007 Lake Tyers Fishery Workshop held on the 21st June in that year has not been released.

In recent years a marked change has occurred in Lake Tyers in that dusky flathead have become, with black bream, the most sought after species, and it is now rare to see a recreational angler fishing for garfish other than at Nowa Nowa on odd occasions when garfish enter that arm. Allan Beveridge an angler of long experience fishing Lake Tyers endorses this observation. The estuary is now under intense fishing pressure from anglers using lures and soft plastics and specifically targeting dusky flathead. On one morning over Xmas 2009 over 80 boat trailers were at the major entry points to Lake Tyers. This increased fishing pressure is also due to the opening of modern launching facilities at Lake Tyers and the decline of recreational fishing in major local rivers and the Gippsland Lakes due to declining black bream stocks.



Many regular anglers believe the size of dusky flathead caught in Lake Tyers has declined in the last 4-5 years and this view is supported by anglers including several scientific anglers who state it is now rare to catch this species over 50cms in length. Dusky flathead over 90cms were relatively common 4-5 years ago. (Personal diaries of anglers support this view.) The size of anglers bags may also be declining as the number of flathead being caught by recreational anglers declines.

At a recent stock assessment dealing with small estuaries, including Lake Tyers, the view of the decline of this species advanced by recreational anglers was not accepted by Fisheries Victoria until in the words of the Manager of Bays and Inlets, Dr MacDonald, "a robust indicator" could be developed to support anglers statements. The problem with this approach is that the dusky flathead stock could be in severe decline before any "robust indicator" is developed, and given the change in the Lake Tyers recreational fishery in the last four to five years, perhaps time is not on our side.

Further the maintaining of the current stock of dusky flathead will be difficult to achieve, or even impossible to accomplish, given the 27cms minimum size limit in Victoria compared with the 36cm minimum size limit for dusky flathead in NSW. A further increase in the MLL to

40cm is being proposed in NSW.

It is worth remembering that all submissions VRFish received from recreational anglers on dusky flathead in the regulation review 2008 urged an increased size limit, however the expectations of anglers regarding this species were not met by a 2cm increase introduced by Fisheries Victoria.

In NSW, research (2008) determined that the minimum length at which 50% of dusky flathead were mature was 32cms for males and 57cms for females. In Victoria the current minimum legal size means that fish taken at that size have not had the opportunity to spawn and so the current minimum size limit instead of protecting the stock, is placing added pressure on maintaining the stock, and this is a Fisheries Victoria decision. It would seem that in an

enclosed estuary like Lake Tyers the current regulations are probably part of the cause for the decline in dusky flathead numbers generally and also the numbers of larger fish that were so evident five years ago.

Perhaps it could be said that current anglers experience including the scientific anglers who contribute to Fisheries Victorias knowledge of the estuary might well be the robust indicator of the status of dusky flathead stocks in Lake Tyers, and Fisheries Victoria could perhaps use this indicator to undertake the research necessary to provide answers for the decline in numbers of this species. The future of dusky flathead in Lake Tyers remains questionable given current attitudes.

Dusky Flathead grow relatively quickly with fish reaching a length of 30cms in one year, and 42cms in the case of males and 59cms in the case of females after 5 years. The 36cm mature male flathead is breeding in under two years but the female flathead takes far longer to reach maturity. A mature large flathead will produce between 300,00 and 3.9 million eggs.

Research NSW Department of Fisheries July 2008

Lake Tyers Anglers Views

Bob Mc Neill has reported that the fishing in Lake Tyers is the worst he can remember and that encompasses more than 20 years angling. Bob fishes generally three mornings a week. The dusky flathead catch has been extremely poor and this comes from an angler who generally uses live mullet, a noted dusky flathead bait. In the past year he has caught only one dusky flathead of 5lb, which he released, and in recent months almost no bream at all. Bob reports the size of the flathead have become progressively smaller. He now keeps an odd fish that twelve months ago he would have released. Bob made the interesting observation that some flathead have had very small bream up to 30mm in their stomachs. He cannot recall this in his fishing experience. Bob also reports he has caught no tailor of any size and no small snapper. Bob made the point that soft plastics may be having a bigger impact than is generally considered on the dusky flathead stocks.

Allan Beveridge has fished Lake Tyers for seventy years and is regarded as an angler who is held in high regard. Allan believes the fishing for bream has come good after a quiet time, and on the morning I rang him he and his wife had been out and both got their bags of bream. Allan's view is that Lake Tyers has so much food with smig and white shell that the black bream have been able to easily get food. Allan says that now the lake is heating up the fish are going to deeper water in the main lake, and of course the clarity of the water has made fishing difficult in recent times. Allan in recent years has seen no anglers specifically targeting garfish, whilst numbers of this species can be seen in the lake. Allan believes the food availability has also made dusky flathead more difficult to catch and he spoke of the amount of smig he has recently seen. Allan is an old style bait fisherman and has never been tempted to take up fishing with soft plastics. His main bait is frozen prawn, and he classes this as the best all round bait. Allan did comment on the lack of other species in Lake Tyers at the moment, and he says that while good tailor are in the lake they have not come on the bite

Fisheries Victorias Response to Anglers submissions on Dusky Flathead

Recreational anglers made submissions to the Lake Tyers Fisheries reserve Management Plan 2006/7 and also to the Fisheries Regulation Review 2008, and on both occasions, arguments were advanced for a greater minimum legal size and bag limit reviews. In response the Executive Director of the day stated both requests would be reviewed during the Regulation process, however, the change from 25 to 27cms for dusky flathead made by Fisheries Victoria in 2008 would have no impact on increasing the spawning potential of this species, and no change was made to bag limits for dusky flathead.

Black Bream in Lake Tyers

The back bream situation in Lake Tyers seems somewhat confused. At the recent Small Estuaries Fisheries Assessment Workshop held in December 2009 there was a report that the dominant year class of black bream was 1998, and at the moment there seems to be a lack of small fish with reports that only 1% of fish sampled are under 20cms whilst only 10% are under the minimum legal length.

There is no doubt that the number of black bream being caught has drastically declined in Lake Tyers in the last 6 months according to most anglers, and suggestions have been made that the disease that affected black bream 2008/9, namely Caligus epidemicus known as copepods which are related to sea lice, may have had a greater effect on black bream numbers than first thought. In reports that have come to hand the vast majority of anglers have had difficulty in catching any black bream in the last six months in Lake Tyers. One report from a regular angler has indicated that in numerous mornings fishing in Lake Tyers he has caught small numbers of small dusky flathead but

only one black bream of 35cms in the period November to February. On the other hand a scientific angler has had most reasonable black bream results.

His comment is below.

"My view is that the fish are spread throughout the system unlike the previous three summers when the fish have been concentrated in the lower lake area. In the last three years fish have been ravenous and feeding 24/7. Everyone caught fish. Now there is more feed and the fish have a normal feeding pattern. You need to be in the right place and at the right time when they come on the bite. My observation is that good bream fishermen are still catching good fish."

There does seem to be considerable numbers of small bream in the lake, and again the scientific angler comments "I can confirm the large numbers of small bream above the island. I have tried on one occasion to net them with my landing net baited with prawn heads but without success. They would have been useful for research purposes. What I did end up with however were large quantities of shrimp" This comment in itself is interesting as shrimp are dependent on sea grass and they have been noticeably absent in the last couple of years with the decline in sea grass.

The numbers of small bream currently in Lake Tyers were brought to my attention by Lake Tyers angler and personality Peter McDiarmid (Peter ran a charter boat operation on Lake Tyers for a number of years) who wrote in early January that-

Peter McDiarmid writes

"Prior to Xmas this year (Late December) I and my family camped up the lake near the island in the Nowa Nowa Arm for a few days of rest before the onslaught of tourists to the lake. After seeing quite a few small mullet swimming around the campsite, I put a collapsible bait trap in to catch a few of these mullet for bait. After about half an hour I checked the bait trap and to my surprise it was full of tiny black bream. It looked like over 50 bream were in the trap with three different size categories about 20mm, 25mm, and 30mm. Two days ago I put my bait trap in at the Green House with the plan to get some livies and again got a lot of small bream of about 25-30cms and there seems to be a fair bit of seagrass growing in both areas." Peter further investigated the sea grass by snorkelling the bottom and found - "surprisingly the bottom was covered in about 4-6 inches of fluffy weed with very little clear patches in it, and this was the same along the main shoreline until you reached a depth of 10-12 feet."

It would seem to be obvious that a spawning of black bream has taken place this year, and based on angler reports it would seem to be significant, however I am not convinced that the numbers of black bream above the minimum legal length in this system are satisfactory and this is based on the reports from many anglers. It would be fair to say the current bream situation in Lake Tyers is confused and is certainly in need of assessment by Fisheries Victoria. I refer readers to the item below which appeared in Issue 29 of "Around the Jetties." The vast numbers of small bream have been verified by myself on recent fishing trips to Lake Tyers.

September Postscript

On the 4th of October I talked to a young lady who had been conducting a creel survey for Fisheries Victoria at the No 2 ramp at Lake Tyers. She had undertaken this survey working 4 days per month over a 4-month period (16 days of survey). This period took in the school holidays and weekend fishing activities. The startling result was that in this period she had seen no more than 20 bream brought into the jetty and ramp. Actually local recreational anglers could have supplied the same information from their recent fishing experience at Lake Tyers. The current fishing in Lake Tyers according to many experienced anglers is the worst in years and seems to affect all species.

I have become more confused at the current black bream situation in Lake Tyers, but then I, like most recreational anglers fishing Lake Tyers, see this as merely emphasizing the need for an assessment of both dusky flathead and black bream stocks by Fisheries Victoria so that the current situation in this special estuary is understood. Currently the vast numbers of 3-6cm black bream in Lake Tyers would seem to indicate a continuing strong black bream fishery, and these fish are a delight to see around ones boat in the shallows while casting a line for a bigger bream.

Current Fisheries Victoria Program in Lake Tyers..

Currently Fisheries Victoria is undertaking an angler and research angler diary program in Lake Tyers, as well as periodic access angler surveys. Catch sampling and otolith ageing surveys of both black bream and dusky flathead are also being carried out to provide the age structure of the key recreational species. Fisheries are working closely with recreational anglers on assessing the stocks of Lake Tyers with particular reference to black bream and dusky flathead. Funding totalling \$36,000 for these projects is from the recreational anglers licence funds.

Response of Fisheries Victoria to Anglers Submissions on Black Bream 2007

Recreational anglers suggested in submissions to the Lake Tyers Fisheries Reserve Management Plan Committee 2007 that the area known as the Lime Kilns on the upper Toorloo Arm of Lake Tyers should have a spawning closure. Anglers believed black bream moved into this area annually to spawn. This area according to the Executive Director of Fisheries Victoria was outside the Lake Tyers Fishing Reserve Boundary and therefore could not be considered. As well the Executive Director of Fisheries Victoria Dr Appleford suggested "spawning closures are not considered an appropriate management action at this time" stating that available evidence from 1994 and 2001 Lake Tyers Fisheries Assessments did not suggest any significant decline in black bream in Lake Tyers. It was further stated that angler diary and creel surveys would determine if any further action was needed to protect bream stocks.

Other Species in Lake Tyers.

The third most significant species for recreational anglers in Lake Tyers in 1984 according to a 1984/5 recreational survey quoted by MacDonald in his 1994 report on Lake Tyers Fin Fisheries, was yellow eye mullet. Now personally I doubt if I have seen a yellow eye mullet in an anglers bag in the last ten years of fishing Lake Tyers, and I have never caught a keepable yellow eye mullet in Lake Tyers; there have been small mullet caught in bait traps regularly. This simple observation tends to indicate the massive change in the recreational catch in Lake Tyers and in the fish being targeted by recreational anglers.

In the commercial catch the second most important species taken in local nets was luderick and this catch amounted to almost 17% of the total commercial catch in Lake Tyers. In 1990 a massive 14 tonnes of Luderick were caught in commercial nets. Whilst recreational anglers do take luderick, it would seem that many recreational anglers do not target this species and this species may have potential for an increased recreational angler effort. Snapper, tailor, salmon and trevally are also taken and at times provide interesting fishing and from my anglers diary I and other recreational anglers had substantial catches of red gurnard and good sized leather jackets over a short period. (Jan-March 2000)

The following comment I wrote in my fishing diary regarding snapper in Lake Tyers (2001)

"The snapper seem to enter Lake Tyers as very small fish when the lake is open, and then appear to grow at a very fast rate, that ensures they are 40 cm fish within three to four years. In the first year after opening of the estuary anglers often catch numbers of very small snapper and they can be seen to increase in size annually. Locals have favourite holes for snapper in Lake Tyers, which are generally along the cliffs of the Aboriginal Mission with the favourite bait being prawn, shrimp or whitebait."

A Moment in Time

On May 26th, 2005, bad weather stopped any chance of boating on Lake Tyers but a fishing friend told me he caught a nice snapper off the bank just below the Tavern. He had gone to the area looking for leather jackets. That afternoon I ventured to the same area and watched some sea breaking across the sandbar into Lake Tyers as I cast a line. That afternoon I caught four snapper between 38-48cms on squid and small blue bait. The appalling weather kept up for a week and in that time, fishing most mornings, I caught another 15 snapper and released a couple and then they were gone and I never caught another snapper in that area. My fishing friend caught an equal number of snapper. Fishing like this in 2005 was one of the real joys of fishing in Lake Tyers, and we surmised the snapper had moved into this area in the expectation of the lake breaking out. We had seen the same thing happen with trevally and tailor on another occasion when seawater entered the lake over the sandbar as a result of big seas.

In Conclusion

In recent years anglers have made submissions and suggestions to the Fisheries Amendment Regulations 2008, the Lake Tyers Fisheries Reserve Management Plan 2007, and a number of fishery assessment meetings with proposals to protect the stocks of recreational fish species in Lake Tyers. It seems in almost all cases suggestions, based on years of experience, have not been accepted as is illustrated above and in some cases anglers believe this lack of action and acceptance of local knowledge, may be placing some stocks at risk. It is evident that in some cases there has been a lack of local angling knowledge on committees structured to make decisions as seemed the case in the Lake Tyers Fisheries Reserve Management Committee. Members of the steering committee did not include one angler from the Lake Tyers recreational angling community despite having several scientific anglers providing vital information for Fisheries Victoria on Lake Tyers over the past decade.

The Lake Tyers Fisheries Reserve Management Plan was published in May 2007. As part of this plan a reference group was to be established to work with the Department of Primary Industry to deliver the recommendations in the Management Plan. In three years I am unaware of any reference group being established by Fisheries Victoria

for Lake Tyers. Dr Appleford, Executive Director Fisheries Victoria, wrote in May 2007 "Comments and views of local stakeholders will be sought through the appointment of a recreational fishing representative to the reference group." This does acknowledge the role of recreational fishing representatives but then, with no reference group after three years, any input from recreational anglers is really just words.

Fisheries Victoria Acknowledges the Green Shore Crab as a Pest

In Fish Fax 261 on the 14th of January 2010 Fisheries Victoria acknowledged publicly the invasive nature of the Green Shore Crab. Fisheries Victoria is encouraging recreation anglers to cease using this crab as bait, and "if you do, only use it in the areas where it is caught" states the Fisheries advice. "It is a fierce predator and out competes marine life" is another statement that recognises the danger of this species in our estuaries. The publicity on this invasive pest is appreciated, but with the declining bait resources in areas like the Gippsland Lakes the shore crab is being sold in many bait outlets as major bait, and this is unlikely to change. The control of this pest is going to be most difficult as it is now found in most estuaries and is having an effect on the food chain of estuary fish.

Readers may recall a full article on the shore crab was published in the October issue of "Around the Jetties." (No 29) I have recent reports provided by anglers of numbers of this species being now found in Lake Tyers. In NSW the Green Shore Crab has been declared a noxious species, and movement or possession of this crab is illegal. Fisheries Victoria states that it "will be working with stakeholders to see how they can help control the spread and minimise the impact of this marine pest." Of great concern is the impact of the crab on the food chain for estuarine species of fish. It is surprising the limited publicity this invasive crab has received, and the increasing impact it seems to be having in our estuaries. Two years ago it was never sold for bait as far as I am aware and most recreational anglers were totally unaware of its existence. How quickly things have changed.

Melbourne Age Newspaper and Shore Crabs

I had a phone call on the 12th February from Carmel Egan, a reporter on the Age Newspaper. Ms Egan indicated she had been sent a copy of Around the Jetties by a reader of this publication with the article that covered the issue of European Shore Crabs (Issue 29 October 2009) and the suggestion that perhaps this was a matter that should be of interest across Victoria. Carmel Egan indicated in this phone call she was most interested in the issue of Shore Crabs raised in Around the Jetties. She indicated she wished to use this material, and raised a number of questions on the extent of the problem, where the crabs originally came from etc. Ms Egan also sought information on how Around the Jetties came into being, and how often it is published. On Sunday the 13th March a half page article appeared in the Sunday Age, raising the issue of Shore Crabs and quoting liberally from local commercial fisherman Ross Day, including a large photo of a commercial fisherman holding a shore crab for a photo opportunity. Unfortunately nowhere in the article is Around the Jetties acknowledged or even mentioned as the original source of the information for the article. We never the less are pleased that the issue of Shore Crabs has been drawn to the attention of the public, regardless of where the original information was derived. The spread of the European Shore crab is now a very public issue.

In the above quoted article it is stated that Lakes Entrance commercial fisherman Mr Ross Day, is selling the European Shore Crab alive to Seafood suppliers at the Footscray Market "where they are popular for use as soup stock" and bring about \$4.00 a kilo. They are also sold for bait locally, and I would suspect are transported to other estuaries for bait by recreational anglers. As previously stated in this publication Shore crabs are almost the only live bait available in the Gippsland lakes apart from prawns in season and the occasional availability of sandworm.

A Comment On European Shore Crabs

From Bob Pearce Coordinator of the Recreational Fishing and Trailer Boats Advocacy Group "It was particularly pleasing to see Fisheries Victoria acknowledge the problem of European Shore Crabs. In all my years of involvement with fishing issues, I had never heard of this problem, nor would I say have most other fisho's, so it is good to see this issue brought to attention in "Around the Jetties."

Can You Help

I recently had a phone call from Keith Richmond of Ocean Grove seeking information on a prawn catcher that in many ways supeceeded the old dip net. This net was made in the form of a box that simply went over the top of the prawn and captured it, even if it burrowed into the sand. I saw a sample of this net some years ago, but have never seen the net since. I have in the back of my mind that a Gippsland Local was making these nets. If any reader can help I would certainly appreciate further information and would pass this onto Keith.

Bass Bonanza

In early January a significant release of Australian bass fingerlings was undertaken at Blue Rock Dam (30,000) and at Glenmaggie Weir (20,000). The bass were purchased from NSW, after using bass from the Victorian Gippsland Lakes Catchment as brood stock for the spawning. The funding of this project came from the Recreational fishing licence Trust Account. The Independent member for East Gippsland, Craig Ingram who is also President of the East Gippsland branch of the Native Fish Association assisted the Executive Director of Fisheries Victoria Anthony Hurst with the release of these fingerlings.





Anthony Hurst watches as Craig Ingram releases Bass Fingerlings and Craig with a Snowy River Bass

It was eight years since the last stocking of these impoundments, largely due to a lack of success in production of fingerlings. This release follows substantial releases in the Snowy River of Australian bass (250,000) in the last couple of years by the East Gippsland Catchment Management Authority. Small bass of around 25cms are being caught and released in the Snowy River from stocking of two and a half years ago, and fish have attained 15cms length in one and a half years. It is hoped stocking of Gippsland Lakes impoundments will become more regular now that breeding stock are available due to the work of recreational anglers, fishing clubs and Fisheries Victoria.

T.C. Roughley in his book "Fish and Fisheries of Australia" 1953 writes "What a fine fish this is. It has everything an angler could desire-it takes a large range of baits and lures freely; it is a splendid striker and fights well when hooked; moreover it is delicious to eat."

Survival of Black Bream and Snapper Released by Hook and Line Anglers in Sheltered Coastal Ecosystems (S.Conran, D.Grixti and A.K.Morison)

An Outline of this report Prepared by Lynton Barr

I recently received from Fisheries Scientist Simon Conran a copy of the final report on survival rates of black bream and snapper caught by recreational anglers in estuaries using hook and line. This is a comprehensive 70 page study that is a final report on work being undertaken by Fisheries Victoria over the last decade, and involving input from anglers. In this study 1,868 black bream and 677 snapper were caught for this study using rod and line

The problem facing the fisheries scientists in the case of black bream was that in recent years the minimum legal length for black bream had increased from 24cms to 28cms, to conserve fish stocks in the Gippsland lakes, and this had the effect of more fish being released by anglers as more fish taken were under size. The problem of course was that if the fish being released suffered high levels of mortality, then increasing the minimum legal length may have little effect on the conservation of fish stocks. The same concern applied to snapper in Port Phillip Bay.

The size of the problem was evidenced by the 2001 National Recreational and Indigenous Fishing Survey, which estimated that nationally 11 million black bream and snapper were caught and released by recreational

anglers. In Victoria it was estimated that 80% of the total black bream catch was released. There was also a perception by many stakeholders that many of these released fish may die, however there had been little research to support this perception. This study will provide some answers to the suggestion that line caught fish may have a low survival rate. Whilst not dealing with snapper specifically in this summary the findings can be applied to undersize snapper most of which are caught by anglers targeting whiting. It should be noted that at times many small snapper are part of Lake Tyers fish stocks.

This study found that the hooking location was the key factor in post release survival of both black bream and snapper. Total survival rate for shallow hooked black bream was 95% and 97% for snapper, however deep hooked black bream had a 74% survival rate and 48% for snapper. Another study had found previously that dusky flathead had a survival rate of 96% when shallow hooked and 73% when deep hooked.

Another important finding was that deep hooking decreased as black bream grew in length, but this was not evident in the case of snapper. Survival rates for both species were lowest where deep hooking involved throat; gill or heart injuries and these injuries were present in 40-50% of deep hooked fish. The total survival rate for deep hooked black bream was 20% greater when the hook was not removed and deep hooked fish that did not bleed had a higher survival rate than those that do bleed. Survival rates for deep hooked snapper were similar whether the hook was removed or not removed. (42-45%) Hook removal and bleeding have been linked to lower dusky flathead survival rates. Standard hooks left in a fish begin to corrode within 22 days.

The findings of this study are that the minimum legal length protection of black bream can be improved if the survival rate of released black bream can be improved. The practical suggestions to achieve this include anglers using a size 1 hook, or larger, and using large size baits which are not taken down the throat as far as small hooks. Anglers are advised from this study to cut the hook if the fish is deep hooked rather than try to remove the hook. The study also indicates that as fish increase in length less deep hooking occurs.

The other interesting finding was that tight line fishing also reduced the number of fish being deep hooked, and this again supported higher levels of survival.

Currently Fisheries Victoria is publicising these findings through pamphlets and a DVD and it is hoped that anglers will act on these findings, which will in return mean a greater survival rate of released black bream and snapper. In recreational black bream fishing in the Gippsland Lakes, released rates for undersize fish are many times higher than the retained catch rates, and even with a high level of survival, the mortality rate of catch was about the same as the retained catch of anglers, and it is this mortality level that anglers must consider reducing. This is a fishery with a very high release rate, and this paper attempts to reduce mortality levels of released fish.

The Minimum legal length protection of black bream can be enhanced through higher shallow hooking rates, and reduced mortality in release rates of undersize fish if anglers use a hook size 1 or larger and a large bait, and adopt tight line techniques when fishing for black bream

Editor

Fisheries Victoria and the scientists involved in this research are to be congratulated, and it is hoped that anglers around the state will support the survival of released fish by undertaking steps to promote shallow hooking of undersize bream and snapper. This again raises the point of fishing for black bream in rivers such as the Tambo, Mitchell and Nicholson when these rivers are carrying great numbers of small bream. A spawning closure together with the recommendations of this paper might provide even greater protection for small black bream; particularly given the higher levels of salinity and the fact that regular spawning may now happen in the rivers because of that salinity.

Conclusion

Thank you to the recreational anglers who provided information on Lake Tyers based on many years experience. Thank you also to Simon Conran fisheries scientist, for the report on the survival of hooked black bream and snapper and also to Fisheries Victoria for the kind invitation to the bass release at Glenmaggie, and the turning of the sod at Snobs Creek that marks the commencement of the building of the new facility for fish breeding in this state. For me it is a special pleasure to see the contribution of anglers to this publication, and to see fisheries scientists and recreational anglers working together to protect our recreational fish stocks for the future.

We can provide a large print version of "Around the Jetties" to any reader having problems with the size of the print. Remember your contributions to this newsletter are welcomed.

Good health and good fishing

Lynton Barr

Opinions expressed in this newsletter are those of the author unless otherwise acknowledged.

MATERIAL FROM THIS NEWSLETTER MAY BE REPRODUCED BUT IT WOULD BE APPRECIATED IF THE AUTHOR AND PUBLICATION WERE NOTED