Lynton G. Barr

Post Office Box 23.
Swan Reach 3903
Phone 03 *5156* 4674
Email www.delbarrnbigpond.com

The following Fish Report was prepared using material from Dr Jeremy Hindells web site and also from recent announcements on local fisheries. I found the following material fascinating and yet it was receiving little publicity. I hope you also find some interest in this report and that in some way it helps some of us understand the important work being currently undertaken on our behalf by fisheries scientists.

Fish Report

Dr Jeremy Hindell, senior fish ecologist with Pirvic (Fisheries Research Queenscliff) had a project funded in late 2004 from General Angling Licence funds, to place transmitters in black bream and then record their movements around the Gippsland Lakes. The Nicholson Angling Club members. and commercial fishermen caught black bream for the project. and just on 60 bream were implanted with transmitters. The early results of this project are just becoming available and Jeremy Hindell has established a fascinating web site with some of these results.
(http://www.dpi.vic.gov.au/dpi/vro/vrosite.nsf/pages/marine_fishtrack)
For those who perhaps lack access to this site the following report is made available.

Reasons for Tracking

The reasons for tracking the black bream are to establish the movements of the fish, and perhaps discover the breeding grounds and areas of habitat that support this species. This is important given the drastic decline in black bream numbers in recent years. (The commercial catch of black bream in 2000/01 was 148 tonnes. Since 2002/3 the commercial catch has been 30 tonnes or less.)

Implanting

All fish implanted with a transmitter have also been tagged with a yellow external tag, and printed on the tag is a number and telephone number where the catch can be reported. The project would like any fish caught with this tag to be carefully released and the catch reported. Anglers who report a catch of an implanted bream will receive a certificate indicating the movements of the fish. Fish have a pinger implanted in their abdomen through a small slit which is then stitched and sealed with super glue. When the fish pass an acoustic listening station they transmit a unique coded signal, which is recorded at the station. and this includes the identity of the fish and in some cases the depth at which the fish is swimming. This information is stored and is collected once each season by a diver going underwater to the station, and inserting a probe into the transmitter and the information from the transmitter is recorded on the computer in the attendant boat.

Some Early Findings.

A most interesting finding is the amount of actual movement of black bream within the rivers and the lake itself. In a recent press release from the Minister Bob Cameron it is stated. "In little more than a year, one black bream Number 1225, was found to have traveled more than 3200 kilometres, mostly up and down the Nicholson, Tambo and Mitchell rivers." This fish was last detected at Swan Reach on the Tambo River, at 4.30 am on the 26"' June 2006.
Dr Hindell reports on another fish, which "traveled 10 kilometres from the entrance of the Tambo River to the south western edge of Raymond Island in just over 3 hours." The same fish then traveled

26 kilometres to Holland's Landing and eventually returned to the Tambo River. I had never expected such massive movements of black bream in such short periods of time. Dr Hindell believes that bream do not appear to live in a single area but may stay in an area for some months before moving on. With this growing understanding of black bream, as an angler, one develops an even greater respect for this superb fish that inhabits our lake system

Woody Debris

Another interesting finding is that the woody debris introduced into the Tambo and Mitchell rivers is providing habitat for a wide variety of fish including bream, luderick mulloway and flathead as well as a host of smaller fish. Dr Hindell suggests. "for black bream, the large woody debris can be considered a type of roadhouse." I recall meeting with local Catchment Authorities and Fisheries about eight years ago to suggest that snags should not be removed from the Tambo but rather additional snags should be placed in the river to create fish habitat. At that time Ports and Harbours removed any tree that fell in the river, as a navigation hazard. Times are changing and the woody debris projects are a great advance on what we suggested at that time.

Another Project

The Minister for Agriculture Mr Bob Cameron announced on Tuesday l9`" of September a grant of $86,000 to expand the current project and to radio track dusky flathead in the Gippsland Lakes. This project will go over two years, and a total of 40 dusky flathead will have transmitters inserted and a further twenty listening stations will be added to the current stations. This will provide some wonderful information on this species. For instance the question should be answered, as to whether dusky flathead leave the estuary as has been suggested by some NSW studies and where does the species move to over the winter period. Very little is known about this species in Victorian waters and this study will be the start of gaining an understanding of one of the prime sporting species in this area. (The dusky flathead commercial catch in the Gippsland Lakes was 65 tonnes in 1985/6 but only 1 tonne in 1998/9. In recent years it has been between 11- 15 tonnes but seems subject to considerable variation.)

Surf Fishermen

An Australian salmon tagged in Portland Vic. in January 1995 was caught in Albany WA, 1198 days later and over that period the fish had swum 2128kms. During that time the salmon had grown about 200mm and weighed 2.Skgs.(Quoted on the web site) Next time you catch a salmon on the beach have a thought for where that fish might have traveled.

Funding for Mallacoota and Lake Tyers

The Minister also announced on the 19th September $58,000 for research into local fish stocks at Lake Tyers and Mallacoota. It is suggested that with the removal of commercial netting from these waters it is necessary to gain an understanding of the key recreational species to assist with future management decisions. Again the funding comes from anglers contributions through their angling licence. I find this project interesting as a paper is currently being prepared by Fisheries Victoria on habitat in Lake Tyers, and a similar paper for Mallacoota. I attended a full day meeting to discuss the Lake Tyers fisheries habitat and found it almost impossible to discuss habitat requirements for dusky flathead, when so little is known about the species. Perhaps these funds might assist in providing a little more information on this species.

Funding

These projects have been funded from the General Angling Licence funds, so that anglers are contributing to the research in their sport, and with the fisheries scientists are joining together in a partnership of discovery. This is an exciting time for anglers.

Most of the above was prepared from the Dr Hindell website, "Fishtrack" which you should visit if you have access to a computer. Other material was obtained from press releases etc. and includes personal comment.

Postscript: Dr Hindell indicated in an email to the writer that he may even be able to tag a small number of Luderick and estuary perch during this program which would add to our understanding of fish of the lake system..

Lynton G. Barr

The following is a small article that I wrote on this subject for my page in the forthcoming Fur and Feather magazine.

I recently had a call from recreational angler Murray Scott, who had caught a black bream in the Mitchell River, and when filleting this fish he found a tag in its back and a black cylinder about the size of a cigarette seemed to have fallen out from the fishes body cavity. I confirmed his suspicion that this was likely to be a transmitter being used in a $100,000 project to map the movements of black bream around the Gippsland Lakes. I contacted the project manager Dr Jeremy Hindell who was most appreciative of the recreational anglers actions, however he indicated he would like the frame or remains of the filleted fish. When I conveyed this information to the Murray he was not able to specify which fish the transmitter was attached to as it was caught the previous week and he had buried the remains. At the request of the project manager he dug up the remains of the five fish he had caught on that fishing trip, and placed the skeletons in a plastic bag, which I delivered that same day to the project team. This project team certainly deserves a medal for commitment in attempting to identify the relevant fish and obtain otoliths from the partly decomposed mess I delivered to them. Jeremy Hindell sent me a statement on the movement of this black bream between October 2005 and July 2006. This made amazing reading and certainly the transmitter was able to follow every move of this fish, and even gave the depth of the water, the date, and place where the fish was recorded. I think when a report is released on the movements of black bream it will make fascinating reading and surprise most of us. By the way the transmitter is inserted into the body cavity of the fish through a small incision, and according to Dr Jeremy Hindell "we use a couple of sutures and some super glue to seal the wound, then wait for the fish to recover before release. All pretty straight forward."

Transmitters and Fish

Yellow Fish Tag, which includes Fish identification number and phone number for you to contact should you catch a fish fitted with a transmitter.

Note the Sutured spot under the belly where transmitter is placed in bream's abdomen.

Remember handle gently and return the fish to the water.

The report below was obtained from Dr Hindell on the fish caught by Murray Scott
Fascinating material that should interest all anglers
Lynton Barr

Below is some history on the fish caught by your contact. We've had much bigger movements by other fish, but this will be a nice one to test some of our ideas on inferred (from fish otolith chemistry) and known movement patterns.

Cheers

Jeremy

Fish number 091
Length 245 mm
Weight 331 g
Caught by Nicholson Angling Club
Tagged with an acoustic tag (including depth sensor)
Released 30 October 2005

History of movement

- Released in Nicholson River at end of October 2005.
- Recorded 30 Nov 2005 at 2:41:57 pm in 0.6 meters depth at Nicholson Boat Ramp
- Arrived at Nicholson River entrance on 2 Dec 2005 at 00:00:54 am and remained in water of around 0.3 m depth
- Returned to Nicholson boat ramp on 4 Dec 2005 at 01:32:27 am. Depth around 1.3 meters.
- Departed Nicholson Boat ramp at around 6:30 am on 6 Jan 2006, and arrived at Nicholson river entrance at 11:52am on 7 Jan 2006.
- Continued into Jones Bay and then arrived at the Jones Bay entrance at 5.30 pm on 7 Jan 2006. Depths varied between 1.9 and 0.6 meters.
- Stayed around entrance to Jones bay until 15 Jan 2006.
- Arrived at the Mitchell River cut at 5:30 pm on 16 Jan 2006.
- Stayed around this area until 6:15 pm on 16 Jan 2006, then swam down the Mitchell River, arriving at the entrance at 9:22 pm on 16 Jan 2006.
- Moved between the Mitchell River entrance and the entrance to Jones Bay for a few days, then returned up the Mitchell river to the Cut at 2:30 am on 19 Jan 2006.
- Moved to artificial snags on Mitchell river at 4:06 am (same day), then to the highway bridge in Bairnsdale at 11:52 am (same day).
- Returned to the artificial snag on the Mitchell River at 12:30pm on 20th jan 2006.
- After this, the fish continued to swim up and down the Mitchelle river, making frequent excursions to the entrance of Jones bay, and spent considerable periods of time around the Cut.
- The fish was last recorded on 17th of June 2006, just south of the highway bridge in Bairnsdale.

Dr Jeremy S. Hindell
Senior Marine Scientist
Marine and Freshwater Systems
Primary Industries Research Victoria
PO Box 114, Queenscliff, 3225, AUSTRALIA
Ph: 61 3 5258 0231
Fax: 61 3 5258 0270
Mob: 0408 104 601