



Welcome to the RAP Newsletter, giving you feedback on the data you are collecting and keeping you informed about what is happening at the Research Division of the Department of Fisheries.

Tailor angling program – 2010 results



Laurie Birchall casting a line. Photo: Dan Pupazzoni

In 2010, our volunteer tailor fishers completed their 16th year of tailor fishing in the Swan River. Every Tuesday evening, from February to April, these dedicated volunteers fish for juvenile tailor in the Swan River from Point Walter jetty. They use standardised rigs and bait so that the catch is comparable from week-to-week and year-to-year. Each tailor is measured before being released back into the river. Over 10,000 tailor have been caught and released at Point Walter since the monitoring program started in 1995.

This year 1,361 tailor were caught and released, the second highest annual catch to date (see Fig. 1). The catch rate was 3.8 fish per fisher per hour, much higher than the long-term average of 1.5 fish per fisher per hour. Fish caught this year ranged in length from 117mm to 317mm.

A couple of years of strong recruitment recently (especially 2008 and 2010) are an encouraging sign, suggesting that the health of the tailor stock along the lower west coast could be improving.

Laurie Birchall, who has been a long-time contributor to the tailor angling program, helped the project reach a significant

milestone this year, by landing fish number 10,000 from the Point Walter jetty. Thank you to Laurie and all our other volunteers for their great effort over the years. See you in 2011.

Amber Howard

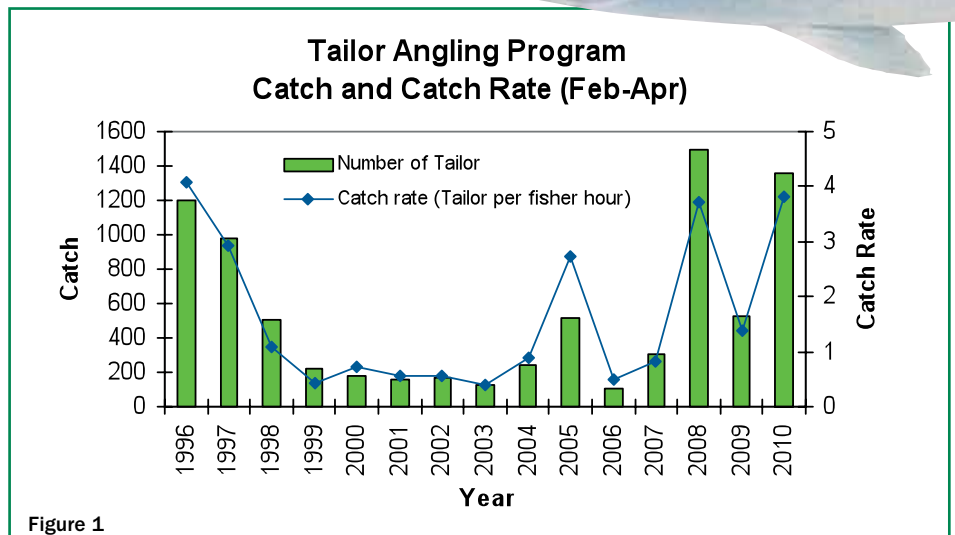
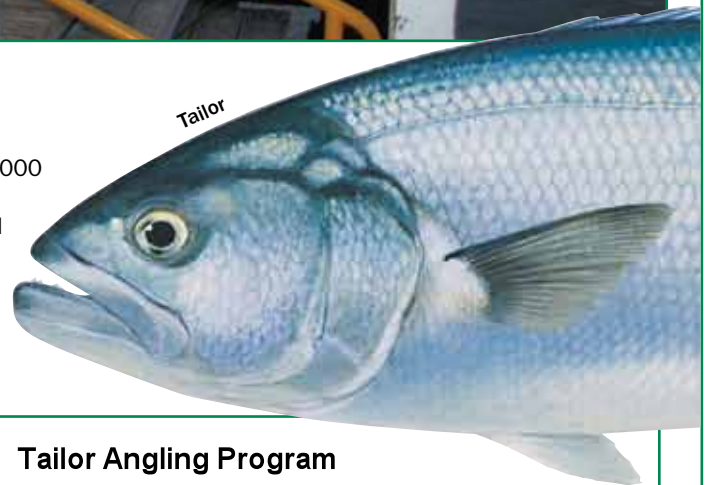


Figure 1

Feral Fish

Introduced species in rivers, lakes and dams are a threat to aquatic biodiversity, they upset the natural balance and compete with or prey upon native species. Fish species that have been harmless in their natural environment can have devastating effects in a foreign environment.

Introduced species can have more effective breeding strategies than native species. An example of this is the mosquito fish, *Gambusia holbrooki*. The mosquito fish was introduced from Central America as it was thought that they could help control insect populations by eating mosquito larvae. However they only eat mosquito larvae if nothing else is available and much prefer a diet of native fish eggs. The mosquito fish bears live young and its offspring have a higher survival rate than the offspring of native fish, which lay eggs.

Introduced species can degrade the environment. When feeding, carp and goldfish dig and stir-up sediment, increasing water turbidity. Less light can penetrate the water, meaning decreased plant growth. They also graze on native aquatic plants. Non-native species can introduce new parasites and pathogens to native species.

Anglers are urged to eat or humanely destroy introduced species they catch, including tilapia, carp, goldfish and redfin perch. Do not return them to the water. Redfin perch is seen as a good sport fish and is good eating. These introduced species have no bag or size limits.

One of our logbook anglers, Bob Longmore from Nannup, fishes Barrabup Pool, a natural pool on the Blackwood River near Nannup. He regularly catches redfin perch and feral goldfish and has caught redfin perch over 1kg in size. The perch often have marron in their stomach. He releases any freshwater cobbler he catches. For Bob, pole fishing for pest species is a most enjoyable pastime, and he's helping our native fish species at the same time.

Amber Howard

Remember that a licence is required for all freshwater fishing in waters south of Greenough.



Bob with a pole-caught 2.125 kg feral goldfish from the Vasse River, Busselton. Photo: Courtesy of Bob Longmore



Gambusia holbrooki. Photo: David Morgan

<http://freshwater.fish.wa.gov.au>

Members of the general public can now access information on the fish and crustacean species that reside in our local waterways via a new website developed by the Department of Fisheries with the support of the natural resource management office. Users can browse either by map, region or species, which will generate items such as:

- A map of data collection points for the particular species, region or water body of interest;
- A table which lists all the species found in a designated catchment or water body; or
- A table which lists all the waterbodies which the species of interest has been located



Which whiting?

Can you tell your *robusta* from your *vittata* from your *bassensis*? In case you hadn't guessed, I'm actually talking about whiting. Most fishers would commonly refer to these fish as 'Sand Whiting' when in fact they are three different species. (see the table below)

There are eight species of whiting commonly caught by recreational fishers in WA. Seven of these belong to the *Sillago* genus (i.e. they are very closely related), so it's not surprising that they look similar and can be difficult to tell apart. The eighth species (King George whiting) belongs to the *Sillaginodes* genus and is relatively easy to distinguish from the others.

Over the next year or so, we are hoping to work out exactly which whiting species are being caught by recreational fishers in WA, including when and where each species is found. We need this information to identify which whiting species are important to recreational fishers in each region. This knowledge will help us to focus our future research efforts on the appropriate species.

We need help from you in the following ways:

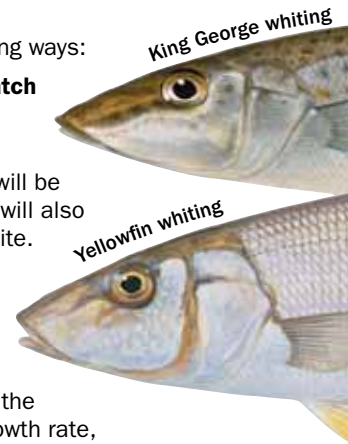
1. Correctly identify your whiting catch when completing your logbook.

We are currently developing an identification guide for whiting. This will be sent to you in the next newsletter. It will also be available from the Fisheries website.

2. Donate the frames of any whiting you catch.

Frames can be dropped off at your local Department of Fisheries office. We need these frames to determine the age, sex, reproductive status and growth rate, which we then use to assess the status of each stock. See the article below on 'how to donate your frames' or contact Joshua Brown on **9203 0111** for more information.

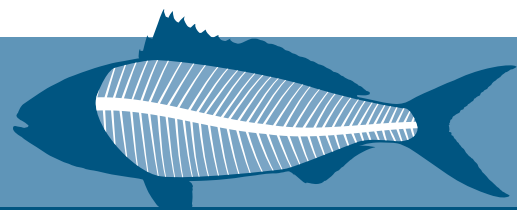
Kim Smith



| Common name | Scientific name | Distribution in WA | Habitat | | | Max. size (cm) |
|-------------------------|------------------------------|----------------------------|---------|---------|----------|----------------|
| | | | Estuary | Inshore | Offshore | |
| King George whiting | <i>Sillaginodes punctata</i> | South of Jurien Bay | ✓ | ✓ | ✓ | 72 |
| Southern school whiting | <i>Sillago bassensis</i> | South of Geraldton | | ✓ | ✓ | 36 |
| Yellowfin whiting | <i>Sillago schombergkii</i> | South of Shark Bay | ✓ | ✓ | | 42 |
| Trumpeter whiting | <i>Sillago berrus</i> | North of Geographe Bay | ✓ | ✓ | ✓ | 30 |
| Western school whiting | <i>Sillago vittata</i> | Geographe Bay to Coral Bay | | ✓ | ✓ | 30 |
| Stout whiting | <i>Sillago robusta</i> | Fremantle to Shark Bay | | ✓ | ✓ | 30 |
| Gold lined whiting | <i>Sillago analis</i> | North of Shark Bay | ✓ | ✓ | | 45 |
| Northern whiting | <i>Sillago sihama</i> | North of Broome | ✓ | ✓ | | 31 |

Table 1. Whiting species caught by recreational fishers in WA.

GO FISHING FOR SCIENCE SEND US YOUR SKELETONS



Recreational fishers can help with research

After you have filleted your fish, the remaining skeleton (or frame) contains vital biological information that our researchers urgently need to determine the health status of WA's fish stocks.

Fish frames for the following species are currently being sought:

| Nearshore species (all regions) | Demersal species (West coast only - Kalbarri to Augusta) |
|---------------------------------|----------------------------------------------------------|
| Australian herring | West Australian dhufish |
| Tailor | Pink snapper |
| Southern sea garfish | Baldchin groper |
| Whiting, all species | Breaksea cod |



How to donate your frames

If you can assist in the collection of any of these frames, please contact the Department of Fisheries' Research Division on **9203 0111** or at ResearchVolunteers@fish.wa.gov.au so that you can be sent sample bags and tags.

Fish frames (with guts intact) should be bagged and tagged with a label that details the following essential information:

who caught the fish (Name and phone number)
when the fish was caught (Date)
where the fish was caught (General location or latitude/longitude)

WIN WIN WIN

All fishers that donate frames with labels that include all the required details will be included in a draw for a tackle prize. Winners will be notified by phone.

CONGRATULATIONS!!!

A big 'thank you' to all fisher's who donated Australian Herring, Tailor and Southern Sea Garfish up to August 31st – the following people were the recipients of \$500 worth of tackle store vouchers.

| | | | |
|------------------|-------------|-------------|-------------|
| J. Empson | G. Maunder | L. Birchall | D. Bedo |
| J. & C. Benniman | B. Heterick | L. Kendle | T. Fanowris |
| S. Bruhn | K. Hughes | | |

In memory of Dan Pupazzoni

16.2.1981 - 1.8.2010



Dan at Pinnaroo Point holding a juvenile Tailor. Photo: Joshua Brown

Tragically we lost a member of our estuarine team recently. Dan was a fun loving person with a passion for the marine environment. He was also a keen surfer and fisherman. He will be greatly missed.

Ma's First Barra

I'd just like to go for a ride
At Kununurra
On that river deep and wide
And look at the beautiful view
Forget barra

You call that thing a boat
She was skeptical
How will it ever float
And what are those tiny rods
For barra?

With a roar we're on our way
She's apprehensive
Her face has caught the spray
The wind is in her hair
Forget barra

He says trawl a moment here
She listens doubtfully
Get accustomed to my gear
Be careful of the snags
There's the barra

It's very tranquil at this spot
She murmurs quietly
He says more often its not
And bam! there's on her line
A barra

The rod bends like a bow
She shrieks excitedly
He says I knew you'd show
Us all the style to catch
A barra

Wound into the boat with glee
She grins modestly
It felt too strong for me
I thought it was a whale
Not a barra

He says it's just a juvenile
Her eyebrows raise
A charming man she says with a smile
But that was a special fish
My first barra

By Dr Mike Bray (RAP log book fisher)

THANK YOU FOR YOUR ONGOING SUPPORT. KIND REGARDS AND HAPPY FISHING

THE RESEARCH ANGLER PROGRAM IS RUN BY THE NEARSHORE AND ESTUARINE FINFISH RESEARCH TEAM

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Fish for the future