



RESEARCH ANGLER PROGRAM

Newsletter No. 32
October 2015



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

Congratulations to our Send Us Your Skeletons winners in 2014/15!



The Department's Renee Hilditch (left) with SUYS Grand prize winner Ben Strautins (centre) and Brad Palmer of Montebello Island Safaris (right).



2014/15 quarterly prize winner – Ryan McDiarmid – winner of an Ugly Stik® Fishing rod donated by Britec Distributors/ Shakespeare and Recfishwest and Freeze Dried Bait Company packs for his donation of a King George whiting frame.

Our Send Us Your Skeletons (SUYS) program provides valuable and much-needed support for research on key demersal and nearshore fish species, like West Australian dhufish and Australian herring. We thank everyone who donated a fish frame in 2014/15, the 5th year of the program.

Fishing club members contributed greatly to the SUYS program in 2014/15. In fact, the grand prize winner, Ben Strautins, is the Vice-President of the Esperance Deep Sea Angling Club and donated his frames of blue morwong and Bight redfish to SUYS. Mr Strautins took his son-in-law with him on the six-night charter trip to the Montebello Islands off the Pilbara coast. This fantastic grand prize was donated by Montebello Island Safaris.

We also congratulate our quarterly prize winners in 2014/15 who received

a range of prizes thanks to our sponsors (Table 1). There are great prizes on offer again in 2015/16 so please keep donating your frames.

Frames donated to the SUYS program are essential for us to assess the status of the State's finfish and develop high-quality management plans for the long-term sustainability of WA's fish.

To obtain a good picture of the status of each key species, we need to collect about 500 frames each year. Donating frames is a great way for recreational fishers to get involved in science and ensure that there are quality scientific data available for stock assessments. Don't forget that fish frames are no longer included in possession limits, so you can keep several fish frames and donate them at your convenience (see the 2015 Recreational fishing guide at www.fish.wa.gov.au).

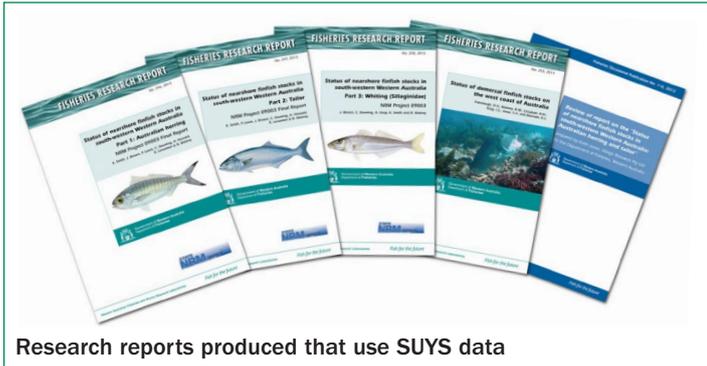
Table 1. Quarterly prize winners for 2014/15

Jul 14 - Sep 14	Andrew Wilson Matt Hoad Steven Pink Kevin Beeck
Oct 14 - Dec 14	Mike King Graeme Maunder Lee Shelley Mark Tomaseti
Jan 15 - Mar 15	Tony Surtan Paul Calabrese Russell Carter Michael Silver
Apr 15 - Jun 15	Matt Fraser Ryan McDiarmid Phil Michael



What has SUYS achieved so far?

Send Us Your Skeletons has been going for five years. During that time it has achieved a lot! The program was a finalist in the WA State Premier's Awards in 2014. SUYS provided data towards the first assessment of South Coast demersal fish stocks. It provided data towards the stock assessment of demersal species in the West Coast Bioregion and the next assessment due in 2016/17, which will hopefully show continued recovery after management changes of these stocks. It provided critical data to the recent stock assessment of nearshore species, particularly Australian herring.



Research reports produced that use SUYS data

SUYS is supported by hundreds of recreational fishers around the State who give their frames to research. Donations were received from all around the West and South Coast Bioregions (Fig. 1). Having so many fishers involved in SUYS helps to increase the number of days of the year when donations are made and the variety of locations where fish are from. This means that our total sample is more representative of the whole stock of each of our key species.

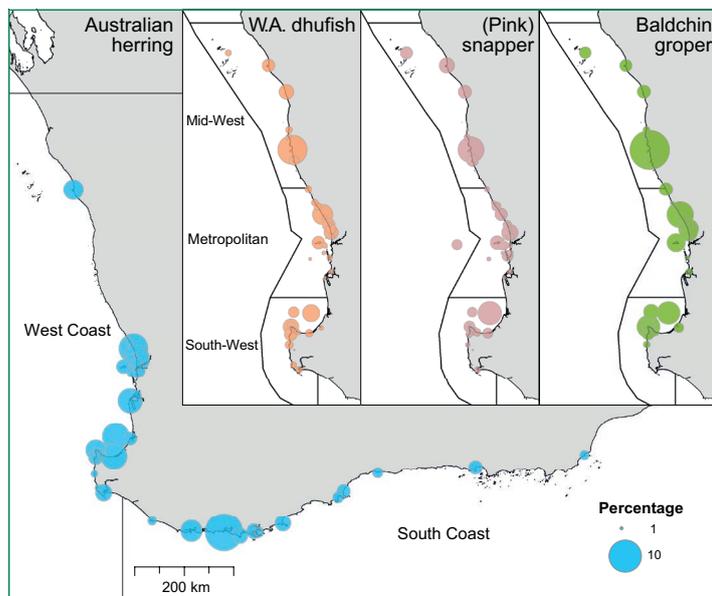


Figure 1. The percentage of frames of Australian herring donated by recreational fishers in 2014/15 from general locations of the West and South Coast Bioregions and of W.A. dhufish, (pink) snapper and baldchin groper from locations in each management area of the West Coast Bioregion. The size of each circle depicts the percentage of samples from a location in each area.

It's great to see the donations of frames of demersal species from the South-West Area rising each year (Fig. 2).

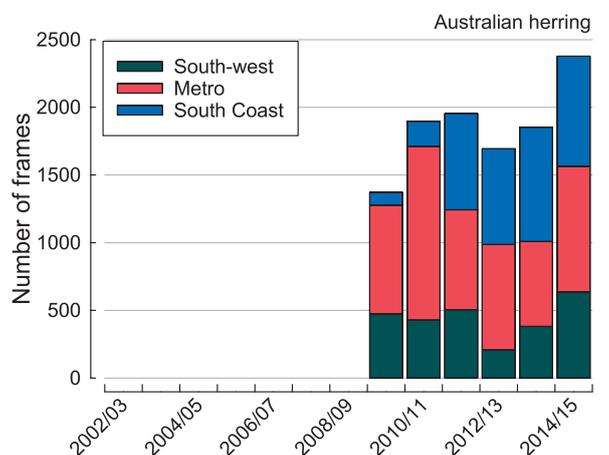
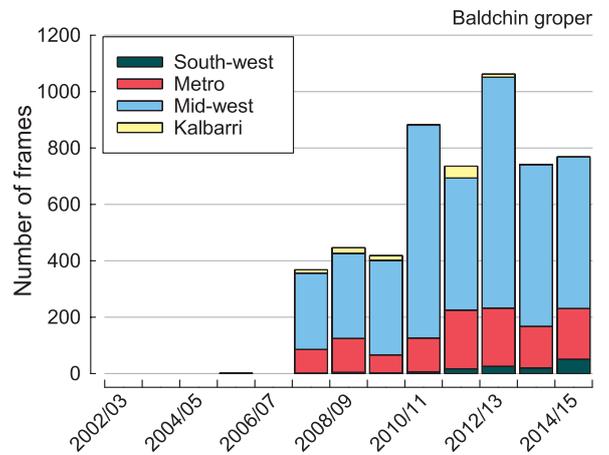
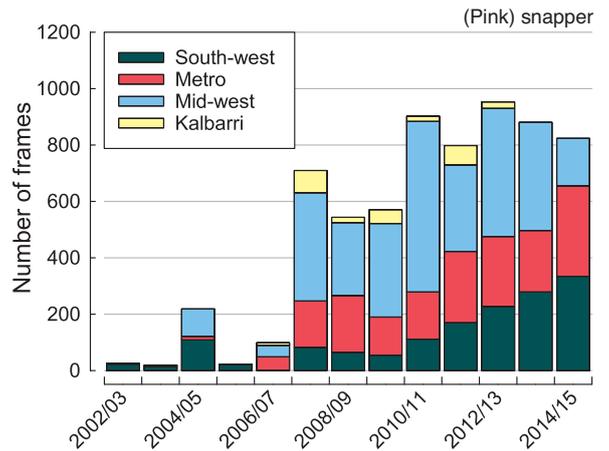
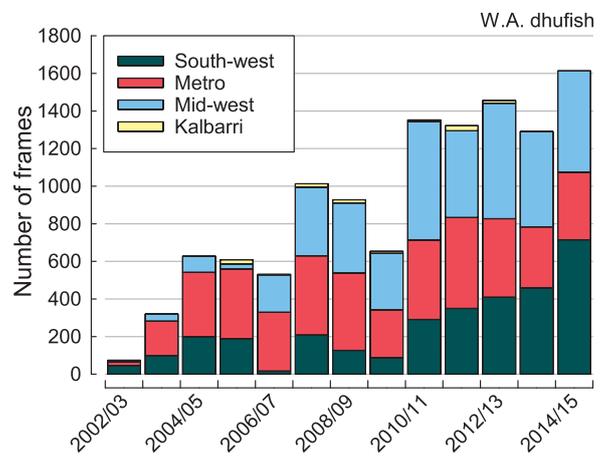


Figure 2. The number of WA dhufish, (pink) snapper, baldchin groper and Australian herring donated by recreational fishers in each area from 2002/03 to 2014/15.

We'd really like to see more frames from the Metro Area in 2015/16, particularly of (pink) snapper. In the Mid-West, we still receive plenty of demersal frames from Jurien, but we would love more donations from a broader range of places along the Mid-West coast, including the Abrolhos Islands, Green Head and Port Gregory.

Since SUYS began, herring frame donations have been stable at around 2000 fish per year. In 2014/15, we reached our target of over 500 herring frames in the Metro, South-west and South Coast region (Fig. 2). We need to keep meeting these targets for herring in the coming years so we can monitor the recovery of the stock, following management changes this year.

To make donation easier, new drop-off points have been set up in Kelmscott, Rockingham, Mandurah, Australind and Green Head (see below and fish.wa.gov.au/frames). Thanks to the owners of all of our drop-off spots for supporting SUYS!

New drop-off locations

Whiteys Tackle - Australind

Shop 29, Australind Shopping Centre, Australind 6233
T: 9797 0762

Tackle World Miami

Unit 8, 651 Old Coast Road, Falcon 6210
T: 9534 5533

Compleat Angler & Camping World - Rockingham

81A Dixon Road, Rockingham 6168
T: 9528 5255

Getaway Outdoors Kelmscott

Unit 5, 2938 Albany Highway, Kelmscott 6111
T: 9495 4444

Green Head General Store & Liquor

3 Green Head Road, Green Head WA 6514
T: 9953 1040

Be Informed. Be Sharksmart.

For the latest reported sightings and tagged shark detection information visit sharksmart.com.au



**BE INFORMED.
BE SHARKSMART**

What can we learn from your fish frames?

The information from donated frames can tell us a great deal about a species. It can tell us how a species' biology might vary across its distribution, how long it lives, when it spawns and even how related fish are to each other! Knowledge of the longevity and growth pattern of a species helps scientists to determine how robust a species is to fishing or environmental change. Long-lived species, such as West Australian dhufish, often have slow growth rates that make them more vulnerable to fishing than short-lived fast-growing species like Australian herring. It would take stocks of a long-lived species much longer to recover if they became depleted.

The ages (from the otolith) and lengths of the many fish collected of a species are used together to determine its growth pattern. To do this, we look at the relationship between the length and age of many fish and fit a curve to this relationship (Fig. 3).

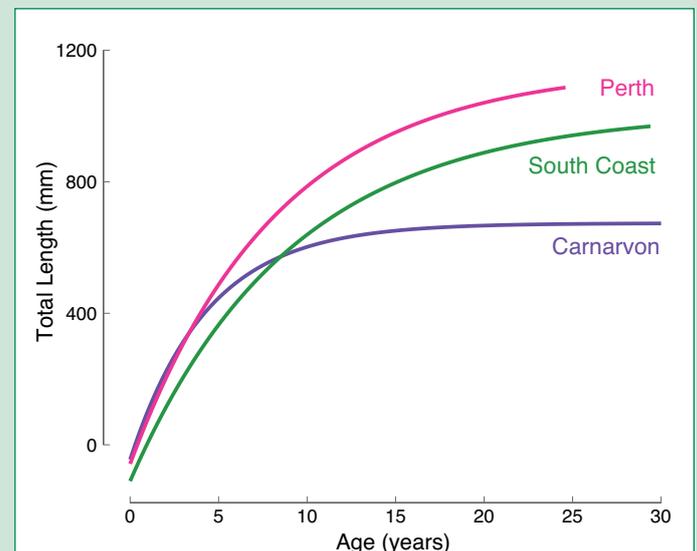


Figure 3. Growth pattern of female (pink) snapper off Perth, the South Coast and Carnarvon.

During the first years of a fish's life, energy is used to grow the body (somatic growth) rapidly, until it is large enough to successfully reproduce. Then its energy is directed towards reproduction and growth slows dramatically. For fish, this growth pattern can be visualized as the relationship between the length and age of the fish.

Fish can grow and mature at different rates and reach different maximum lengths across their distribution. This is largely due to there being an optimal environment for growth of a species in its range. For example, female (pink) snapper around Perth grow rapidly during their first few years of life, reaching about 820 mm by 10 years old. In contrast, by about 10 years old, (pink) snapper from Carnarvon reach approximately 610 mm, while on the south coast they reach about 720 mm (Fig. 3).

Prizes

By donating frames of the required species (Fig. 4) before July 1 2016, you could win a number of prizes thanks to our supporters' generosity. Quarterly prizes are up for grabs from Fishing Western Australia, Pristine Fishing, Mills Charters, White Salt, The Freeze Dried Bait Company, Western Angler and Shakespeare/Bricap Distributors and Recfishwest.

To donate frames, label them with your name, number and address (we will send you research feedback), the date and location of your capture (shore catch: general location; boat catch: latitude/longitude or distance and bearing from port and the name of the port). Information you provide about the location of your catch is confidential and only used for research.

Thanks to all of the SUYS sponsors for their contributions over the years!

Please keep donating frames and don't forget to provide your contact details so you go into the prize draws. Watch our website (www.fish.wa.gov.au/frames) for other SUYS updates and to locate drop-off points along the West and South Coasts. Don't hesitate to drop us a line (enquiries@fish.wa.gov.au) or call **9203 0111** if you have any queries.

We also have SUYS staff in the regions, Rhys Allen (**0407 388 930**) in the Mid-west, Kim Clayton (**0419 192 101**) in the South-west and Tim Leary (**0419 959 926**) on the South Coast, who may be able to arrange frame pick-ups.



WC



West Australian dhufish
(*Glaucosoma hebraicum*)

WC



Baldchin groper
(*Choerodon rubescens*)

WC



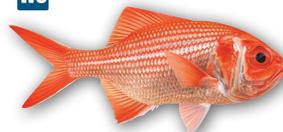
Redthroat emperor
(*Lethrinus miniatus*)

WC



(Pink) snapper
(*Chrysophrys auratus*)

WC



Bight redfish
(*Centroberyx gerrardi*)

WC SC



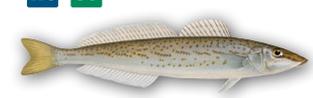
Australian herring
(*Arripis georgianus*)

WC SC



Tailor
(*Pomatomus saltatrix*)

WC SC



King George whiting
(*Sillaginodes punctatus*)
Over 35 cm in length

WC

Species needed from the West Coast Bioregion

SC

Species needed from the South Coast Bioregion

Figure 4. Required species

Catch the fishing news

Have the latest WA recreational fishing news delivered straight to your inbox – subscribe to the Department's *Catch!* e-newsletter at www.fish.wa.gov.au/catch



Thank you for your ongoing support and happy fishing!

Nearshore and Estuarine Finfish Research Team

Kim Smith, Amber Quinn, Chris Dowling, Nick Jarvis, Neil Rutherford and Tim Leary

West Coast Demersal Team

David Fairclough, Brett Crisafulli, Elaine Lek, Rhys Allen and Kim Clayton

Email: enquiries@fish.wa.gov.au

Telephone: +61 (08) 9203 0111

Deliveries: 39 Northside Drive, Hillarys, Western Australia 6025

ABN: 55 689 794 771

www.fish.wa.gov.au/frames



Fish for the future