



NSW Research Angler Program

Issue 15 July 2017

Welcome to the “NSW Research Angler Program Newsletter” – providing you, the research anglers and spearfishers of NSW, feedback on the data you are collecting by donating your frames to research.

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Notable Donations from Autumn 2017!

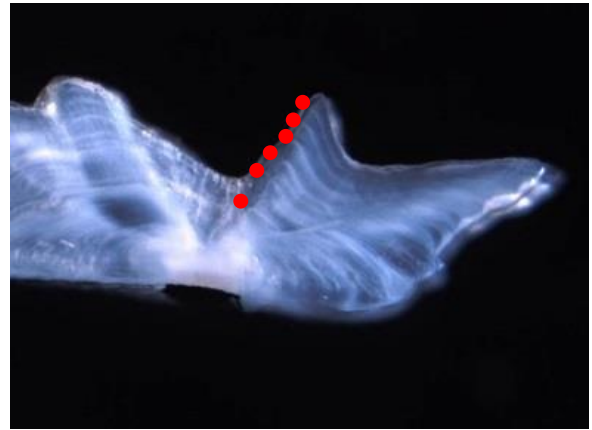
Even though the temperatures are on the drop towards the chill of winter, autumn can still be one of the hottest times of the year for the East Coast fisher. In the thick of the action over autumn was Dean Grant who generously donated a serious trophy tailor of 81 cm to the NSW RAP! Caught from one of Dean’s favourite big tailor spots in Lake Macquarie, a ‘greenback’ this size is pretty solid for eastern Australian. And Dean’s fish really delivered some gold as analysis of one of its otoliths showed it to be a grand six years of age! This may not sound like much for such an impressive tailor, but this fish is currently the oldest tailor so far recorded in NSW waters! A great start to autumn for Dean and a great start to autumn for the NSW RAP and tailor research in NSW.



Dean Grant with a jumbo 81 cm tailor from Lake Macquarie donated to the NSW RAP from autumn 2017. Photo courtesy Dean Grant.



University of New South Wales PhD student Hayden Schilling preparing to process Dean Grant's mega Lake Mac greenback in the lab at the Sydney Institute of Marine Science.



The otolith section from the 81 cm fish at left with growth rings clearly visible giving it an official estimated age of 6 years – the oldest tailor so far recorded in NSW waters!

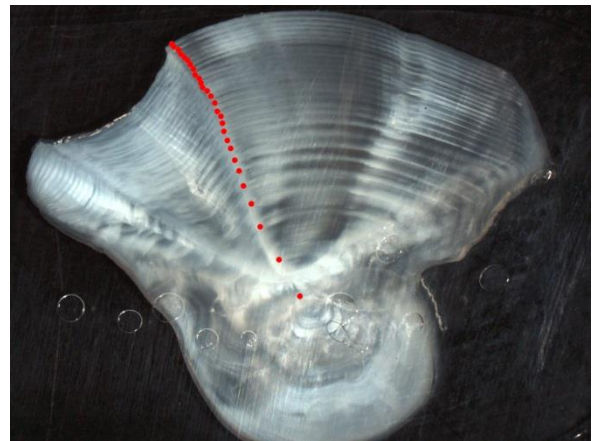


South Coast research angler Paul Martin is pretty good at catching mulloway with rod and reel, but as a true mulloway 'all-rounder' doesn't mind occasionally donning the neoprene and fins. It turns out that Paul is also pretty good at hunting mulloway with a spear taking his PB jewey over autumn. Paul's 148 cm Batemans Bay fish was in absolutely prime condition coming in at a chunky 32 kg. Part of the reason Paul's fish reached such impressive dimensions may have been the amount of time it had to grow as analysis of one of its jewels revealed it to be an amazing 26 years old! Only two fish older than this have so far been recorded in NSW waters making this fish an incredibly valuable addition to our knowledge of mulloway here. Paul reckons he's going to hang up his mulloway gun in favour of rod and reel after this fish, but what a way to go out!

An understandably stoked Paul Martin with an immense Batemans Bay mulloway of 148 cm and 32 kg estimated to be 26 years old. Photo courtesy Paul Martin.



The tail of the tape! A length of 148 cm on the dot for Paul Martin's PB mullet from Batemans Bay. Photo courtesy Paul Martin.

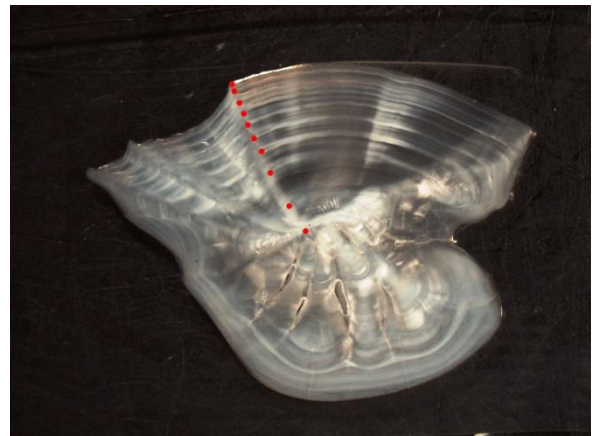


The otolith section from Paul's 148 cm fish with its 26 growth rings clearly visible (although some squinting may be required!).

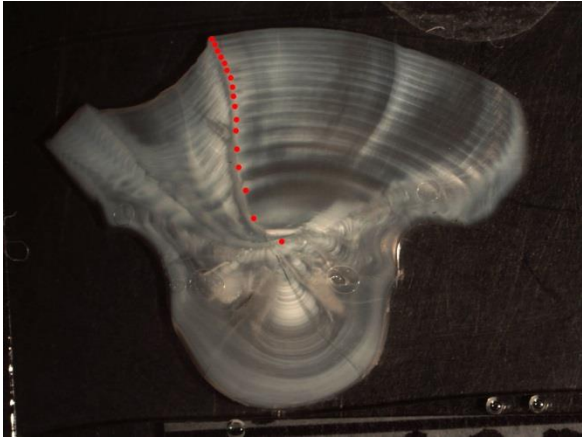
Many of the fish featured in this section of the newsletter are impressively large or old fish, but the data we get from the vast bulk of donations to the NSW RAP are not particularly big or especially old! These are the individuals which make up the bulk of fish populations and provide the data that allows fisheries scientists to successfully assess the stocks of all the species involved in the RAP. One such fish was donated by Central Coast mullet tragic Jay Pilson over autumn. Jay's previous donation to the RAP was both big (145 cm) and old (22 years), but his donation this season was significant because at 118 cm, the fish was exactly the average size for an 8 year old mullet in NSW! (The sizes recorded for 8 year mullet in NSW range from 82 to 141 cm)!



Jay Pilson with 118 cm of Central Coast beach mullet estimated to be 8 years old – the exact size a mullet should be at this age! Photo courtesy Jay Pilson.



Eight growth rings for a 118 cm mullet is right on the average. Except a 118 cm mullet is NEVER average!



The otolith section from Daniel Bloom's 135 cm autumn Forster mulloway, based on the growth rings was estimated to be 15 years old!

As demonstrated by this autumn's 'Notable Captures', even though the NSW Research Angler Program has "angler" in its name, the contribution of NSW's keen spearfishers to the program are absolute gold. More of this speared gold came in the form of a strikingly coloured mulloway donated by Coffs Harbour fisho Daniel Bloom. Having previously donated two smaller fish to the NSW RAP, Daniel's latest donation was a lovely Forster fish which came it at an impressive 135 cm. Analysis of its otolith revealed it to have an estimated age to match of 15 years – making it some seriously fast-growing gold!



One of the largest 15 year old mulloway so far recorded in NSW – a 135 cm fish donated by keen spearo Daniel Bloom. Photo courtesy Daniel Bloom.

Project Progress – Autumn 2017

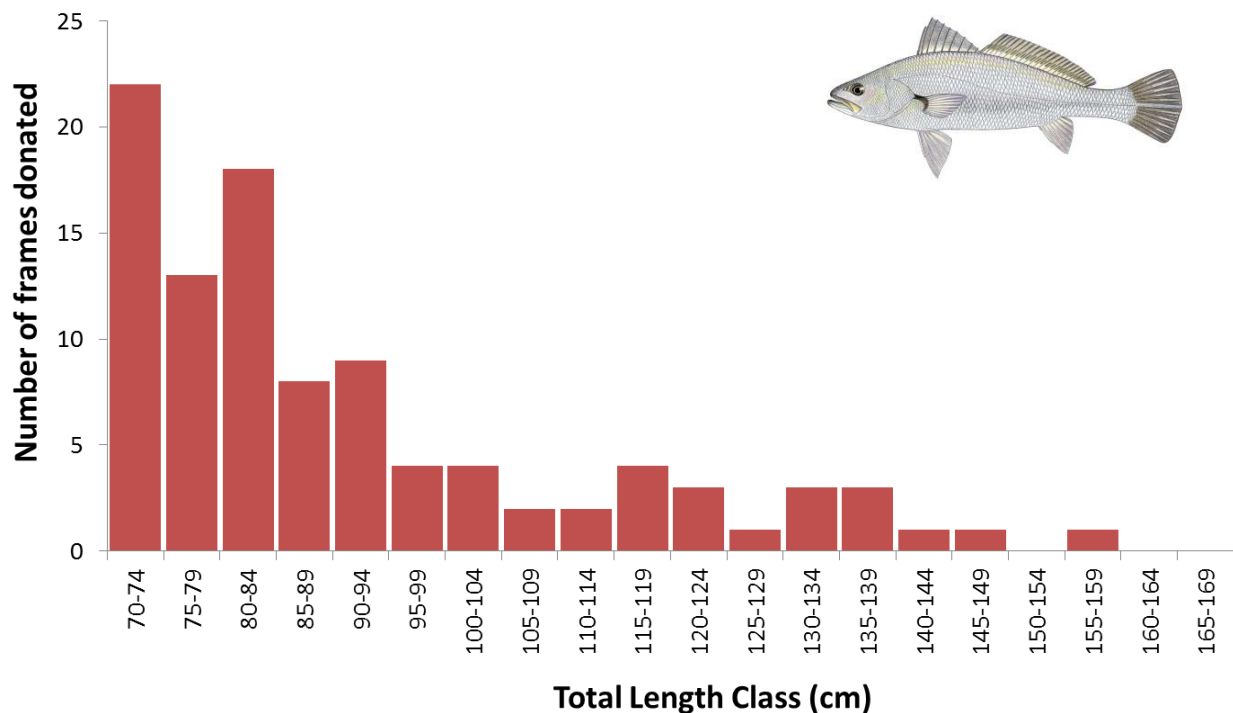
More than 1300 mullet frames have been donated to the NSW RAP since its inception in spring 2013 when we had 99 frames donated. Three and a half years on and we again had 99 mullet frames donated to the program! This autumn however, we also had 59 snapper, 27 dusky flathead and more than 100 tailor. We have come a long way in three and a half years!

This season's mullet frame donations came in the size range most commonly encountered by rec fishers chasing jewies with 70% between 70 and 95 cm. The larger mullet were again well represented with 25 metre-plus fish donated along with nine of 130 cm and larger!

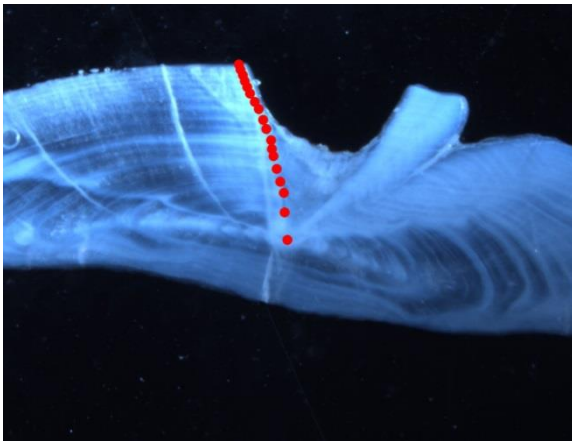
NSW RAP researcher Antony Gould removes the jewels (otoliths) from one of the 99 mullet donated to the program from autumn 2017.



Lengths of mullet (*Argyrosomus japonicus*) donated to the NSW Research Angler Program from autumn 2017.



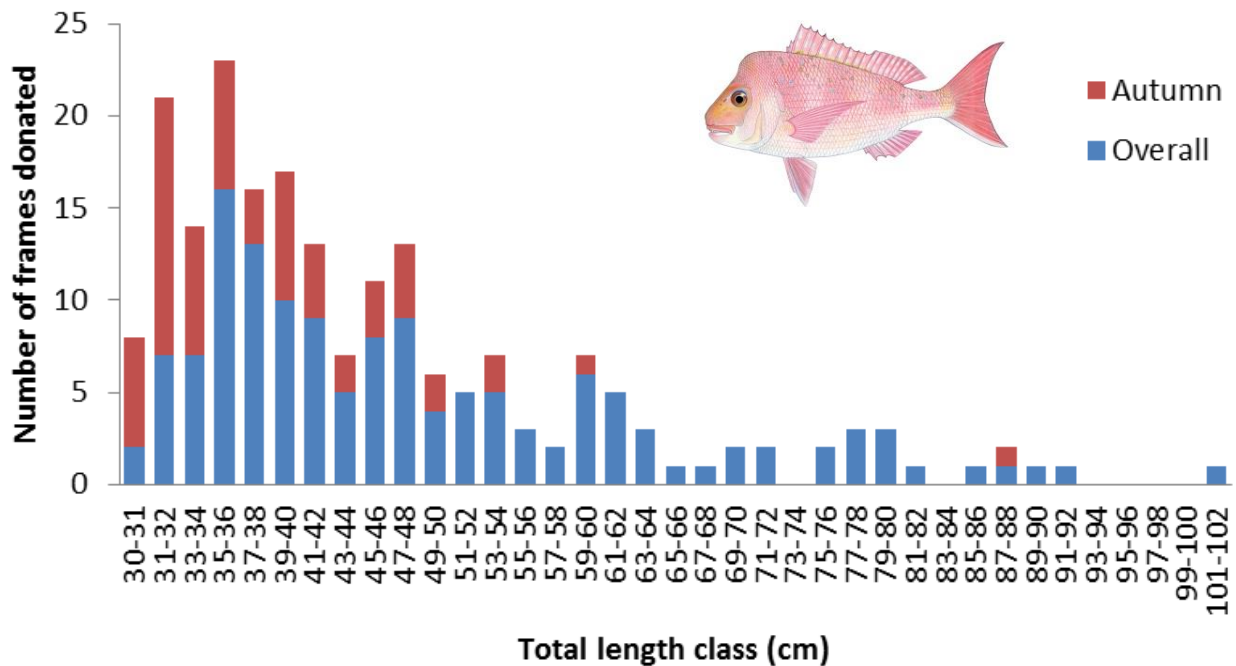
And don't forget that you can now post the otoliths from your mullet catches (or otoliths from any of our species – if you can find them!) to us making donating to the program even easier. All you need to do is contact us at the NSW RAP (T: 9435 4671, E: research.angler@dpi.nsw.gov.au) and we will send you out a reply-paid padded post pack and data label. Then it's simply a matter of filling out the data label and placing it, along with a single otolith from your fish into the post pack (right), seal it, stick it in the nearest Australia Post box and let the postman do the rest!.



The otolith section from an 87.1 cm snapper donated to the program over autumn resulted in the South Coast fish being estimated to be 16 years old!

Autumn 2017 was one of the best donation seasons for one of our other high profile recreationally-important species, the mighty snapper (*Chrysophrys auratus*). The graph below shows the sizes of the record 59 snapper donated to the NSW Research Angler Program from autumn. Not surprisingly fish within 10 cm of the legal size of 30 cm are those most commonly encountered by rec fishers chasing the delicious sparid. Seventy percent of our donated snapper were therefore the most frequently retained and donated, however these came from as far north as Yamba offshore all the way south to the reefs around Eden. This spatial coverage is not only excellent for monitoring the snapper stock(s) in NSW, but highlight just what a popular fish species snapper is in our state, from the far north to the far south!

Lengths of snapper (*Chrysophrys auratus*) donated to the NSW Research Angler Program in autumn 2017 and overall.



“Top Five” snapper donors overall (as of 31 May 2017):

Donor	No. frames donated	Region
Taigan Heath	43	Far North Coast
Matt Proctor	42	Far South Coast
Keith Kneebone	38	Sydney
Paul Blade	26	Coffs Harbour
Chris Webb	14	Coffs Harbour

Even if it is only one frame, one head, or a single jewel, we are willing to do (almost) anything to get it!

Techo Time!

Welcome to the second instalment of “Techo Time” where our resident NSW Research Angler Program technician, Antony Gould, teaches you some of the ‘tricks of the trade’ for removing otoliths from snapper and dusky flathead!

Mining for jewels!

Many research anglers and spearos are familiar with the removal of the otoliths (or jewels) from mullocky (see [NSW RAP Newsletter 4](#)). However, all fish have otoliths and analysis of these weird and wonderful structures allow fisheries researchers to estimate the age of a fish – a parameter absolutely crucial for monitoring the health of all fish stocks. All of our drop-off locations will store your donated frames (or heads) whole until we can collect them to remove the otoliths ourselves, however there are a few reasons why you may want to have a crack at doing it yourself:

- We can get research feedback on your donations back to you faster.
- You don't need to think about the logistics of getting your frames to a drop-off location – you can dispose of them at the cleaning table.
- It makes my job heaps easier!



Have a crack at removing otoliths from your frame donations and you can leave pesky pannie frames like this at the cleaning table!

What you will need

When we process your donated frames at the Sydney Institute of Marine Science, we use a wide array of dissection tools to remove the otoliths, however you can do it just as effectively with a pair of **needlenosed pliers** and some **tweezers** or **forceps**.

On your marks, get set, dig!

1. Measure the length of your fish from the tip of the nose to either the end of the tail (total length) or the fork in the tail (fork length) – either of these measurements is fine, or both, just as long as you **measure the fish!**
2. Remove the gills and guts – at this point why not see if you can estimate the sex of the fish and the stage in the reproductive cycle? – all super useful additional information (see [NSW RAP Newsletter 14](#) for “Sexing and Staging” your fish).
3. Place the fish upside down (‘belly-up’) and identify where the gills were attached to the underside of the skull – inside this is the ‘otolith cavity’.



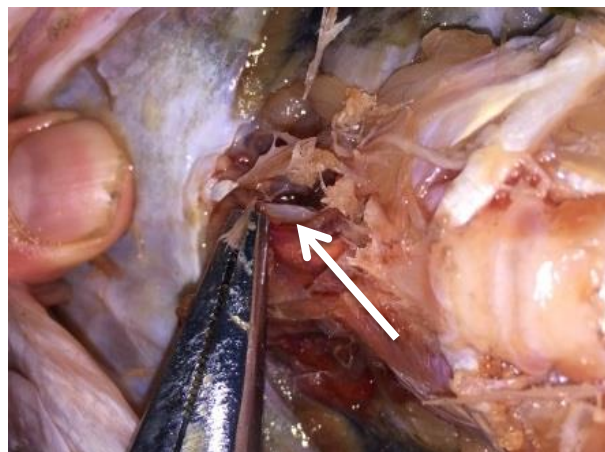
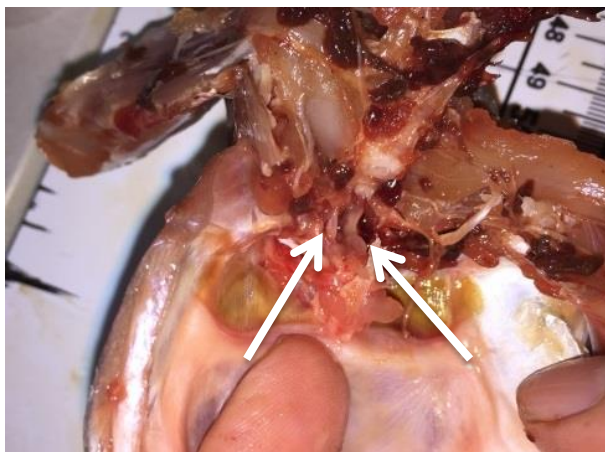
The position of the 'otolith cavity' in snapper (at left) and dusky flathead (at right).

4. Once you have identified the 'otolith cavity', begin carefully removing layers of bone by 'pinching' or 'crimping' flakes of bone with the pliers until you break into the hollow cavity containing the otoliths. It's best to do this slowly and methodically to start with as the otoliths can be broken at this point, but once you become accustomed to the location of the otoliths, you can fearlessly grab a chunk of bone with the pliers in one go!



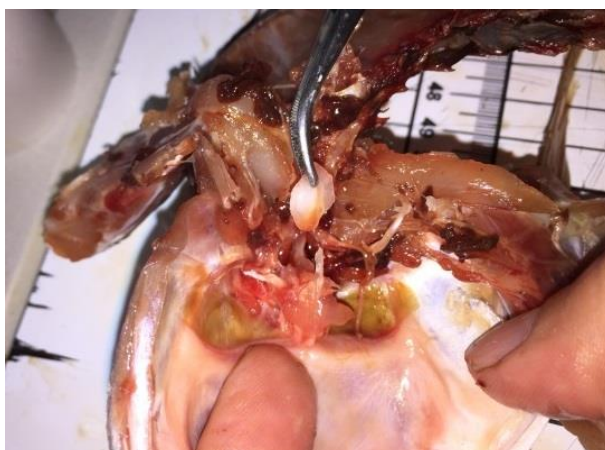
Slowly removing layers of bone from the otolith cavity using the needle-nosed pliers in snapper (at left) and dusky flathead (at right).

5. Once you have broken into the cavity, continue to carefully remove bone making the opening you have created larger (large enough to remove an otolith or two!). Once a hole has been made in the cavity, look for the otoliths, they will be surrounded by a membranous fluid-filled sac and are bright white (compared with the surrounding bone). When you touch them with forceps or tweezers they feel and sound different to the bone as they are considerably denser being made of calcium carbonate.



Once you have created an opening into the otolith cavity, look for the otoliths themselves – they are a different colour and texture to the surrounding bone. Snapper (at left) and dusky flathead (at right).

6. Remember playing that incredibly frustrating kids boardgame “Operation”? Well this is where those skills will finally pay off – grab your tweezers and pluck those bad boys out! Sometimes grabbing the membranous sac allows you to pull both otoliths out at once. Try to get them out whole, but if you do break them collect as many pieces as you can as we can usually still get an age for the fish!



Pay dirt! Carefully remove the otoliths from the cavity – you may need to wiggle them around a little to get them out. Snapper otoliths are thick and rounded (at left) and dusky flathead otoliths are long and thin (at right).

7. Give the otoliths a rinse in freshwater to remove any blood or remnants of the membranous sac and then blot them dry. Because otoliths are a slightly concave shape, they can easily be snapped in half in one of our reply-paid envelopes (see page 6) so it's best to wrap them in some tissue or similar to give them a little padding.



Rinse the otoliths in some freshwater, dry them and send them in to the NSW RAP!

8. Record fish length, capture location, date, sex and stage (if you're game! – see [NSW RAP Newsletter 14](#)), fisher name and contact details and include this data with the otoliths. Then contact the NSW Research Angler Program (research.angler@dpi.nsw.gov.au, 02 9435 4671) and we will send you a reply paid padded post pack for you to mail the otoliths in to us.

Happy digging!

NSW RAP – ANSA Tagging Project Update

A slightly different update on the NSW RAP-ANSA mulloway tagging project this autumn issue of the RAP Newsletter with a more in-depth analysis of tagging efforts and results to date.

Tagging

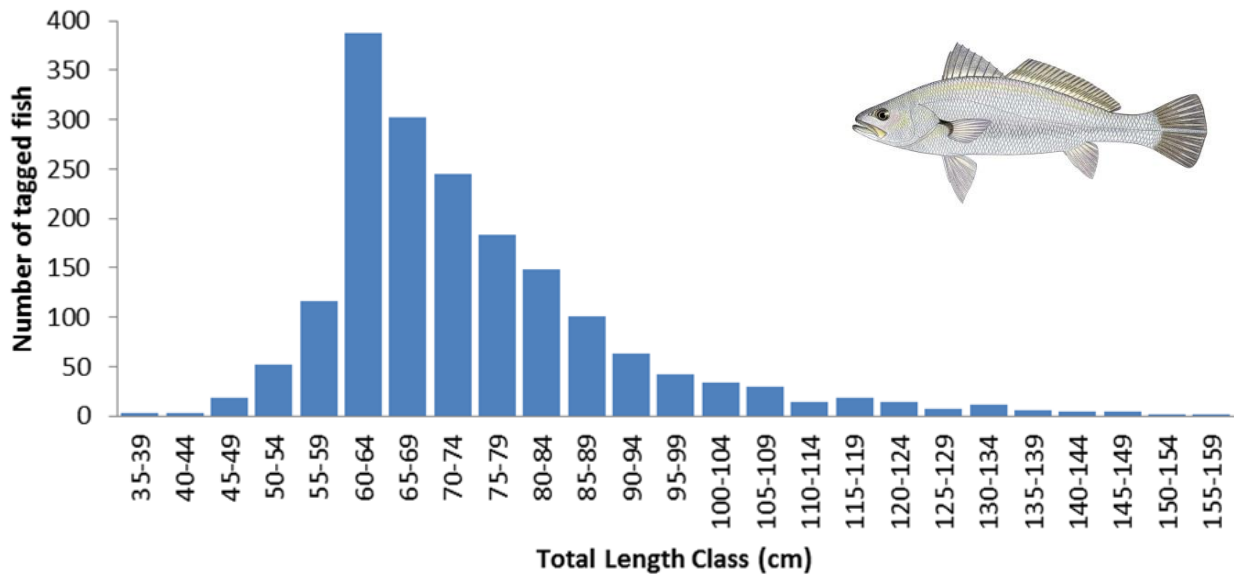
In the three years since March 2014, a total of 1822 mulloway have been tagged by participants in the NSW DPI – ANSA pilot mulloway tagging program. The vast majority have come from systems in close proximity to Sydney (Hawkesbury River, Sydney Harbour, Botany Bay), but fish have been tagged from the Tweed River in the north to Bega in the south.

Numbers of mulloway tagged from systems/locations on the NSW coast. * - “North Coast”, “Mid North Coast” and “South Coast” are combinations of various systems/locations in each region.

System/Location	Number of mulloway tagged
Yamba-Clarence River	115
Coffs Harbour	94
North Coast*	40
Port Macquarie	70
Newcastle-Hunter River	50
Mid North Coast*	80
Lake Macquarie	135
Hawkesbury River-Brisbane Water	292
Sydney Harbour	229
Botany Bay-Georges River	490
Port Hacking	51
Wollongong-Port Kembla	71
Clyde River	36
South Coast*	44

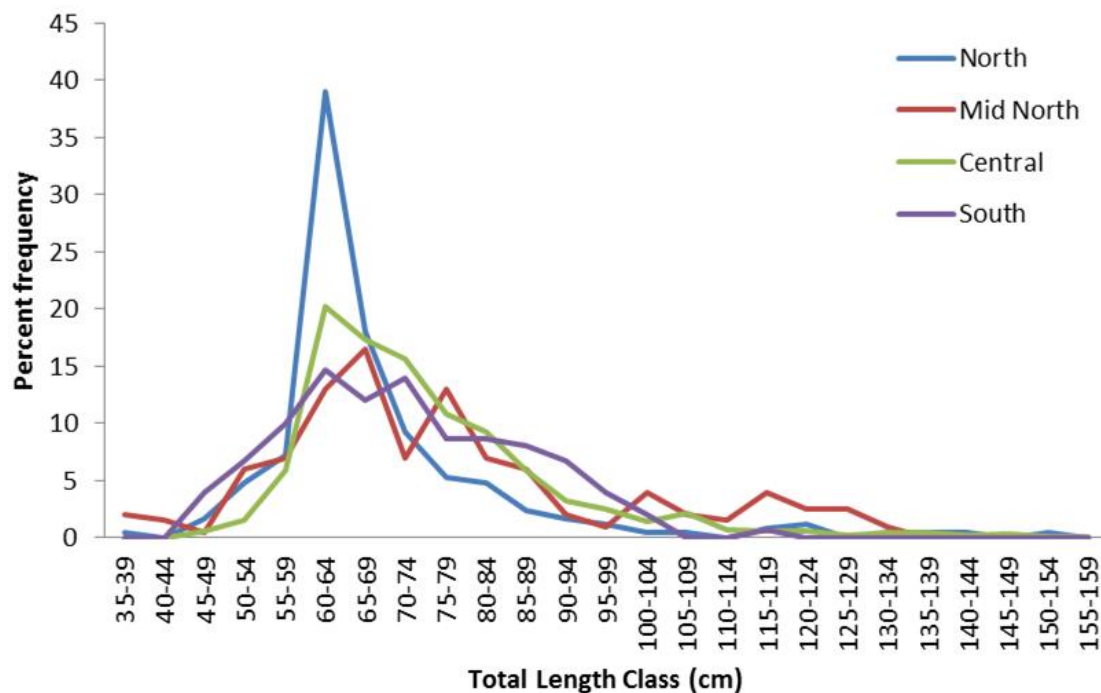
Tagged fish have spanned the full size range of mulloway likely to be encountered by recreational fishers and have ranged from 35 cm up to 155.5 cm. Seventy percent of tagged mulloway have been between 60 and 85 cm, but more than 150 metre-plus fish have also been tagged. Included in these are 53 fish of over 120 cm (~17 kg), 30 fish larger than 130 cm (~21 kg) and 13 mulloway of 140 cm plus (~27 kg). The tagging of such good numbers of large fish is important because previous mulloway tagging has shown that larger fish are the most likely to move significant distances compared with smaller individuals.

Length frequency of mulloway tagged as part of the NSW RAP-ANSA tagging project since March 2014.



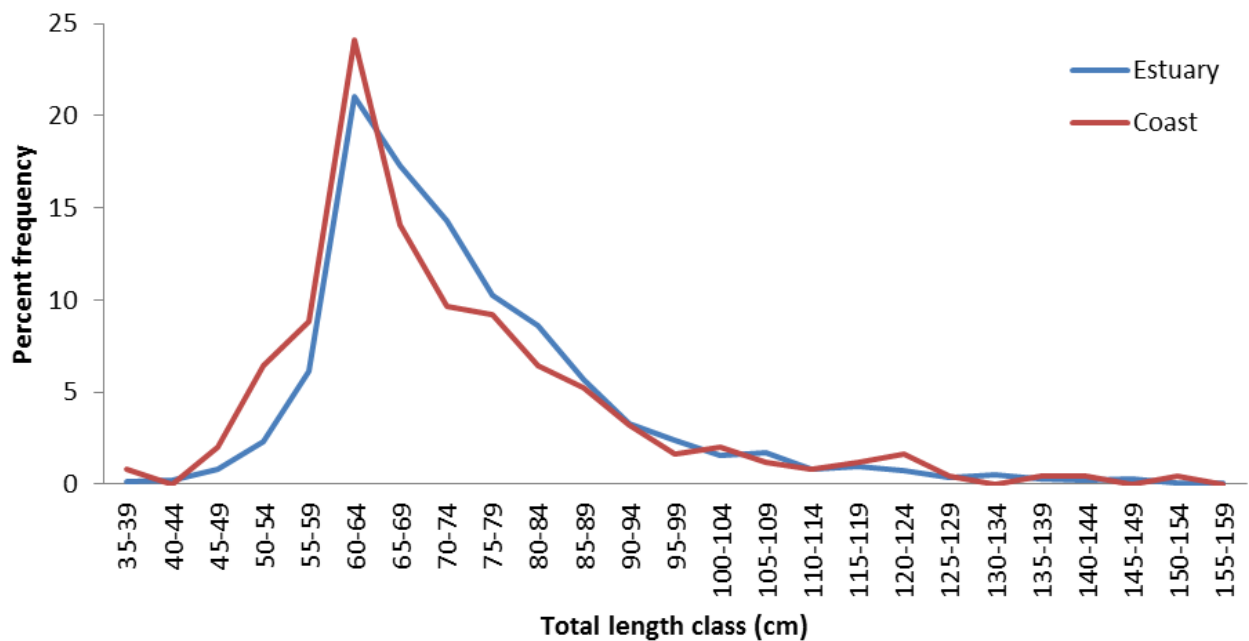
If we split the coast up into 4 latitude zones – North (Tweed – Coffs Harbour), Mid North (South West Rocks – Newcastle), Central (Lake Macquarie – Port Hacking) and South (Wollongong – Bega), you can see that the sizes of tagged fish are reasonably similar between zones with most fish tagged between 60 and 85 cm and a long ‘tail’ of larger fish. The Northern zone was dominated by tagging of fish 60-65 cm, almost all of which came from the Clarence River. A high proportion of fish tagged from the Southern zone were 85-100 cm. Similarly, 110-125 cm individuals made a substantial contribution to tagged fish in the Mid North zone. Fish larger than 110 cm contributed between 3 and 10% of tagged fish for all zones other than the Southern zone, where only a single 116 cm fish was tagged. The largest number of >110 cm fish came from the Central Zone (44), mainly because of the large numbers of fish tagged in this zone overall (~1200 fish).

Size frequency of tagged mulloway from North (n=249), Mid North (n=200), Central (n=1196) and Southern (n=150) latitude zones.



Far more estuary-caught fish (1549) have been tagged compared with fish caught from breakwalls, rocks or the beach (249). Despite this, the proportions of sizes for both groups are very similar.

Size frequency distribution of tagged mulloway caught from estuaries (n=1549) or from the coast (beach, breakwall, rocks, n=249).



Top Five taggers overall (as of 31 May 2017):

Tagger	No. fish tagged	Region
Chris Cleaver	250	Everywhere!
Ivan Maric	125	Sydney
Dan Selby	111	Sydney
Mark Pirie	94	Yamba
Peter Rothwell	90	Sydney
Paul Blade	85	Coffs Harbour



This 81 cm Coffs Harbour beach mulloway was recaptured by Chris Webb after being tagged some 337 days earlier at 60 cm by Paul Blade. Photo courtesy Chris Webb.

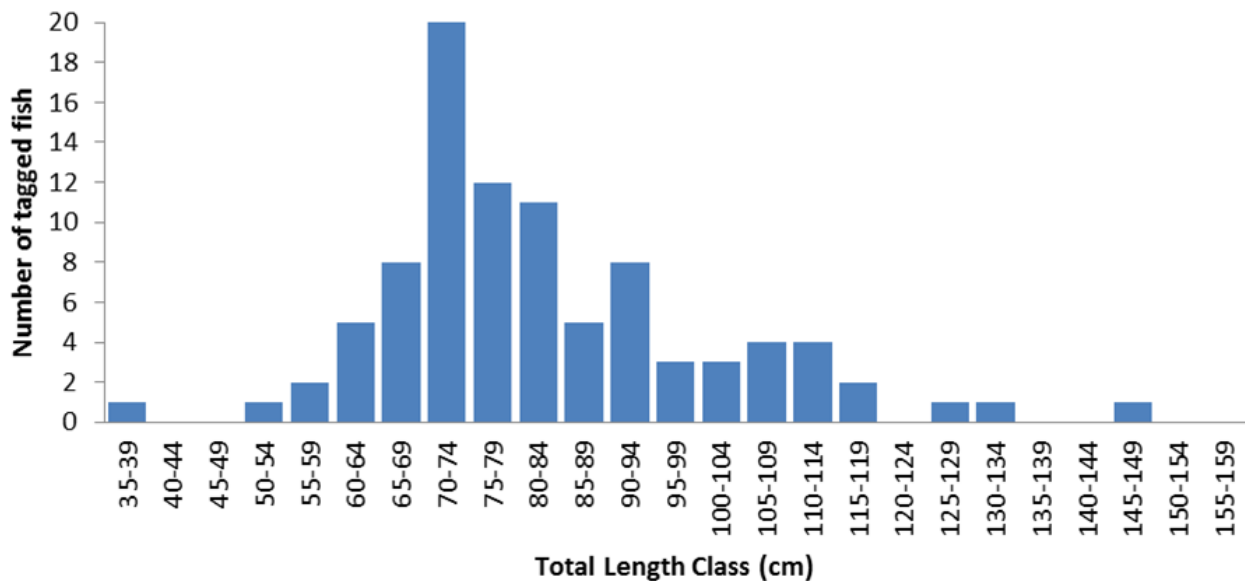


Happy taggers Dan Guilfoyle and Mark Williams with a fine pair of freshly tagged Lake Macquarie mulloway from autumn. Photo courtesy Mark Williams.

Recaptures

A total of 124 tagged mulloway have been recaptured as part of the NSW DPI – ANSA pilot mulloway tagging program representing a recapture rate of 6.8%. Not surprisingly, the most commonly recaptured length class of tagged fish was 65-95 cm (~70%), the size range at which most fish were initially tagged. Eighteen tagged metre-plus fish have been recaptured including four larger than 125 cm. The largest tagged mulloway to be recaptured was 147 cm when recaptured 553 days after being tagged.

Size frequency distribution of the 124 tagged mulloway recaptured as part of the NSW DPI – ANSA pilot mulloway tagging program.



Scott Purnell with a 125 cm fish caught in the Hunter River which had been tagged by Dan Selby some 946 days earlier in the Hawkesbury River when just 103 cm. Photo courtesy NEWTAG.

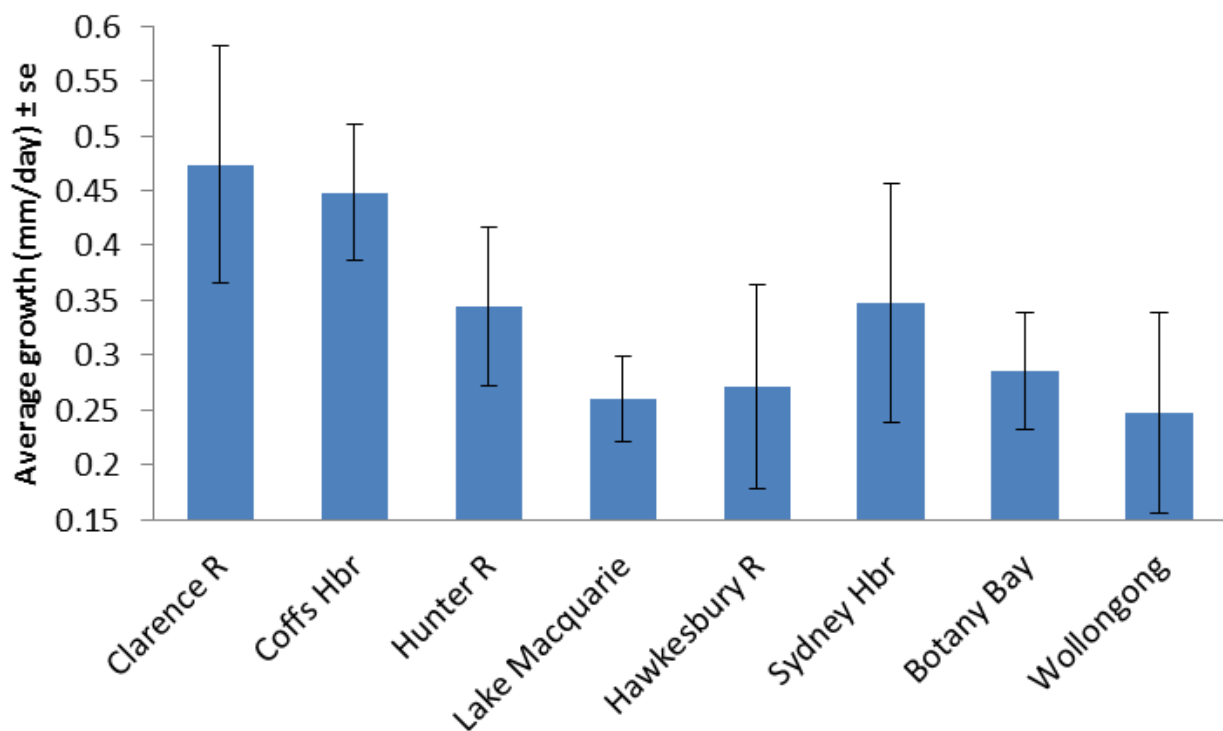
Movement of tagged mulloway confirm the results of previous tagging efforts in both NSW and elsewhere, whereby the majority of tagged fish appear relatively sedentary and are recaptured in, or in close proximity to, the estuary/location where they were initially tagged, sometimes after quite extensive periods at liberty.

A smaller proportion of movements however occur over significant distances both north and south along the NSW coastline and from one estuary system to another. This migratory behaviour appeared more prominent in larger individuals (average length ~97 cm), whilst sedentary or residential behaviour was more common in smaller individuals with an average length of ~81 cm.

Of the recaptured mullock, 66% were recaptured within 20 km of their tagging location, usually within the same estuary system. Mean distance travelled by these river 'residents' was ~6.5 km and time at liberty ranged from 4 to 853 days with an average of 242 days. Maximum change in length of a 'resident' fish from tagging to recapture was 37 cm and occurred for a Coffs Harbour fish tagged when 57 cm and recaptured in the same location at 94 cm some 739 days later.

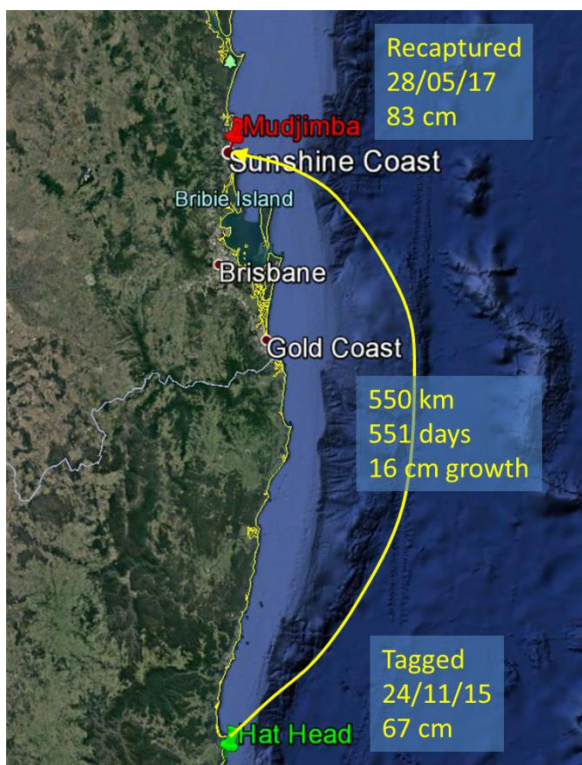
Even though most tagged mullock did not move far from the tagging location, their residency does give us an opportunity to examine growth in the wild (via change in length from tagging to recapture). This appeared to vary with latitude with the fastest growth found in northern NSW (Clarence River & Coffs Harbour) and slowest growth apparent in fish from Wollongong. This is possibly due to a simple relationship between environmental temperature and somatic growth which varies over the ~600 km between the northernmost and southernmost location. However, the growth rates of fish are also influenced by a multitude of other factors, like food quantity and quality, age, disease, parasite loads, seasonality, genetics and many others.

Average growth (mm/day with errors) of recaptured mullock which remained resident in eight locations/estuaries on the NSW coast.



Top Five largest fish tagged overall (as of 31 May 2017):

Tagger	Total length (cm)	System	Season
"Tagger 86"	155.5	Hawkesbury River	Autumn 2016
Josh Anderson	152.5	Yamba	Spring 2016
"Tagger 86"	152	Hawkesbury River	Spring 2015
"Tagger 86"	148	Hawkesbury River	Summer 2016-17
"Tagger 86"	146	Hawkesbury River	Summer 2016-17



The remaining 32 tagged mulloway which were recaptured had moved significant distances (>25 km) along the coast or from estuary to estuary. The most common primary direction of movement was north (n=16) and the average distance travelled was ~125 km (25 – 550 km). Included in these fish was the greatest distance travelled by a tagged mulloway so far recorded in NSW at ~550 km from Hat Head to the mouth of the Maroochy River (Queensland) in 551 days! Nine mulloway tagged in estuary systems close to Sydney (Botany Bay-Georges River and Brisbane Water-Hawkesbury River) were recaptured ~150 km north on the Hunter Coast region (Newcastle Harbour-Hunter River, Stockton Beach, Port Stephens) suggesting that this may be an important migration route for mulloway in NSW. It took these fish, on average, 360 days (range 163 – 946) to make this journey.

Left: The marathon 550 km journey taken by tagged mulloway # A599706 from Hat Head to the mouth of the Maroochy River at Mudjimba, Queensland.

Maximum change in length of a fish which moved a significant distance was 23.5 cm and occurred for a Hawkesbury River fish tagged at 63.5 cm which was recaptured in Port Stephens at 87 cm some 566 days later. Average growth of fish which moved significant distances was slightly less (0.31 mm/day) than that of “resident” fish recaptured in close proximity to their tagging location (0.33 mm/day).



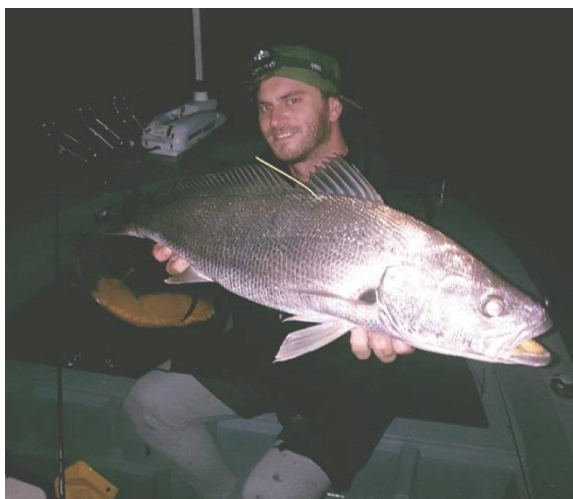
Cameron Cronin releases a 67 cm mulloway (at left) at Hat Head containing tag # A599706 on 24 November 2015. Photo courtesy NEWTAG.



Peter Brodie with tagged mulloway # A599706 after recapture on 28 May 2017, now 83 cm in length, after its epic swim to Mudjimba. Photo courtesy Peter Brodie.

Tagged mulloway recaptures for autumn 2017 (as of 31 May):

Tagging angler	Total length (cm)	Tagging location	Recapture angler	Recapture location	Total length (cm)	Days at liberty
Ivan Maric	59	Botany Bay	<i>n/a</i>	Botany Bay	67	271
Jack Freestone	66	Brisbane Water	Matt Forrest	Brisbane Water	73	253
Chris Cleaver	<i>n/a</i>	<i>n/a</i>	Steve Hoyts	Cooks River	102	
Todd Chown	84	Hawkesbury River	Keith Azzopardi	Hawkesbury River	87	265
<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	Jamie Whitbread	Hawkesbury River	75	
Dan Selby	78	Hawkesbury River	Dan Selby	Hawkesbury River	104	724
Dan Selby	103	Hawkesbury River	Scott Purnell	Hunter River	125	946
Paul Blade	60	Coffs Harbour	Chris Webb	Coffs Harbour	81	337
Peter Rothwell	147	Hawkesbury River	Jack Freestone	Broken Bay	147	553
Brad Gibson	55	Thirroul	Peter Thompson	Thirroul	71	543
Kyle Worley	85.5	Lake Macquarie	Marc Goodall	Stockton Breakwall	96	439
Jay Kim	60	Cowan Creek	Cameron Gunner	Cowan Creek	68	327
Cameron Cronin	67	Hat Head	Peter Brodie	Mudjimba, Qld	83	551



Dan Guilfoyle, Mark Williams and Corey Reid had a red hot session on Lake Macquarie over autumn tagging some quality mulloway – where they end up being recaptured is the exciting bit! Photos courtesy Dan Guilfoyle, Corey Reid, Mark Williams.

Next time you're out chasing mullocky, keep an eye out for one of our yellow NSW DPI tags. Remember that the tag may be fouled with algae.



If you are fortunate enough to catch a tagged mullocky, please record the tag number, measure the length of the fish, and contact either the NSW DPI Gamefish Tagging Program (T: 4424 7411, E: gamefish.tagging@dpi.nsw.gov.au) or the NSW Research Angler Program (T: 9435 4671, E: research.angler@dpi.nsw.gov.au). The tag will be yellow, approximately 12 cm long and located just beneath the dorsal spines.

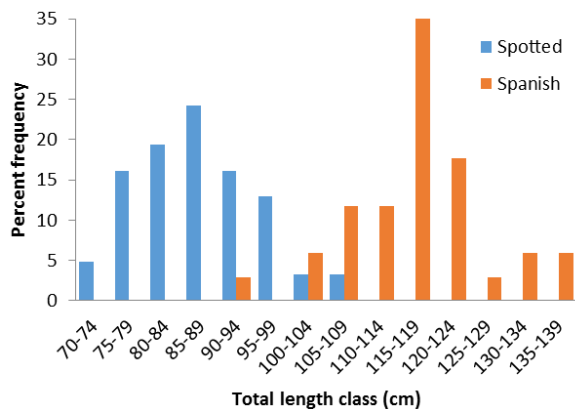
The crucial data collected by this project will help us to learn more about the movements, growth and post-release survival of this iconic fish. Stay tuned for future updates in the Winter 2017 NSW RAP Newsletter!

Also don't forget, you can also now stay up-to-date with all the comings and goings of this component of the NSW RAP by visiting the project Facebook page ([Newtag – NSW Tagging Program – Mullocky](#)).

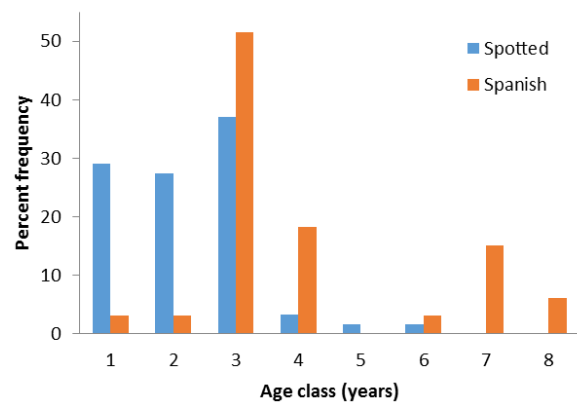
Once again, an enormous thank you must go to the [ANSA NSW Branch](#), and in particular **Stan Konstantaras** and **Chris Anagnostou**, for managing this important and fascinating component of the NSW Research Angler Program.

NSW RAP Mackerel Update

With yet another mackerel season gone, the NSW RAP received some very timely information from the [Queensland Department of Agriculture & Fisheries](#) concerning last year's NSW RAP mackerel donations which have now been analysed for age estimation prior to use in a joint assessment of the East Coast stocks of these valuable and highly sought-after fish species. Whilst the stock assessment itself is still some time off, the age data when combined with the size data reveal some very interesting comparative patterns. As can be seen from the below figures, being a larger faster-growing species, Spanish mackerel (*Scomberomorus commerson*) frame donations were from a larger size class of fish than for the smaller spotted mackerel (*S. munroi*). The size-at-age graph for the two species shows that despite these differences, NSW's donations were primarily of 3 year old fish for both species. What is also clear is that the spread of spotted mackerel ages was very even primarily spanning ages 1-3, whereas the ages of donated Spaniards was much more variable with almost 20% 7 year olds with very few six year olds and not a single 5 year old!

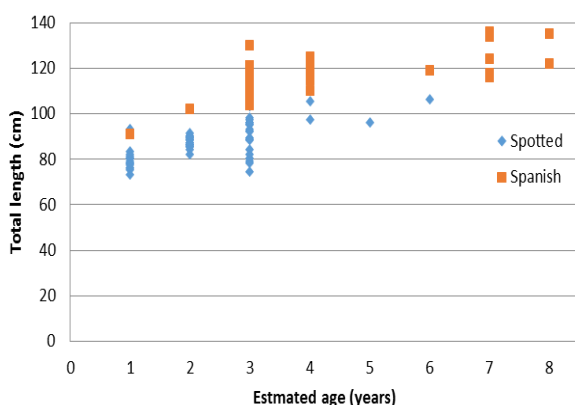


The sizes of Spanish and spotted mackerel donated to the NSW RAP in 2015-16.

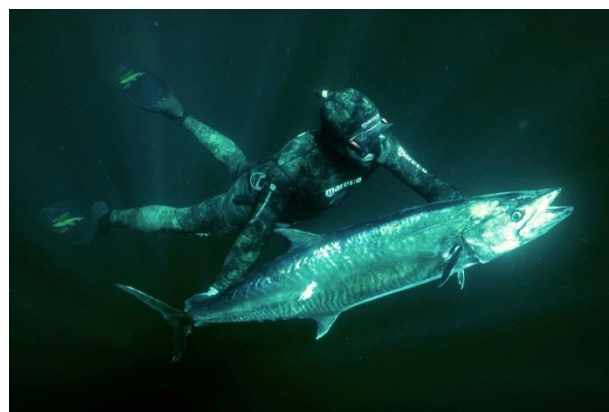


The ages of Spanish and spotted mackerel donated to the NSW RAP in 2015-16.

Routine monitoring in Queensland has shown the majority of recreationally-caught *S. munroi* to be 1-3 year old fish, similar to the situation in NSW. For *S. commerson*, the large proportion (34%) of 1 year olds in the East Coast recreational catch in 2013-14 may be reflected the predominance of 3 year olds in the NSW catch last season and may therefore represent this strong cohort moving through the East Coast fishery. For comparison, the [Queensland Department of Agriculture & Fisheries](#) fact sheets for each of the species can be found [here](#) and [here](#).



Size-at-age data for Spanish and spotted mackerel donated to the NSW RAP in 2015-16.



It's data from trophy fish like this 159 cm Spanish mackerel that make donations to the NSW RAP so invaluable. Photo courtesy Derrick Cruz.

NSW RAP Presentations

If you are a member of a fishing club (spearfishing or angling) or a tackle shop hosting regular fishing-related presentations and are interested in having someone from the NSW RAP give a talk on the program (and we now have a bunch more species to talk about!), please don't hesitate to get in contact with us (E:

research.angler@dpi.nsw.gov.au, T: 9435 4671) and we will send someone out to get you and your audience 'revved-up' about the program!

Right: NSW RAP scientist Julian Hughes makes a presentation at the monthly meeting of the Northern Suburbs Underwater Club. Photo courtesy Adam Price.



The “Top Fives”!

Our sincerest thanks to the following dedicated mullet Research Anglers and spearfishers who have made it into our “Top Five” lists of frame donors overall and those for autumn 2017.

This season’s “Top Five” mullet frame donors were a real ‘who’s who’ of some of the RAP’s major frame contributors over the years! Paul Blade’s 10 fish up to 86 cm from Coffs Harbour and surrounds take his overall contribution to this program to over 100 frames! Kevin Buhler was also on fire in Coffs Harbour donating frames from six lovely fish of his own. Yamba stalwart Mark Pirie managed eight cracking fish from the Clarence River, the largest of which (121 cm) estimated to be 7 years old. David Birt’s legendary exploits around Newcastle continued unabated through autumn donating six fish himself along with valuable contributions from other members of the family Birt – four fish from Matthew and three from Nathan! Eden hasn’t been the most prolific part of NSW for mullet frame donations, but that may be about to change with the most excellent exploits of Dean Boulton yielding five invaluable Far South Coast fish for this year’s mullet stock assessment.

“Top Five” mullet donors autumn 2017 (as of 31 May):

Donor	No. frames donated	Region
Paul Blade	10	Coffs Harbour
Mark Pirie	8	Yamba
Kevin Buhler	6	Coffs Harbour
David Birt	6	Newcastle
Dean Boulton	5	Eden

“Top Five” largest mullet donated autumn 2017 (as of 31 May):

Donor	Total length (cm)	Estimated age (years)	Region
Paul Martin	148	26	Batemans Bay
Shane Crowe	140	20	Eden
Andrew Sharp	138	22	Port Stephens
Col Tenamam	136	9	Port Macquarie
Daniel Bloom	135	15	Forster
Grant Ashwell	135	10	South West Rocks



The guys from [Australian Surfcaster](#) continue to provide the RAP with plenty of tailor frames, including some from seriously solid fish like this one. Photo courtesy Ben van der Woude.



Col Tenamam with 136 cm of a super fast-growing Port Macquarie breakwall mullet estimated to be just 9 years old! Photo courtesy Col Tenamam.

“Top Five” largest mullet donated overall (as of 31 May 2017):

Donor	Total length (cm)	Estimated age (years)	Region	Season
Nathan Debono	168	26	Newcastle	Winter 2015
Adam Price	164	24	Sydney	Spring 2013
Keith Kneebone	160	20	Sydney	Autumn 2014
Mark McCabe	159	21	Sydney	Spring 2013
Sal Nahle	158	18	Sydney	Autumn 2016

Paul Martin’s humungous Batemans Bay mullet from earlier in the newsletter was not only the largest mullet we had donated to the NSW RAP over autumn 2017 at 148 cm, but it was also the oldest at an estimated 26 years, making this fish the (equal) third oldest mullet so far recorded from NSW. The second largest fish, a stonking 140 cm 20 year old fish, donated by Shane Crowe was by far the largest mullet we have had donated from the Far South Coast of NSW. Andrew Sharp’s 138 cm fish from Port Stephens was estimated to be a venerable 22 years old, in contrast to a fish donated by Col Tenamam from Port Macquarie which, despite being just 2 cm shorter at 136 cm, was estimated to be a very youthful (and fast growing) 9 years old! Daniel Bloom’s gold-plated 135 cm Forster fish from earlier in the newsletter was estimated to be 15 years old along with another fish of the same size, this one donated by Grant Ashwell from South West Rocks, estimated to be 10. Our final “Top Five” mullet for autumn 2017, Damian Cliffe’s 130.5 cm Yamba breakwall fish was estimated to be 12 years old.

“Top Five” oldest mullockay donated autumn 2017 (as of 31 May):

Donor	Estimated age (years)	Total length (cm)	Region
Paul Martin	26	148	Batemans Bay
Andrew Sharp	22	138	Port Stephens
Shane Crowe	20	140	Eden
Daniel Bloom	15	135	Forster
Damian Cliffe	12	130.5	Yamba

“Top Five” oldest mullockay donated overall (as of 31 May 2017):

Donor	Estimated age (years)	Total length (cm)	Region	Season
Vaughan Little	34	156	Nowra	Spring 2013
Paul Lennon	33	149	Port Stephens	Summer 2016-17
Scott Robson	26	154	Newcastle	Summer 2013-14
Evan Leeson	26	144	Port Macquarie	Autumn 2014
Nathan Debono	26	168	Newcastle	Winter 2015
Paul Martin	26	148	Batemans Bay	Autumn 2017
Marwan Nasr	25	147	Sydney	Spring 2014
Greg Slater	25	133	Eden	Winter 2016
Adam Price	24	164	Sydney	Spring 2013
Jack Graham	24	<i>Unknown</i>	Eden	Winter 2016
Hari Corliss	24	151	Port Macquarie	Winter 2015

As well as those mentioned above, thanks to all the fishers who donated their autumn mullockay, kingfish, dusky flathead, snapper, mackerel and tailor to the NSW RAP, here's hoping for a quality winter of fishing for all our species!

Drop-off Locations

Many thanks must once again go to all participating drop-off locations for their enthusiastic involvement in the program. This program would simply not be possible without your continued support. The list of drop-off locations for donated frames is changing regularly as more tackle retailers become involved in the program. Our most recent addition to our list of participating tackleshops is **Iluka Bait & Tackle (3A Owen St, Iluka 2466, T: (02) 6646 5217)**. On the northern side of the mighty Clarence River, Iluka is a renowned hotspot for many RAP species and owner Ross will gladly accept your donated frames (once he sells you the gear to catch them!).



For the full and up-to-date list of places where you can drop-off your frames, heads or jewels, please visit:

<http://www.dpi.nsw.gov.au/fisheries/recreational/researchangler/drop-off-locations>



Daniel Bloom donated 135 cm of Mid North Coast autumn bronze – estimated to be 15 years old! Photo courtesy Daniel Bloom.



Rick Jones with a fine 119 cm autumn Coffs Coast mulloway – estimated to be 9 years old. Photo courtesy Rick Jones.

Monthly Prize Draw Winners!

The lucky monthly NSW Research Angler Program prize winners for autumn 2017 were decided by randomly drawing one frame donor from each month.

Congratulations to the following Research Anglers:

March	Dean Boulton	(Eden)
April	Jason Szabo	(Central Coast)
May	Kevin Buhler	(Coffs Harbour)



Each winner will receive a \$50 gift voucher generously donated by [MO Tackle Coffs Harbour](#) (for use in-store or online)

Future winners will be published in upcoming newsletters and on our website. Don't forget to include your contact details (phone number, postal or email address) on the label accompanying your donated frame to ensure your chance of winning!

Remember, if you're going to catch and keep any of our species (**Mulloway, Snapper, Dusky Flathead, Yellowtail Kingfish, Tailor, Spotted or Spanish Mackerel**) for a feed, please fillet your fish and donate the frame, head or a single otolith to research –

WE NEED THE DATA FROM YOUR FISH!

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

The NSW Research Angler Program is part of the Resource Assessment & Monitoring Unit of the Fisheries NSW Research Branch and is generously funded by the NSW Saltwater Recreational Fishing Trust and the NSW Department of Primary Industries.

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