

NEWSLETTER NO. 5

NSW Research Angler Program

December 2014

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.

Notable donations from Spring 2014

Mulloway have a well-deserved reputation as one of the most challenging sportfish to catch on a regular basis in southern Australia. As all mulloway fishers know, targeting them successfully is no simple task and the only way to "crack the jewy code" and get consistent results, is to spend countless patient hours on the water meticulously recording catches, tides, moon phases, seasons, baits, lures, and a multitude of other factors. Of course, the other way target them successfully is to go fishing with someone who has already "cracked the code" for you! This is exactly what happened to novice mulloway fisher Marwan Nasr when he went out for a mulloway session on the Hawkesbury River with good mate and jewy specialist Louis Harb. After collecting fresh squid for bait, the boys set up at well-known mulloway hotspot Flint and Steel Point. They didn't have to wait long before Marwan's 30 lb test monofilament began peeling off the reel. After an epic 45 minute white-knuckle tussle with Louis providing expert tutelage throughout, Marwan guided a truly immense Hawkesbury mulloway boatside for landing. This extraordinary fish measured 147 cm and weighed 32 kg.



Now that's a mulloway! The vivid purple and bronze hues of a prime just-landed 147 cm, 32 kg Hawkesbury River mulloway caught on 30 lb monofilament by Marwan Nasr and Loius Harb on the 13th of November.





Above: The otolith section from Marwan Nasr's 25 year old mulloway with the growth rings used to estimate its impressive age clearly visible.

Left: Marwan proudly displays his fish-of-a-lifetime. At an estimated 25 years old, the 3rd oldest mulloway so far recorded in NSW!

And the surprises didn't end there, as upon closer inspection, the fish had a tag in it! Slightly discoloured by algal growth, tag #A585165 had been previously inserted below the dorsal spines of this fish on 25th of June by Sydney Sportfishing's Dan Selby and client Nathan Bradley and featured in the Winter 2014 NSW RAP Newsletter (www.dpi.nsw.gov.au/__data/assets/pdf_file/0013/520114/nsw-research-angler-program-newsletter-03-june2014.pdf). Dan and Nathan caught the fish on a live 40 cm tailor at another of the Hawkesbury's favourite mulloway honey holes, Juno Point, just 2 km away when it was 144 cm in length. In 141 days between tag and recapture, the fish had grown 3 cm; an impressive amount for such a large and potentially old fish. And fortunately for the NSW Research Angler Program, we got to find out just how old when Marwan generously donated one of the jewels from his incredible fish to research. Analysis of the otolith from the fish revealed it to be an extraordinary 25 years old making it the 3rd oldest mulloway so far recorded in NSW. An awesome result for Marwan and Louis and an awesome result for the NSW Research Angler Program, the information from this fish now makes a small, but extremely important, contribution to our knowledge of the mulloway stock in NSW.

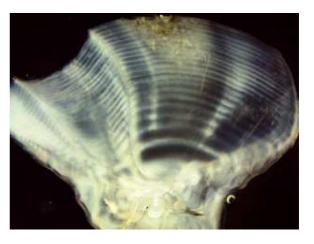
Believe it or not, we had an even larger mulloway donated to the program over spring! Gun mulloway-hunter Joel Edwards has tagged plenty of fish in Lake Macquarie in the past for the NSW RAP, but fishing in Newcastle Harbour recently, encountered something slightly larger. At 150 cm, Joel's mulloway was right up there with the largest fish donated to the program so far. And at an estimated 22 years old, it had an age to match its incredible size making it the (equal) sixth oldest mulloway to date recorded from NSW waters. Even more amazing was that Joel correctly predicted its age before a single cut was made!

Right: Joel Edwards with an enormous 150 cm of Newcastle mulloway which he correctly estimated to be 22 years old!





Big jewels: The jewels (or otoliths) from Joel Edwards' 150 cm Newcastle mulloway.



Old jewels: The otolith section from Joel's 22 year old mulloway.

Only slightly shorter than the previous pair of fish at 141 cm, but at a hefty 30 kg, Chris Cleaver's second donated mulloway in as many months from the Hawkesbury was a surprise. Not because it was caught using 10 lb braid and 12 lb leader, but because analysis of its otolith revealed it to be a surprisingly youthful 14 years of age. More details of a rather memorable day for Chris on the Hawkesbury can be found on the Fishing World website (www.fishingworld.com.au/news/report-new-boat-epic-jewies). One of the many reasons mulloway are such a popular target species is because they grow to extremely large sizes. And thanks to collection of data on recreationally-caught mulloway via the NSW RAP, it's clear that they reach these large sizes reasonably quickly, after which they just get older (and possibly more wily!).



Chris Cleaver with another enormous Hawkesbury mulloway at 141 cm and 30 kg (above) estimated to be a just 14 years old (right).



And just to demonstrate how impressively fast mulloway can grow, our final "notable capture" comes from Mid-North Coast Research Angler and spearo Mischka Luzius who shot an old-fashioned 60-pounder over spring near Coffs Harbour. No matter what technique you use, nailing a 135.5 cm mulloway is an impressive feat, only matched by the fish's average growth rate of almost 20 cm per year! At an estimated age of just 8 years, this fish was easily the largest 8 year old mulloway so far recorded in NSW waters.



Mischka Luzius proudly displaying 135.5 cm and 60 lbs of fast-growing Coffs Harbour mulloway.



The otolith section from Mischka's fish – the largest 8 year old NSW mulloway recorded to date.

Project Progress - Spring 2014

A total of 133 mulloway frames were donated to the program over spring by 51 dedicated research anglers and spearfishers. This made spring 2014 our most successful season so far for frame donations to the NSW RAP! This spring narrowly edged out the same time last year when 131 frames were donated, but back then the legal length was just 45 cm!

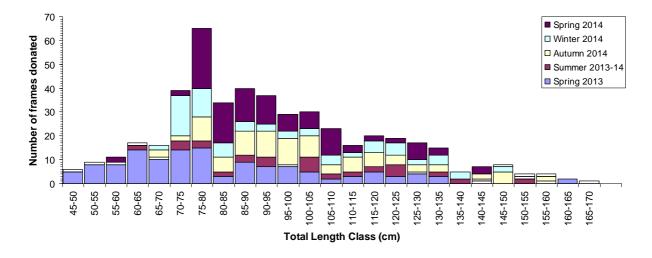
Whilst almost half (~47%) of the fish donated during spring were in the size range most commonly retained by recreational mulloway fishers (70-85 cm), we were once again fortunate enough to get info from plenty of bigger fish right up to an enormous 150 cm fish from Newcastle.

Frames or otoliths from 34 fish donated to the program over spring were from mulloway of greater than 1 metre in length, with 16 over 120 cm, six of these were larger than the 130 cm mark. These are the trophy fish which make mulloway such a popular target species for fishers in NSW and the NSW RAP is very fortunate to now have access to data from such important individuals.

A trophy mulloway being processed in the lab: Researchers collect data on the length of the fish (135.5 cm), its sex (female), reproductive stage (mature non-spawning) and by removing and analysing the otoliths, its age (8 years old).

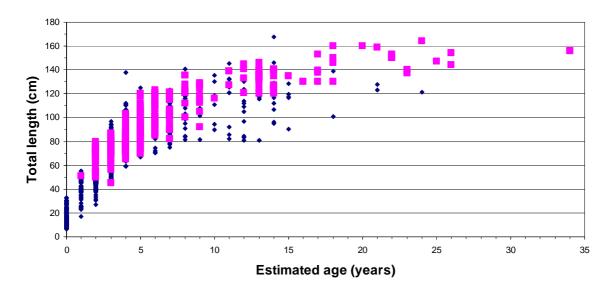


Length frequency of mulloway donated to the NSW Research Angler Program since the commencement of the program in September 2013.



As you can see clearly from the below graph of the ages and sizes of mulloway collected in NSW, since involving keen anglers and spearfishers in the collection of data on mulloway via the NSW RAP, the part of the graph featuring the oldest and largest individuals is now very well-populated with data points. Prior to the commencement of the NSW RAP in September 2013, Fisheries NSW had collected data from just ten mulloway estimated to be 15 years of age or older, and none older than 24. Our knowledge of the ages mulloway are capable of reaching in NSW now looks very different with thirty-six mulloway 15 years of age or older recorded in the year since the NSW RAP got underway. What will things look like this time next year?

Size-at-age data for mulloway in NSW: the blue points represent the data Fisheries NSW had for mulloway prior to the start of the program (mainly from commercial sources). The purple points represent data from recreationally-caught fish donated to the program since the commencement of the NSW RAP in September 2013.



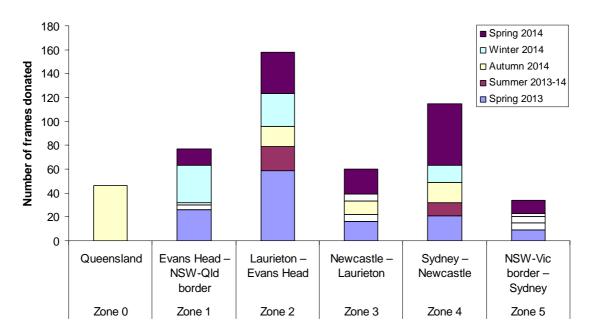
The graph below shows the number of mulloway frames donated to the program by recreational fishers to the end of November 2014. We aim to collect data from at least 300 frames from each of the sampling zones along the NSW coast by the end of September 2015. We have been well on track to reach this goal in Zone 2 (Laurieton – Evans Head) from the very start of the program and with a further 35 frames donated this spring, the keen anglers and spearfishers of Zone 2 continues to be our most consistent source of samples. Thanks to an amazingly productive spring in Lake Macquarie and surrounds, Zone 4 (Sydney -Newcastle) for the first time provided the highest number of frames (52) donated to the program. Spring donations from the other zones were all amongst the highest recorded in each zone capping off a memorable season for the program.

If you're going to be out chasing mulloway in summer, especially in the southern half of the state, please keep the program in mind if you do keep a fish - remember, even if it is only one frame, we want it!

Now that's a jewy jewel! The otolith from one of our spring donated mulloway and meticulously filled-out data label.



Number of mulloway frames donated by recreational fishers to the NSW Research Angler Program since the commencement of the program in September 2013.



Why not mail your jewels in to the NSW RAP?

Even though there are plenty of keen mulloway anglers and spearos out there passionate enough to want to help by 'doing their bit' for their favourite fish, sometimes getting the frame from a hard-won mulloway catch to one of our participating tackleshop drop-off points for donation to the program is far from a simple task. Not all fishers live in close proximity to a drop-off point, and even for those who do; just transporting the frame from a trophy mulloway can be a serious challenge!

For this reason, you can now post the jewels from your mulloway catches to us just as 54 of our donors did this past spring. Each time you catch a mulloway and would like to donate the invaluable information from your catch to research, 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 jewel 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!



"Keen Angler Diary" Component

The response from anglers to our request for voluntary "Keen Angler Diarists" has continued to be excellent and at last count we have 90 "expert" mulloway anglers measuring their catches and diligently recording data on their mulloway fishing activities in one of our Keen Angler Diaries.



All "Keen Angler Diarists" are provided with a small 20 page waterproof diary to record information from 200 mulloway fishing trips along with a custommade extra-long 160 cm NSW RAP fish measuring mat for you to accurately measure the lengths of the mulloway you catch. We are still seeking interest from recreational mulloway anglers in participating in this program so if you regularly chase mulloway and would like to contribute some crucial data on the recreational mulloway fishery, please contact us (T: 9435 4671, E: research.angler@dpi.nsw.gov.au) and we will send you out a Keen Angler Diary pack.

The 2014 Hawkesbury Classic



On November 16, the NSW Research Angler Program team attended the weighin of the 22nd annual Hawkesbury Classic at the Pitt Town Sport & Rec Club. The Hawkesbury River is the spiritual home of mulloway fishing in NSW and once again lived up to its reputation this year with our team measuring and removing otoliths from some fourteen fine mulloway between 71 and 121 cm caught over the 3 day event. Consistent performers Craig Williams (2013 Winner) and Trevor Coyte (2010 Runner-up) had fish for us to sample for the second year in succession. We also spoke with a lot of keen mulloway anglers on the day who we hope were convinced to donate to the program in the future!

Hawkesbury Classic weighmaster Warren Peck puts Daniel Pipitone's winning mulloway on the scales. Daniel's 121 cm fish was estimated to be 8 years old.

Many thanks to the Pitt Town Fishing Club for getting us involved in such a fantastic event and to all the competitors who let us collect data from their catches; you will all receive one of our personalised Research Feedback Certificates containing all the information we were able to get from your fish and how it fits in with our overall knowledge of mulloway in NSW.

The otoliths are removed from Aaron Perrin's 83.4 cm mulloway caught at the 2014 Hawkesbury Classic.



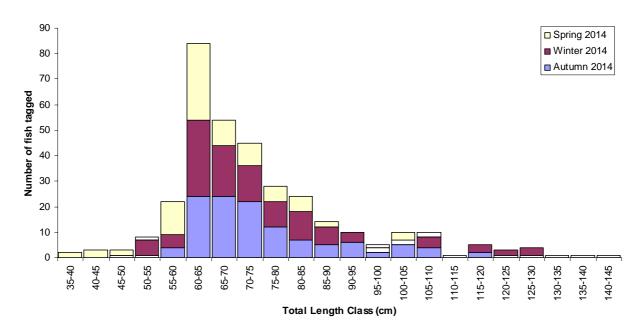
NSW RAP-ANSA pilot tagging project update

As of the end of November, a total of 338 mulloway have been tagged by NSW RAP-ANSA pilot mulloway project participants. Even though the number of fish tagged over spring (90) was only slightly down on the winter tally of 104, this is a remarkable effort given how challenging mulloway can be to target successfully on a regular basis. Mulloway's reputation for readily being able to be caught on lures (provided you know what you're doing!) is also revealed by these tagging results with 94% of tagged fish caught on lures with just 19 fish taken on bait.

In contrast to last season when most of our tagged mulloway came from the Sydney metro region, more than half of our tagged mulloway over spring came from north of Sydney. This, thanks in large part to an incredible 31 fish tagged by gun Mid-North Coast jewfishwhisperer Paul Blade in the area around Coffs Harbour alone. Paul was ably assisted by Kieran Hill who managed to tag eight fine fish

from the Hunter River and Lake Macquarie, and Mark Pirie, who tagged six fish in the challenging conditions of the Yamba breakwall. Not to be outdone, proven mulloway tag-a-holics Chris Cleaver and Dan Selby (and clients) still managed to tag a remarkable 18 and 19 fish respectively from heavily-fished waters within casting distance of Australia's most populous city.

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



More than half the fish tagged over spring were again in the just sub-legal 55-70 cm bracket – an ideal tagging size as these fish would have been released anyway - why not release them with a tag? Another five fish of over a metre in length were tagged through spring – two from each of Chris Cleaver (105 & 109 cm) and Dan Selby (103 & 104 cm) and one from Joel Edwards (104 cm) – bringing the total number of 'metre-plus' fish tagged since the start of the project to 36!

Four tagged mulloway were recaptured during spring 2014, including Marwan Nasr's amazing 147 cm 32 kg dinosaur mentioned earlier in the newsletter. Warwick Bagshaw fishing at the F3 Bridge on the Hawkesbury on October 1 caught a fine 77 cm mulloway only to discover one of our tags sticking out of its shoulder. Tag #A585362 had been inserted into this fish by Chris Cleaver some 76 days earlier only a couple of kilometres away near Brooklyn when just 74 cm in length. Another mulloway also tagged by Chris on the very same day in the very same place (#A585364) as the previous fish was also recaptured over spring, this time some 101 days later and slightly further up river at Bar Point.

Brothers in arms: Louis Harb with Marwan Nasr's 147 cm 32 kg Hawkesbury mulloway caught on November 13th with tag #A585165 (circled) just visible beneath the dorsal fin.



Dan Selby and proud Sydney Sportfishing client Nathan Bradlev with the same 25 year old fish after being tagged on 25th June when it was a mere 144 cm in length!



Also recaptured in spring was a 50 cm fish caught by Tom Salem at Bald Face Point on the Georges River on October 12. Interestingly, this fish hadn't put on any length or moved far from where tagged by George Armao in the middle Georges 128 days before on June 6. At 50 cm this fish is still out there - who knows how big or where it will be next time we see tagged mulloway #A585546?

Below: A small mulloway with a big appetite - 50 cm of fine little Georges River mulloway recaptured by Tom Salem some 4 months after being tagged by George Armao.



Right: A bigger mulloway with a taste for soft plastic - Joel Edwards releases 98.5 cm of prime lure-caught mulloway from Lake Macquarie at the end of October.



Top Five taggers for spring 2014 (as of 30 November 2014):

Tagger	No. fish tagged	Region
Paul Blade	31	Coffs Harbour
Dan Selby	19	Sydney
Chris Cleaver	18	Sydney
Kieran Hill	8	Hunter
Mark Pirie	6	Yamba

Top Five taggers overall (as of 30 November 2014):

Tagger	No. fish tagged	Region
Chris Cleaver	81	Sydney
Dan Selby	59	Sydney
Paul Blade	43	Coffs Harbour
George Armao	28	Sydney
Mark Pirie	14	Yamba

Top Five largest fish tagged for spring 2014 (as of 30 November 2014):

Tagger	Total length (cm)	System
Chris Cleaver	109	Georges River
Chris Cleaver	105	Georges River
Dan Selby	104	Hawkesbury River
Joel Edwards	104	Newcastle Harbour
Dan Selby	103	Hawkesbury River

Top Five largest fish tagged overall (as of 30 November 2014):

Tagger	Total length (cm)	System	Season
Dan Selby	144	Hawkesbury River	Autumn 2014
Mark Pirie	138	Clarence River	Autumn 2014
Dan Selby	132	Hawkesbury River	Winter 2014
Kris Hickson	129	Manning River	Autumn 2014
Kris Hickson	128	Manning River	Winter 2014

Next time you're out chasing mulloway, keep an eye out for one of our yellow NSW DPI tags. The tag may be discoloured or fouled by algae like this one found in a fish recaptured by Tom Salem.

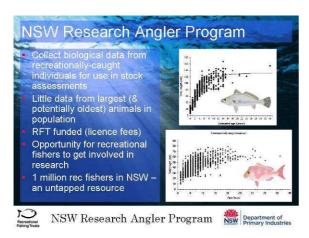


If you are fortunate enough to catch a tagged mulloway, please record the tag number, measure the length of the fish, and contact either the NSW DPI Gamefish Tagging Program (T: 4424 7411, E: gamefish.tagging@dpi.nsw.gov.au) or the NSW Research Angler Program (T: 9435 4671, E: research.angler@dpi.nsw.gov.au). 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 Summer 2015 **NSW RAP Newsletter!**

Once again, a very special thanks must go to ANSA NSW and in particular Stan Konstantaras and Chris Anagnostou, for managing this important and fascinating component of the NSW Research Angler Program.

NSW RAP fishing club presentations



Many thanks to Club Burwood RSL Fishing Club, who hosted a presentation by one of our researchers on October 13th.

An excellent turnout of enthusiastic anglers were on hand to hear about the program and we even managed to collect some otoliths donated by experienced mulloway angler and club member, Charlie Brincat.

If you are a member of a fishing club (spearfishing or angling) and are interested in having a presentation on the program made to your members, 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 fishing club enthusiastic about the program.

The "Top Fives"!

Our sincerest thanks to the following dedicated mulloway Research Anglers and spearfishers who have made it into our "Top Five" lists of frame donors overall and those for Spring 2014.

An amazing effort from first time donor Kyle Worley saw him top our list of donors for spring with a remarkable tally of 15 mulloway between 73 and 103 cm out of Lake Macquarie and off the ocean rocks nearby. Above and beyond, Kyle also managed to convinced fellow Lake Mac mulloway hunters James McEwan (6 fish) and Glen Price (3 fish) to also donate their fish to research meaning that Kyle donated himself, or had a hand in the donation, of an awesome 24 fish to the program over spring! Daniel Hughes was also in the thick of mulloway mayhem around Laurieton over spring donating 12 fine fish, and in doing so snuck into our overall "Top Five". Consistent producer and overall leading donor Paul Blade was again right up there with 14 fish between 72 and 97 cm from a secret Coffs Harbour location. Damien Sherry provided us with otoliths from 6 metro Sydney fish from the Lane Cove and Parramatta Rivers and James Sakker did his bit for the spearos by donating 5 fish, including a cracking 124.5 cm 18.3 kg fish from South West Rocks. A brilliant effort from all our dedicated Research Anglers over spring made it the most successful season for the program so far!

"Top Five" donors spring 2014 (as of 30 November 2014):

Donor	No. frames donated	Region
Kyle Worley	15	Lake Macquarie
Paul Blade	14	Coffs Harbour
Daniel Hughes	12	Laurieton
Damien Sherry	6	Sydney
James McEwan	6	Lake Macquarie
James Sakker	5	Coffs Harbour

"Top Five" donors overall (as of 30 November 2014):

Donor	No. frames donated	Region
Paul Blade	44	Coffs Harbour
James Sakker	23	Coffs Harbour
John St Vincent Welch	16	Evans Head
Kyle Worley	15	Lake Macquarie
Mark Pirie	13	Yamba
Daniel Hughes	13	Laurieton

Joel Edwards' 150 cm 22 year old Newcastle monster and Marwan Nasr's 147 cm 25 year old Hawkesbury beast not surprisingly topped our list of largest and oldest spring-donated mulloway, but these were far from the only trophy jewies donated to the program over spring. Don Stewart's 138 cm fish from Yamba topped the scales at an impressive 17 years old, John St Vincent Welch's 120 cm Evans Head fish came in at 13 and Mischka Luzius' 135.5 cm Coffs Harbour fish mentioned earlier in the newsletter a surprisingly young 8 years of age.

Last newsletter, we witnessed some surprising results with six of nine "Top Five" largest and oldest fish donated over winter all estimated to be 13 years old. Well, wouldn't you just know it, but it's happened again; with five of nine fish in the "Top Fives" this time estimated to be 14 years old! Once again, these 14 year old fish encompassed quite the range of sizes as well as coming from far-flung locations such as the Hawkesbury River (Chris Cleaver - 141 cm, Keith Kneebone - 135 cm), Port Stephens (Ben Doolan - 126 cm), South West Rocks (James Sakker – 124.5 cm) and a 127 cm fish caught at Yamba by an unknown donor. If the last 6 months is anything to go by, we may be in for more interesting patterns in summerdonated mulloway?!

"Top Five" largest fish donated and associated ages spring 2014 (as of 30 November 2014):

Donor	Total length (cm)	Estimated age (years)	Region
Joel Edwards	150	22	Newcastle
Marwan Nasr	147	25	Sydney
Chris Cleaver	141	14	Sydney
Don Stewart	138	17	Yamba
Mischka Luzius	135.5	8	Coffs Harbour
Keith Kneebone	135	14	Sydney

"Top Five" largest fish donated and associated ages overall (as of 30 November 2014):

Donor	Total length (cm)	Estimated age (years)	Region	Season
Adam Price	164	24	Sydney	Spring 2013
Keith Kneebone	160	20	Sydney	Autumn 2014
Mark McCabe	159	21	Sydney	Spring 2013
Vaughan Little	156	34	Shoalhaven	Spring 2013
Scott Robson	154	26	Newcastle	Summer 2013-14

"Top Five" oldest fish donated and associated lengths spring 2014 (as of 30 November 2014):

Donor	Estimated age (years)	Total length (cm)	Region
Marwan Nasr	25	147	Sydney
Joel Edwards	22	150	Newcastle
Don Stewart	17	138	Yamba
Chris Cleaver	14	141	Sydney
Keith Kneebone	14	135	Sydney
Unknown	14	127	Yamba
Ben Doolan	14	126	Port Stephens
James Sakker	14	124.5	South West Rocks
John St Vincent Welch	13	120	Evans Head

"Top Five" oldest fish donated and associated lengths overall (as of 30 November 2014):

Donor	Estimated age (years)	Total length (cm)	Region	Season
Vaughan Little	34	156	Shoalhaven	Spring 2013
Scott Robson	26	154	Newcastle	Summer 2013-14
Evan Leeson	26	144	Port Macquarie	Autumn 2014
Marwan Nasr	25	147	Sydney	Spring 2014
Adam Price	24	164	Sydney	Spring 2013
Robert Thorpe	23	137	Newcastle	Autumn 2014
Mark Pirie	23	140	Yamba	Autumn 2014

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 off drop-off locations for donated frames is changing regularly as more tackle retailers become involved in the program. For the full and up-to-date list of places where you can drop-off your frames, please visit:

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

Monthly Prize Draw Winners!

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

Congratulations to the following Research Anglers:

Glen Price September (Lake Macquarie) **Kyle Worley** October (Lake Macquarie) November **Daniel Pipitone** (Sydney)



Each winner will receive either:

- a \$50 gift voucher generously donated by MO Tackle Coffs Harbour (for use in-store or online),
- or a mulloway-ready lure pack worth \$50 containing a selection of proven hardbody, soft plastic and blade-style mulloway-catchers from Storm, Killalure, Berkley and Rupes.

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 a mulloway 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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