

# REEL TALK

## JUNE 2024



*Official newsletter of the Surf Casting and Angling Club of WA (Inc)*



Surf Casting and Angling Club of WA (Inc)  
 Reel Talk – June 2024 Contents

Cover picture – Kure Bay Barra.

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LIFE MEMBERS

Ian Cook  
 Mal Head

Peter Osborne  
 Terry Fuller

Bob Henderson

**Deceased life members**

Vic Davis  
 Noel Knight  
 Jim Strong

Doug Edward  
 Les Shand  
 Eric Parker

Lloyd Dunn  
 Ron Kildahl  
 George Holman

Dudley Brown  
 Bob Klein

# CLUB COMMITTEE

## September 2023 - August 2024

All club emails should be sent to [secretary@scac.net.au](mailto:secretary@scac.net.au) All correspondence by mail should be addressed to:

Secretary  
Surf Casting & Angling Club of WA (Inc.)  
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Marmion WA 6020

### EXECUTIVE COMMITTEEE

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**Secretary**

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### GENERAL COMMITTEE

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#### NON-COMMITTEE POSITIONS

**Website Co-Ordinator**

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**Membership Co-Ordinator**

*Currently Vacant*

**Reel Talk Editor**

John Curtis  
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[jcurtis@inet.net.au](mailto:jcurtis@inet.net.au)

**Social Events Organiser**

Sandra Wessels  
0408 125 651

# JUNE GENERAL MEETING

Wednesday 12th June, 2024

**Location: Croatian Club in Wishart Street, Gwelup**

Doors open no earlier than 6:45PM

Meal at 7.00PM with General Meeting at 8.00PM

Please RSVP to secretary for catering purposes by Noon On Sunday 9<sup>th</sup> June.

## **POSTPONEMENT OF PRESENTATION NIGHT**

Due to unforeseen circumstances the Committee has postponed the Annual Presentation Night to a later General Meeting to be held at the Croatian Club Wishart Street, Gwelup when arranged.

## June Birthdays



Helen Tomazin	9/6
Chris Stickells	11/6
David Wessels	15/6
Norm Vojdinoski	21/6
Jane Pekaar	24/6



# Competition Year May 2024 – April 30, 2025.

Field day dates for the 2024 / 2025 Competition Year have been set and Long Weekends have been noted

DATE	VENUE	BOUNDARIES
22, 23 & 24 June 2024	Rottnest & Open	North Mole to Yanchep
13 <sup>th</sup> & 14 <sup>th</sup> July 2024	Open	Mandurah to North Mole
3 <sup>rd</sup> , 4 <sup>th</sup> & 5 <sup>th</sup> August	Rottnest & Open	North Mole to Yanchep
21 <sup>st</sup> , 22 <sup>nd</sup> , & 23 <sup>rd</sup> September	Bowes River to Murchison River Mouth King's Birthday L W E	Mandurah to North Mole
October 12 <sup>th</sup> & 13 <sup>th</sup>	Yanchep to Moore River (incl Moore River)	North Mole to Yanchep
November 16 <sup>th</sup> & 17 <sup>th</sup>	Cape to Cape Location to be decided at General Meeting	Mandurah to North Mole
December 14 <sup>th</sup> & 15 <sup>th</sup>	Preston to Dawesville Cut Including Peel Estuary	North Mole to Yanchep
January 25 <sup>th</sup> 26 <sup>th</sup> & 27 <sup>th</sup>	S Bend to Dongara	Mandurah to South Mole
February 15 <sup>th</sup> & 16 <sup>th</sup>	Cervantes to Jurien Bay	North Mole to Yanchep
March 1 <sup>st</sup> 2 <sup>nd</sup> & 3 <sup>rd</sup>	Reef Beach to Bremer Bay L W E	Mandurah to North Mole
April 19 <sup>th</sup> 20 <sup>th</sup> & 21 <sup>st</sup>	Bluff Creek	North Mole to Yanchep

## Standard weekends

Lines down Saturday 0600  
Lines up Sunday 0900

## Long weekends and Rottnest

Lines down Saturday 0600  
Lines up Monday 0900

Note: The Fremantle Port Authority have closed the South Mole to vehicle access until further notice. This is due to illegal camping activities taking place. Go to [https://www.fremantleports.com.au/community-education/south-mole-community-consultation?mc\\_cid=e973c30635&mc\\_eid=1f5507d512](https://www.fremantleports.com.au/community-education/south-mole-community-consultation?mc_cid=e973c30635&mc_eid=1f5507d512) to make a submission before June 6<sup>th</sup>.

Go to [https://recfishwest.org.au/how-to-give-your-views-to-the-government-on-the-proposed-south-coast-marine-parks/?mc\\_cid=e973c30635&mc\\_eid=1f5507d512](https://recfishwest.org.au/how-to-give-your-views-to-the-government-on-the-proposed-south-coast-marine-parks/?mc_cid=e973c30635&mc_eid=1f5507d512) for Further information on making a submission.

# ROTTNEST FIELD DAYS 2024

The scheduled dates for club field days on Rottnest for 2024 are:

**June 22<sup>nd</sup> 23<sup>rd</sup> & 24<sup>th</sup> & August 3<sup>rd</sup> 4<sup>th</sup> & 5<sup>th</sup>**

The initial cost for each is \$170 per attendee, which includes accommodation, bus transportation, and ferry crates.

Note that this does not include your food, bait or transport costs to or from the island

Members can travel in a group to Rottnest or make their own way over.

For details of club and group arrangements and payment of a deposit please contact Peet Wessels.

There are still two spots available for June – See Peet Wessels for details.

# DRY CASTING

## MAY 2024 DRY CASTING REPORT

As I drove down West Swan Road, I noticed the mist rising off the dams and valleys. Switched over to the temperature gauge which stated 10 degrees, wound the window down and it was a biting wind. With assistance from Gary, we set up the distance course on quite damp grass, with the sun coming back to warm the area. The decision was made to do the distance events first.

Well, Gary fluffed his first cast and it was out in the trees, came back and reached 128 m, then did 109 m in the art bait, but good fortune was on my shoulder and I cast 136 m in the 112 g. Gary dominated the DHA event, and I got lucky in the SHA event with 27 points. Even Vince T got into the act and did some great scores in the DHA event (he might drift off now and then). A good sign, he is on a learning curve.

Next casting day is **Sunday 9<sup>th</sup> of June**, due to the long weekend on 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup>.

Bob Henderson, DCO

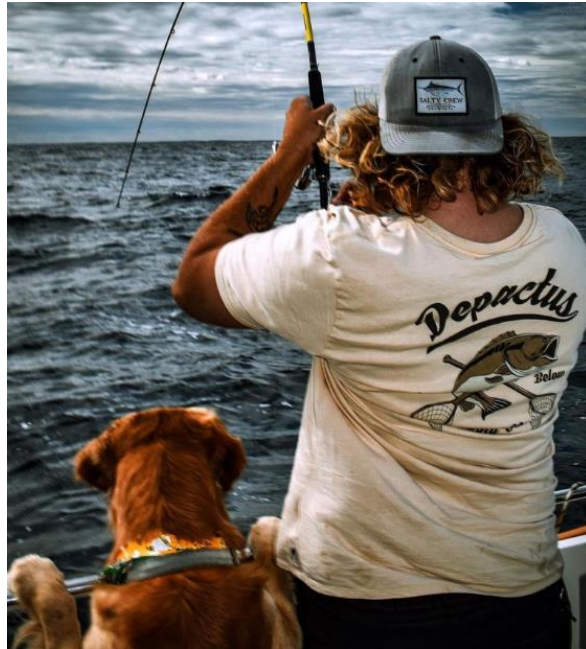
## Results

Name	DHA	H/C	SCORE	SHA	H/C	SCORE	TOTAL
Gary Gildersleeves	147	0	<b>147</b>	19	3	<b>22</b>	<b>169</b>
Bob Henderson	117	37	<b>154</b>	27	0	<b>27</b>	<b>181</b>
Mal Head	130	29	<b>159</b>	8	10	<b>18</b>	<b>178</b>
Mark Hansen	107	48	<b>154</b>	23	7	<b>30</b>	<b>184</b>
Vince Tomazin	96		<b>96</b>			<b>0</b>	<b>96</b>

NAME	56 g	H/C	SCORE	ART/BAIT	H/C	SCORE	112 g	H/C	SCORE	TOTAL
Gary	0	2	<b>0</b>	109.28	5	<b>114.28</b>	134.32	6	<b>140.32</b>	
	128.20	2	<b>130.20</b>	108.25	5	<b>113.25</b>	129.40	6	<b>135.40</b>	<b>802.45</b>
Bob	112.21	14	<b>126.21</b>	96.99	17	<b>113.99</b>	130.10	18	<b>148.10</b>	
	118.35	14	<b>142.56</b>	98.45	17	<b>115.45</b>	136.20	18	<b>154.20</b>	<b>979.51</b>
Mal	86.29	43	<b>129.29</b>	77.78	40	<b>117.78</b>	97.10	59	<b>156.10</b>	
	83.10	43	<b>126.10</b>	80.10	40	<b>120.10</b>	91.66	59	<b>150.66</b>	<b>978.03</b>
Mark	93.24	35	<b>128.24</b>	77.75	34	<b>111.75</b>	0	42	<b>0</b>	
	0	35	<b>0</b>	81.19	34	<b>115.19</b>	87.04	42	<b>129.04</b>	<b>668.22</b>
Vince T	49.61		<b>49.61</b>	57.16		<b>57.16</b>	62.68			
	54.43		<b>54.43</b>	52.34		<b>52.34</b>	58.12			<b>309.54</b>

Note: Vince has yet to have a handicap allocated.

**Overall, Winner with Handicap:** Bob Henderson with Mal Head a very close second 1.48 points behind.



'Whatchya got – Dad ? Is it a big one ?

### DO IT NOW

I expect to pass through this world but once,  
Any good thing therefore, that I can do, or any kindness that I can show to any fellow human being,  
Let me do it now. . .  
Let me not defer nor neglect it  
For I shall not pass this way again.

Stephen Guellet.

### SPICY BBQ FISH WITH MANGO SALAD



#### Ingredients

4 white flesh fillets (about 100g each)  
1 tsp ground cumin  
olive or canola oil spray  
1 avocado, peeled, seeded and diced  
juice of 1 lime  
lemon wedges, to serve

2 tsp ground coriander  
1 tsp ground turmeric  
100 g baby spinach leaves  
½ cup coriander leaves , chopped  
½ cup natural yoghurt  
2 mangoes, peeled and cut along core into two large cheeks

#### Method

Add the ground coriander, ground cumin and ground turmeric into a shallow dish and mix well. Add fish fillets and turn to coat. Preheat BBQ grill to high. Lightly spray mango cheeks with oil. Cook until lightly charred on each side and set aside. Lightly spray the fish fillets with oil. Barbecue for 3 - 4 minutes on each side until cooked through. For the salad, slice mango and combine in a bowl with spinach, avocado, coriander and lime juice. Serve fish with mango salad, yoghurt and lemon wedges.

## THE BLONDE'S GUIDE TO MEDICAL TERMS (AND THEIR MEANINGS)

ARTERY	The study of painting
BACTERIA	Back door to a cafeteria
BARIUM	What doctors do when treatments fail
BOWEL	A letter like A E I O or U
CAESARIAN SECTION	A district of Rome
CAT SCAN	Searching for the kitty
CAUTERISE	Made eye contact with her
COLIC	A sheep dog
COMA	A punctuation mark
CONGENITAL	Friendly
D & C	Where Washington is
DILATE	To live long
ENEMA	Not a friend
GENITAL	Not Jewish
GI SERIES	Soldier ball game
GRIPE	Suitcase
HANGNAIL	Coat hook
HIGH COLONIC	Jewish religious holiday
IMPOTENT	Distinguished, well known
LABOUR PAIN	Getting hurt at work
MEDICAL STAFF	A doctor's cane
MORBID	High offer
NITRATE	Cheaper than day rate
NODE	Well aware of
OUTPATIENT	Person who has fainted
PAPSMEAR	Fatherhood test
PELVIS	Cousin of Elvis
POSTOPERATIVE	Letter carrier
PROSTATE	Flat on your back
RECOVERY ROOM	Place to do upholstery
RECTUM	Damn near killed him
RHEUMATIC	Amorous
SECRETION	Hiding something
SEIZURE	Roman emperor
TABLET	A small table
TERMINAL ILLNESS	Getting sick at the airport
TIBIA	Country in North Africa
TUMOR	More than one
URINE	Opposite to "you're out"
VARICOSE	Near by
VEIN	Conceited



## A CURRENT AFFAIR: THE MOVEMENT OF OCEAN WATERS AROUND AUSTRALIA

Published: January 16, 2019

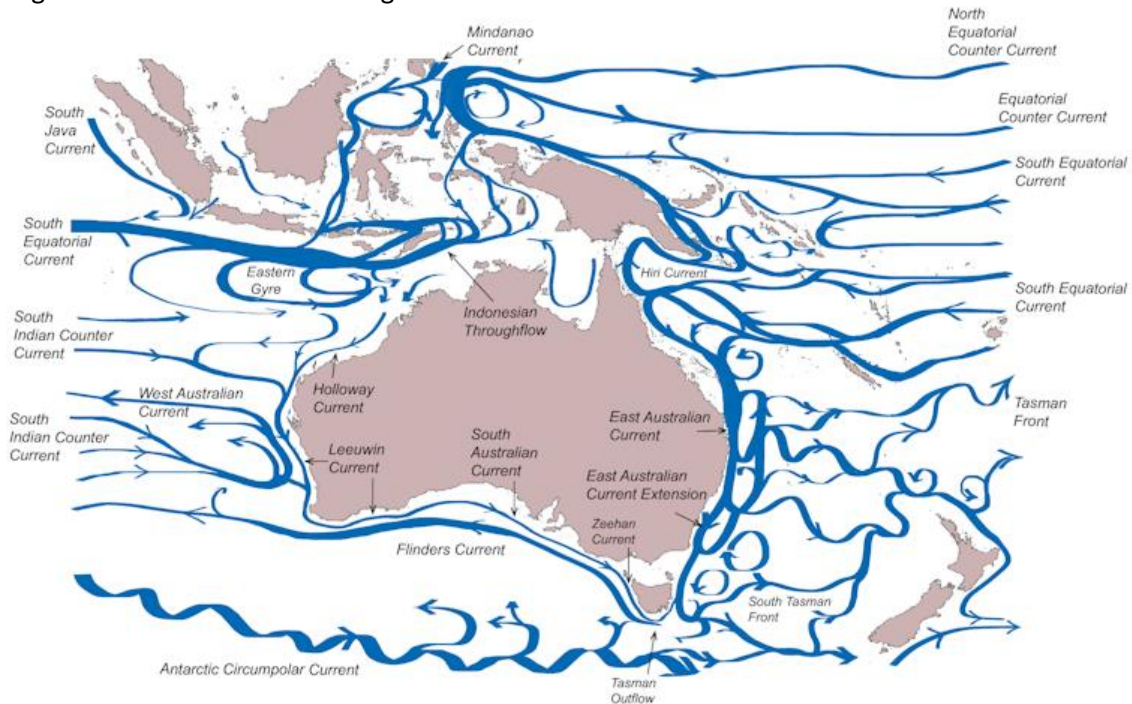
Authors:

[Charitha Pattiaratchi](#), Professor of Coastal Oceanography, The University of Western Australia

[Ems Wijeratne](#), Assistant Professor, UWA Oceans Institute, The University of Western Australia

[Roger Proctor](#), Director, Australian Ocean Data Network, University of Tasmania

Many people in Australia will head to the beach this summer and that'll most likely include a dip or a plunge into the sea. But have you ever wondered where those ocean waters come from, and what influence they may have? Australia is surrounded by ocean currents that have a strong controlling influence on things such as climate, ecosystems, fish migrations, the transport of ocean debris and on water quality. We did a study, published in 2018, that helps to give us a better understanding of those ocean currents.



Surface currents around the Australian continent.

Our 15 year simulation indicates that water from the Pacific Ocean enters the Indonesian Archipelago through the Mindanao current (north) and Halmahera Sea (south). It then enters the Indian ocean as the Indonesian Throughflow between many Indonesian Islands, with flow through the Timor Passage being the most dominant. Most of this water flows west as the South Equatorial Current. Re-circulation of the SEC creates the Eastern Gyre that contributes to the Holloway Current. This in turn feeds the Leeuwin Current – the longest boundary current in the world (Ocean currents that flow adjacent to a coastline are called boundary currents)

The Leeuwin Current is the major boundary current along the west coast and as it moves southward. Indian Ocean water is supplied by the South Indian Counter Current increasing the Leeuwin Current transport by 60%. The Leeuwin Current turns east at Cape Leeuwin, in Western Australia's south-west, and continues to Tasmania as the South Australian and Zeehan Currents.

There is a strong seasonal variation in the strength of the boundary currents in the Indian Ocean with a progression southwards of the peak transport along the coast.

The Holloway Current peaks in April/May (coinciding with changes in the monsoon winds), the Leeuwin Current reaches a maximum along the west and south coasts in June and August.

### Go with the flow: Pacific Ocean

In the Pacific Ocean, the northern branches of the South Equatorial Current are the main inputs initiating the Hiri Current and East Australian Current. At around latitude 15 degrees south the currents split in two: southward to form the East Australian Current, and northward to form the Hiri Current which contributes to a clockwise gyre in the Gulf of Papua. The East Australian Current is the dominant current in the region transporting 33 million cubic metres of water per second southward.

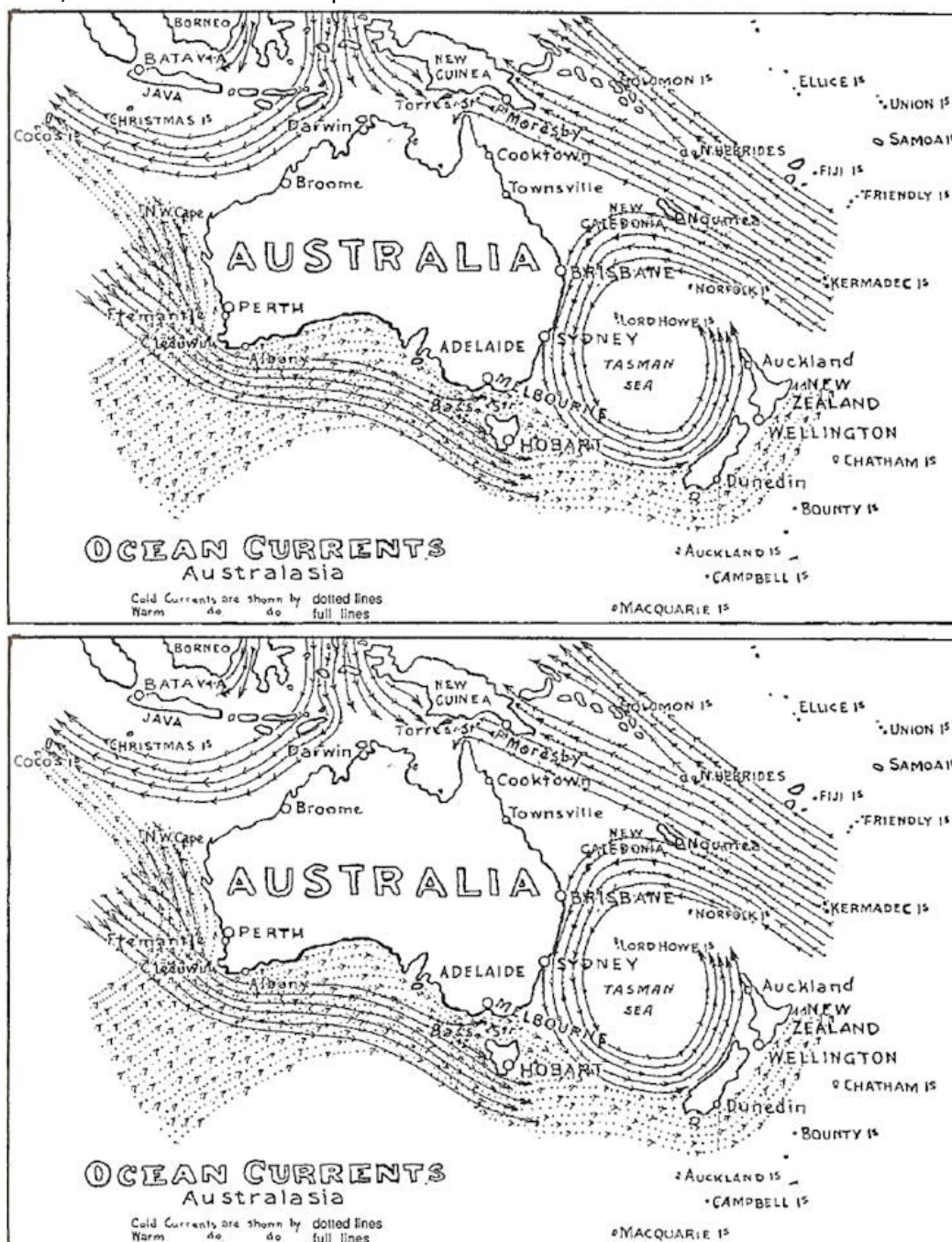
At around 32 S, the East Australian Current separates from the coast and 60% of the water flows eastward to New Zealand as the Tasman Front. The remaining 40% flows southward as the East Australian Current extension and contributes to the Tasman Outflow. The Tasman outflow is the major conduit of water from the Pacific to Indian Ocean and contributes to the Flinders Current, flowing westward from Tasmania and past Cape Leeuwin into the Indian Ocean.

Along the southern continental slope, the Flinders Current appears as an undercurrent beneath the Leeuwin Current and a surface current further offshore. The Flinders Current contributes to the Leeuwin Undercurrent directly as a northward flow, flowing to the north-west of Australia in water depths 300 metres to 800 metres.

**Impact of the currents**

Understanding ocean circulation is a fundamental tenet of physical oceanography and scientists have been charting the pathways of ocean currents since the American hydrographer Matthew Maury, one of the founders of oceanography, who first charted the Gulf Stream in 1855.

One of the first maps of circulation around Australia was by Halligan (1921) who showed the movement of “warm” and “cold” waters around Australia. Although some of the major features (such as the East Australian Current) were correctly identified, a more fine scale description is now available.



Ocean surface currents around Australia. [G H Halligan 1921](#),

The unique feature of ocean currents around Australia is that along both east and west coasts they transport warmer water southwards and influence the local climate, particularly air temperature and rainfall, as well as species distribution. For example, the south west of Australia is up to 5 C warmer in winter and receives more than double the rainfall compared to regions located on similar latitudes along western coastlines of other continents. Similarly many tropical species of fish are found in the southwest of Australia that hitch a ride on the ocean currents. The Pacific Ocean is the origin of waters around Australia with a direct link to the east and an indirect link to west.

Ocean water from the Pacific Ocean flows through the Indonesian Archipelago, a region subject to high solar heating and rainfall runoff, creating lower density water. This water, augmented by water from the Indian Ocean, flows around the western and southern coasts, converging along the southern coast of Tasmania. So next time you head for a dip in the coastal waters around Australian, spare a thought for where that water has come from and where it may be going next.

### SPICY SARDINE PASTA (or how to use your leftover bait)



Prep time 15 mins; Cook time 15 mins; Serves 4.

#### Ingredients

½ bunch flat-leaf parsley, leaves removed, finely chopped	1 tbsp baby capers, rinsed, chopped
2 tbsp extra virgin olive oil	400 g can diced tomatoes
400 g fettucine	330 g sardines in tomato sauce, roughly chopped
4 slices crusty bread (optional, to serve)	200 g salad greens (optional, to serve)
2 lemon, 1 rind finely grated and juiced, 1 cut into wedges	

#### Method

Cook pasta as per pack instructions in a large pan of boiling salted water until just tender.

Meanwhile, place parsley in a small bowl. Add the chopped capers and lemon rind and mix through until well combined.

Drain pasta and set aside. Heat tomato in the same pan for 4 minutes or until hot, adding hot sauce if desired. Add pasta, sardines, half of the parsley mixture, lemon juice and oil. Toss gently to combine. Serve sprinkled with remaining parsley mix and lemon wedges, green salad and crusty bread on the side.

### AUSTRALIAN SALMON



Australian salmon are a popular target species for surf and inshore anglers alike along Australia's southern coastlines. The name "salmon" is a misnomer, as these fish are not "true" salmonids (family Salmonidae), but instead they are members of the family Arripidae, a group of salmon-shaped fish which occur only in Australian and New Zealand waters. There are only four species in the family. The smallest member is the tommy ruff or Australian herring (*Arripis georgianus*).



Herring look somewhat similar to small Australian salmon but are easily distinguished by their rough scales, black tips on their tail and grey coloured pectoral fins. Small Australian salmon, on the other hand, have smooth scales and bright yellow pectoral fins. They also grow much larger than herring, which only reach around 40 cm in length, while Australian salmon can grow to over twice that length.

There are actually three species of "salmon" in our waters.

Adults of the Western Australian salmon (*Arripis truttaceus*) breed in the southern parts of WA, and their eggs and juveniles get dispersed into South Australia, Victoria and Tasmania by the Leeuwin Current. This species grows to around 80 cm fork length, but adult fish are rare in Victoria and the eastern parts of South Australia, as the adult fish tend to migrate west towards the spawning grounds as they grow. Tag returns have shown that once tagged, western salmon behave differently and tend not to migrate as much as uninjured fish.

The Eastern Australian salmon, or kahawai (*Arripis trutta*) is distinguished from the western species by having 33 to 40 gill rakers on the first gill arch, compared to only 25 to 31 for the western salmon. This species occurs in New South Wales, Victoria and Tasmania, also Lord Howe Island and New Zealand, while occasional schools also migrate as far north as South-East Queensland during some winters. Eastern salmon usually don't grow quite as large on average as the western species, topping out at around 75 cm fork length in New Zealand.

The granddaddy of them all is the northern or large tailed kahawai (*Arripis xylabion*). This species, which can reach around a metre long and over 10 kg in weight, is found only around Lord Howe, Norfolk and the Kermadec Islands, with occasional stragglers reaching northern New Zealand. As its name suggests, this species has a comparatively larger tail, which is longer than the length of the head.

All three species of Aussie salmon are highly visual feeders which eat a variety of crustaceans and polychaetes as juveniles, but shift to baitfish (mainly pilchards, sprats and anchovies) as adults. Their voracious feeding, often in large schools, sparked interest from scientists regarding how much they actually eat and whether they exert "top down" pressure on baitfish species lower in the food chain. After studying this subject for several years, scientists from NSW fisheries deduced that over the course of a year, Eastern Australian salmon ate an average daily ration of 0.9–1.4% of their body weight per day, which was lower than for other similar predators like tailor and the American striped bass which eat around 5-6% of their body weight per day on average.

Even so, over the course of a year this suggests that Australian salmon eat over four times their own body weight in smaller pelagic prey species (including pilchards, scads and other zooplanktivores which comprised around 93% of stomach contents). Assuming an eastern stock of 10,000 tonnes of salmon, this indicates they eat over 40,000 tonnes and possibly up to 50,000 tonnes of baitfish annually (depending on water temperatures), which was estimated at around 15% of the total spawning biomass of the small pelagic baitfish stock each year.

In turn, adult eastern salmon were preyed upon by several apex predators including seals, dolphins and sharks. Feeding salmon schools also migrate long distances and push baitfish up to the surface where they are accessed by seabirds, so all things considered, schools of Aussie salmon play an important ecological role in energy transfer amongst the upper levels of the pelagic food chain in our inshore ecosystems.

One other interesting fact about these fish is that there is evidence their diet has shifted markedly in recent decades. Historic studies from the 1950's and 60's found that adult eastern Australian salmon ate mainly krill and squids, species typically associated with cooler waters, but today their diet is dominated by small pelagic baitfish. The reason why is thought to stem from long term changes in the Eastern Australian Current driving warmer waters further and further south over the last few decades. Scientists consider this "multi-decadal southward penetration of the EAC" is one of the clearer signs of the current global warming trend and the shift in diet of Australian salmon is a biological record of this.

## FISHING IN THE PERTH METROPOLITAN AREA

(What to look for and what will you catch)

(A compilation of notes and articles)

Perth is blessed with some of the best beaches in the world. The fishing from these beaches is excellent and is available all the year round. Species likely to be encountered when beach fishing include skipjack trevally, tailor, herring, tarwhine, mullet, mulloway, flathead, small sharks, pike, snook, whiting, salmon and a host of less common species.

Several factors come into play when selecting a location to fish in the metropolitan area.

These include;

- time of year,
- time available,
- distance to travel,
- prevailing weather conditions,
- ability to read the beach to pick a fishing spot.

### **So where do we start?**

Many anglers these days are hung up on travelling to fish remote locations and rarely take the time to look in our local waters for what can be rewarding and memorable species.

While these days I would love to go to the Top End, the Kimberley and the Pilbara and chase any number of fish, I have found over the last twenty years that my local waters have been fairly productive and I don't have to travel far to satisfy my fishing needs. Not only does fishing closer to home save you money, the short trip means more time fishing.

### **The fruits of a little research.**

These notes will give a run down about how to check out your local area in more detail and use methods to improve your fishing in these local spots. Results will take time but if you put in the time and effort you will be rewarded as many locations hold an abundance of decent fish. All you need to do is just look deeper below the surface and spend a few lazy afternoons on the water to extract them.

### **Do the time, do the research.**

No one can expect to rock up to a location, throw in a line and bring in heaps of fish. Yes, there can be pot luck but most anglers these days will do a fair amount bit research prior to fishing an area and spend time fishing the same location over and over until they know and where and when a site produces.

Local knowledge is gold so talk to people in your area, friends, locals, neighbours, and tackle shop owners to get more info about your local river, beach or estuary.

More often than not, you have to put in the time yourself and fish those new spots that you often overlooked, until you crack the code. This may produce many a dud trip or yield little return but then one day it will all come together. I've never really given it much thought as I always thought of it more as being over fished and not very reliable as a location. There are plenty of locations, with shallow bays and the river is mostly fairly wide, reasonably deep in some areas and often a bit murky due to tannin staining from tea trees in the upper reaches.

### **The fruits of a little research.**

I have spent some time fishing different sections and locations, wading and fishing from the shore.

I have been able to focus my trips on the best times to fish; often on a rapidly rising barometer on those afternoons where the breeze is in a little late and my results greatly improved.

**(Tip:** - plan a trip when the barometer is rising).

Fishing during the "right" weather patterns can make all the difference. A steady rising or rapidly dropping barometer has worked best for me. Tides also play a big part; ever noticed when fish come on the bite for no apparent reason, even way up the top end of a tidal river 30 km inland? I focused my most of my fishing two hours before the top of the tide or the bottom and two hours after the slack.

### **Record the tides, catches and barometer.**

This goes without saying. You could come back to the same location, and get very different results if the conditions have changed. I had been storing this knowledge for many years in a fishing diary, and it has become invaluable.

Recording your catch, the location and conditions is reference point. There are also heaps of apps that can do this. On one particular day I caught a dozen 45 cm+ flathead in the space of a few hours. The tide was incoming on a mid-morning, it then peaked and as it dropped I got most of my fish on the dropping tide. So I now fish this spot at the same tide for similar results.

It is easy to maintain a fishing log, just a few lines on the computer, or in a notepad is all you need for valuable reference info for future trips. History and knowledge of a spot allows you to achieve consistent results.

**Put in the time and they will come - fishing during the "right" conditions i.e. usually a rising barometer, often helps.**

With the local knowledge from other anglers, I would wander blindly into a spot, get mixed results and probably never want to go back. So I applied the principle of a rising barometer closer to home and the results came. Even a variation of few HPa on the barometer can make all the difference to get fish.

### **Concentrate on an area**

If you concentrate on one or two areas long enough, you will eventually learn to fish it when it produces. I have a spot in the metropolitan area that is near where I used to live. I walked from home to fish it regularly after work during summer. It wasn't until I spent a few longer concentrated sessions in the same spot that I worked out how it worked fish wise, with barometer, tide, swell etc., and the spot revealed the best times to target fish. Rather than fishing all over the place looking for fish, I focused my efforts on a particular area and worked it over a number of times. Once again the theory of concentrating efforts on one spot produced consistent results. Now forty years later I can still go back and fish that spot and get fish.

### **Changing tactics**

You just have to be willing to mix it up. If you don't get results first go, try all the different parts of the water column to entice a strike. Fishing close to home I now can produce a few good fish a trip, put a smile on my face and be home in time for dinner.

### **Fish different times of the day**

One tactic I have tried is to try fishing different times of the day. I've always been a dawn warrior, but recently I've been fishing the afternoon due to the summer heat and because I wanted to fish into the night.

It's not the quantity of time-spent fishing but the quality, so more often I fish at 5 pm till 7 - 8 pm into dusk during summer. High tide on dusk has been a very productive time on the salt water as in the fresh. It is amazing on dusk how much surface activity there is. Picking the optimal time and tide when fish are feeding or on the move will increase results.

### **Change tactics, lure types, line.**

One thing I have changed is line strength. I was using 15 lb braid for everything. I have now dropped down to 6 lb, which has helped control smaller lures and baits when casting and increase catch rates on lighter line.

One problem with people starting out in fishing is that they use too high a line strength for what they are trying to catch. i.e. 10 kg for whiting? When was the last time you landed a 10 kg whiting? Don't believe the "fishing guru's" on television, they are being paid / sponsored to sell a product.

For most estuarine and near inshore species 4 - 6 kg line should be the maximum. If you find a spot isn't producing after 15 - 20 minutes of casting and you know fish should be in the region, move to the next spot.

### **Summary**

So the next time you drive to work past that spot near home or work, take a rod and have a few casts. Try talking to some people in the local area or take a closer look by walking the area. This way you will see things and notice things that you have not noticed before. Spend the time around a few spots to learn when it produces fish. This will all take time but I guarantee it will be worthwhile. I don't know any confident angler who just walks up to a spot and pulls fish.

Most importantly, take what you need for a feed and practice catch and release. I like nothing better than coming back to a spot knowing I released a fish there not so long ago and find it's challenging me to catch it again.

### **THAI FISH CAKES WITH CRUNCHY SALAD**



### **Ingredients**

400 g firm white boneless fish fillet, roughly chopped  
4 stems fresh coriander, roots discarded  
1 tbsp lemon or lime juice

1 clove garlic, peeled and quartered  
1 tbsp red curry paste  
1 egg



150 g green beans, trimmed, cut into 1 cm rounds  
olive or canola oil spray, to serve  
½ small red capsicum, seeded and sliced into strips  
1 cup coriander stalks and leaves, chopped, extra  
1 red chilli, seeded and thinly sliced (optional)  
1 ½ tbs sweet chilli sauce  
1 continental or 2 large Lebanese cucumber, halved lengthways

½ small red capsicum, seeded and diced  
lemon or lime wedges  
2 cups bean sprouts  
½ cup mint leaves, torn  
1 tbs lemon or lime juice, extra  
1 tsp fish sauce

### Method

Place fish, garlic, coriander, curry paste, juice and egg into a blender or food processor. Process until the mixture is well combined and is a smooth paste consistency. Transfer to a large bowl with diced red capsicum and the green beans. Mix until well combined.

With damp hands, using 2 tablespoons of mixture at a time, shape mixture into 12 balls. Flatten into 1 cm thick patties. Spray a large non-stick frypan with oil and place over medium heat. Place 6 fish cakes evenly around the pan. Cook for 3 - 4 minutes then flip and brown on reverse side for a further 2 - 3 minutes until cooked through. Transfer to a plate and repeat with remaining mixture.

Begin to prepare salad by adding remaining ½ red capsicum, thinly sliced, to a large bowl. Using a teaspoon, discard seeds from cucumber. Slice thinly on the diagonal and add to capsicum along with bean sprouts, extra coriander, mint and chilli.

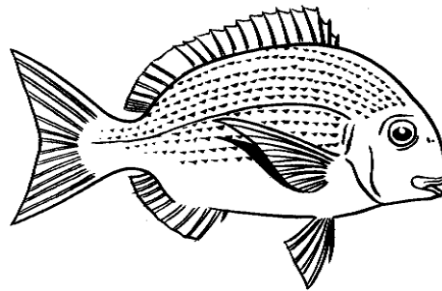
To make the dressing, combine extra juice, sweet chilli and fish sauce in a cup and pour over salad just before serving.

Divide fish cakes and salad among serving plates. Serve with lemon or lime wedges, if desired.

### Hint

Fish cakes can be steamed in the microwave rather than browned in a pan. Place fish cakes around the outer edge of a large microwave-safe plate lined with non-stick baking paper. Cook, uncovered, on MEDIUM (50%) for 12-15 minutes or until firm and cooked through.

### TARWHINE



Sometimes, just sometimes, tarwhine can be a pest if they are small and numerous. But if they are getting up towards a kilo in weight, they can provide great fun and can be feisty critters indeed when hooked on light gear. Anglers fishing from a dinghy in quite shallow water can often do well dropping a whitebait or blue sardine down near some likely looking rocky inshore reef. They tend to lurk where shore anglers would be dissuaded from casting for fear of losing their gear – whereas dinghy anglers can simply lower their bait right on the spot with little risk of snagging the bottom.

The West Coast and Gascoyne Region daily bag limits of 16 fish appear somewhat generous given that tarwhine are not the finest table fish as they can be quite soft when cooked. *Rhabdosargus sarba* is thought to have an Indo-West Pacific distribution although West Australian researchers have raised some doubts about this. Tarwhine are still commonly referred to in WA as silver bream.

### Identification

At first glance inexperienced anglers can mistake tarwhine for yellowfin or black bream, but the best way to tell the difference is that tarwhine have 6-7 rows of scales above the lateral line and yellowfin and black bream have four. Tarwhine generally have a silvery body with rows of yellow dots forming longitudinal stripes. Another identifying

feature is the forehead on tarwhine, which is convex, while in yellowfin and black bream the forehead tends to be flat or even slightly concave.

### **Size**

Although the Australian Museum shows tarwhine growing to a very healthy 1.4 kilos and 45 cm in length, some records even show the largest tarwhine at a massive 2.44 kilos and 52 cm in length. Most anglers would be delighted with a fish of over a kilo, but tarwhine would mostly be encountered at something closer to half a kilo in weight, and sadly many are much smaller than that

### **Distribution**

Tarwhine can be found in estuaries, along surf beaches and on inshore reefs up to 35 metres in depth, from Albany through to Coral Bay.

### **Breeding and migration**

Tarwhine are pelagic spawners and spawning occurs from July to November in estuaries and inshore waters. In the Swan River spawning occurs in the deeper sections of the river, generally during strong ebb tides and times of high salinity, which carry the eggs downstream to the ocean. These tarwhine do not re-enter the estuary until they are at least one year old.

Tarwhine have been shown to undergo size-related movements, starting off by settling in sheltered, sandy surf shorelines. From there they move progressively to nearby seagrass beds and then to exposed sandy surf shorelines and finally they move out to areas around inshore reefs where ocean spawning occurs. Small crustaceans comprise most of a tarwhine's diet, but as they get older they change their diet to become herbivorous.

Interestingly in the lower reaches of the Swan River, and in Shark Bay, the length at which half of the fish reach maturity is approximately 180 mm. However, in coastal marine waters near Perth, the overall size at maturity is 230 mm. In the marine environment, tarwhine attain maturity once they move to the inshore reefs, where during the spawning season tarwhine only 180 mm long were mature. Conversely in the shallow shoreline waters, fish up to 250 mm were not mature! As you can imagine, this might have important management implications, because it effectively means that all tarwhine caught on sandy surf beaches (but not those with reefs) are immature. Tarwhine have been recorded as attaining a maximum age of 13 years.

At Murdoch University a study by Dr Alex Hesp showed that, in WA, tarwhine were unquestionably a rudimentary hermaphrodite. That is, a fish that starts life with indeterminate sex (they contain gonads with both female and male tissue). With increasing size/age, the fish become either females or males (no sex change). However, this species has been clearly shown to be a protandrous hermaphrodite in Hong Kong, which means fish start life as males and change sex to become females.

The study in South Africa on this species also came to the conclusion that it is a protandrous hermaphrodite (but that not all individuals change sex). This raised the question as to whether tarwhine (*Rhabdosargus sarba*) in WA were the same as elsewhere.

### **Threats**

Over-fishing does not seem to pose a threat at this time, but environmental issues with the associated decline in water quality and water flows in all of our southern estuaries could become a problem.

### **Tackle and bait**

Tarwhine should be targeted using light tackle, if the best sport is to be had. A medium spin outfit loaded with 6 - 8 kilo line would be fine. A longish rod of around three metres is useful in order to keep the line above the shore break and to provide the best control when a fish is hooked.

Terminal tackle can also be as simple as a couple of metres of 10 kilo mono trace with a running ball sinker down to a small set of gang hooks for whitebait and blue sardines, or a long shank single hook for prawns. Small strip baits can also work well for tarwhine at times.

In stronger surf locations, where a larger sinker is required, the best terminal gear is a single dropper loop rig.

### **Fishing methods**

In some locations tarwhine like a rising tide as it tends to provide them with the feeding opportunities that they are looking for as the tide washes over shallow reefs and gutters. Some white water over the reef structure also improves your chance of finding a tarwhine. In other locations low tides can provide the opportunity to fish reef holes and ledges that are not readily accessible at high tide.

Southern surf beaches also turn up their fair share of decent size tarwhine and they can be found feeding in gutters, especially at night. Indeed, early morning and evening are generally the best time to catch tarwhine. A long cast is generally not required when targeting tarwhine, as many good fish can be found very close to the beach. Use a series of well-placed casts to explore a particular location and if nothing is found move on to the next likely looking spot. Travelling light and walking the beach is the best way to fish for tarwhine.

When beach fishing think like a fish and try to place your bait in a natural fish highway, like sandy gutters and holes adjacent to any reef structure. If there is no reef visible then concentrate on fishing the beach holes and gutters.

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“You Must Learn From The Mistakes Of Others

You Can’t Possibly Live Long Enough To Make Them All Yourself.”

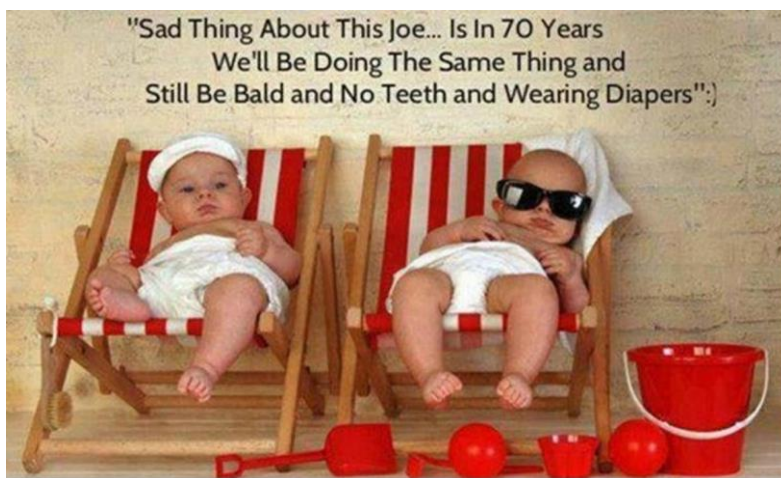
Sam Lavenson

### THOUGHTS

The early bird gets the worm, but the second mouse gets the cheese

I love defenceless animals, especially in a good gravy.

Support bacteria - they're the only culture some people have.



### THAI STYLE SOUR ORANGE CURRY OF YELLOWTAIL SCAD AND BROCCOLINI



Boiled curries such as this are often sold in the markets of Thailand; they are among the oldest and simplest of Thai curries and are usually made with seafood. An oily fish complements the tartness of this sour orange curry and, as the fish is broken up to thicken the curry, an inexpensive fish like Yellowtail Scad is ideal. It is meant to be hot and sour, but if you like a little less heat, seed the chillies before chopping them.

Prep 15 Mins; Cook 10 Mins; Serves 4

#### Ingredients:

2 cups chicken stock

½ cup tamarind liquid (see notes)

125 g cherry tomatoes, halved

2 tablespoons fish sauce, more or less, to taste

Steamed jasmine rice, to serve

½ tablespoon palm sugar

200g Yellowtail Scad fillets, skin off, bones removed

1 stalk broccolini, cut into florets, stem sliced

1 lime, juiced

### Sour Orange Curry Paste

5 red shallots, roughly chopped (see notes)

10 small red chillies, roughly chopped

1 teaspoon gapi (see notes)

2 cm piece ginger, peeled, roughly chopped

Salt flakes, to taste

#### **Method:**

Make Curry Paste: Process all ingredients in a blender or food processor, adding a little water or stock if necessary to form a smooth paste.

Place stock in a saucepan and bring to the boil. Reduce heat, add Curry Paste, palm sugar and most of the tamarind liquid and stir until paste dissolves. Add fish, tomatoes and broccolini and simmer until fish is cooked, stirring regularly to break it up. Taste and add fish sauce, lime juice and more tamarind liquid if needed.

Serve with steamed rice.

#### **Notes:**

Dried tamarind pulp is sold in blocks at Asian grocery stores. To make tamarind liquid, work 3 tablespoons of tamarind pulp into  $\frac{3}{4}$  cup of warm water then strain through a fine sieve, pressing down to remove as much tamarind as possible.

If red shallots are unavailable, use 2 large golden shallots or 1 small red onion.

Gapi, Thai shrimp paste, is available from Asian grocers.

#### **Alternative Species:**

Australian Herring, Australian Sardines, Jack Mackerel, Mullet.

### **BRAID VS MONO: WHICH IS THE BETTER FISHING LINE?**

It has become one of the longest on-going debates between anglers for some time now – which is better, monofilament or braided fishing line?

Depending on who you talk to, the answer to this question can vary greatly. Some, typically veteran anglers, swear by their tried and tested monofilament fishing lines, mainly because they have been using them for as long as they have been fishing.

Conversely, a large number of anglers believe that the newer braided lines are un-rivalled thanks to the various advantages they can provide over mono lines (as will be discussed here). Then you have others who see the merits of both and use each type of line depending on the kind of fishing they are doing.

This just goes to prove that there are notable benefits to each and that you really can't go wrong using either of them – it often just comes down to personal preference or particular fishing conditions. But let's look at the particular pros and cons of each and why anglers might prefer one over the other.

#### **Deciding Which Fishing Line to Use**

One of the biggest attractions to mono lines is the fact they are much easier to tie and cut. That means beginners can learn the basics of knot tying with a mono fishing line and find it will serve them well, making tying tackle and line knots that bit simpler.

Mono also provide better knot reliability than braids because they are more likely to stretch than break on a sudden, heavy hit and are especially preferred for that reason when live-bait fishing, trolling and balloon fishing.

Speaking of knots, we have all created unwanted knots in the course of our fishing lives. Here, too, monofilament has an advantage, as working out a knot is not usually a much of a headache.

The same cannot be said for braided lines however. This can be attributed to their thinness as well as the woven fibre materials from which they are made, requiring all manner of specialized knots to be learned, which can obviously be rather time-consuming.

Not only that, but accidentally knot up a braided line, whether through wind knots while casting with a reel that has too much line on it or through some other mistake, and you'll pay for it by spending valuable time untangling multiple knots while you watch from the sidelines as your buddies are hooking into fish.

Also, many sportfishermen also believe that monofilament line is a better choice for use in crystal-clear water as it provides better “invisibility” for certain species such as snapper, bonefish and permit fish that are able to pick up on the line. Of course, the visibility/invisibility of your fishing line will also have a lot to do with other factors such as the colour of your line and water depth in addition to the condition of the water.

If you’re going to fish with braid, ensure you also use a good fluorocarbon leader, for maximum stealth, especially when fishing for species that are skittish. Fluorocarbons also make it safer to handle the end of your line than braid, which can easily slice your fingers.

But as far as I’m concerned, the benefits of using braided line far outweigh some of its drawbacks. Perhaps the main advantages of braids are their strength, thinner diameter, and line sensitivity. Simply put, this allows more high-strength line to be packed onto the reel, provides more distance for casting than mono out on the beach, rocks or river flats, and lets you feel the bite better.

The lack of stretch and the sensitivity that they offer is particularly useful when throwing lures and jigs, jigging or fishing deep water/bottom fishing, and ability to pack on more and heavier- test line on the reel is especially advantageous for the angler battling drag-smoking brutes like, yellowtail kingfish and the like.

In addition, braided line tends to offer better durability (with the exception of abrasion around rocks and other sharp structure) when compared to monofilament, resulting in a line that lasts much longer. Mono tends to deteriorate faster than braid, especially in saltwater, though there are many who will tell you the opposite is true.

### Is Braid Worth the Cost

Because of the production costs involved in making a line that has a superior strength-to-diameter ratio while providing zero-stretch and improved casting distance, the higher costs of braided lines are justifiable, many contend. But they cost a lot more than monofilament line yard for yard, and the higher price is regularly cited as one of the biggest drawbacks whenever debating the pros and cons of braided fishing line.

With that being said, the price of regularly replacing mono, particularly if it seems you are constantly going through it quickly, may end up making the cost of using braid roughly the same, or possibly cheaper, in the long run.

To determine which ultimately offers the better cost value – if that’s a concern – it might be worth it test out braided line against monofilament to see how long each lasts you,

Many anglers are also divided over braid’s zero-stretch aspect. While many feel that this is great for added sensitivity and a firmer hook-set, others feel that this lack of line stretch, like you would get with mono, results in more instances of the hook being ripped out of the fish’s mouth.

However, those who love braid will tell you there’s also nothing like it for setting a hook on a fish that is quite a distance way or for pulling one away from structure fast.

Line twisting is also generally easier to avoid with braided lines. This is due to this line type having low memory; but many anglers who use mono use a loop for casting to ensure there is no line twist, so it all depends on personal preferences for the most part.

### Final Thoughts on Braid vs Mono

As you can see, there are certainly merits to using either. Both braided and monofilament lines have their strengths and weaknesses, and many anglers prefer one over the other for any number of reasons. Yet, there is also a growing percentage of anglers who see the benefits that each one can offer and therefore use both to cover a wide spectrum of angling needs!

## CREAMY GARLIC MUSSELS

Prep time: 10 min, Cook time: 20 min, Serves: 4

### Ingredients

1 tbs olive oil	1 medium red onion, finely chopped
4 cloves fresh garlic, thinly sliced	1 individual celery sticks, finely chopped
2 kg mussels, scrubbed, de-bearded	1½ cups sparkling apple juice
⅓ cup fresh dill, coarsely chopped	½ cup light thickened cream
4 slice sourdough bread	

### Method:

Heat oil in a large saucepan over medium heat. Add onion, celery and garlic and cook, stirring, for 5 minutes or until softened. Increase heat to high. Add apple juice and bring to the boil. Remove any

remaining beards from mussels. Add mussels to saucepan and cover tightly. Cook for 5 minutes or until mussels open (discard any that stay closed). Using a slotted spoon, transfer mussels to a serving bowl and cover to keep warm. Bring cooking liquid to the boil. Boil for 3 - 4 minutes or until reduced by one-third. Add cream and dill and stir until heated through. Divide mussels among serving bowls and pour over sauce. Serve with bread and green salad.

### OYSTERS WITH LEMON-LIME HOLLANDAISE

#### Ingredients:

oven-roasted capsicum	one dozen fresh asparagus spears
fresh sage leaves	rocket leaves for garnish
one dozen oysters	lemon-lime hollandaise

#### Lemon-Lime Hollandaise

Makes about 300 mL

3 egg yolks	zest of one lime, finely grated.
juice of one lemon and one lime.	6 - 8 coriander seeds
150 ml of light olive oil.	1 tbs warm water.
sea salt and freshly ground white pepper	

#### Method:

Create a bed for the oysters with the rocket and herbs, spoon a little of the hollandaise into each oyster shell, and garnish with capsicum and asparagus.

Put the egg yolks, zest, juice, coriander seeds and 1 tbs warm water into a heatproof bowl and set over a pan of simmering water. Whisk with a balloon whisk until the mixture is pale and creamy and falls in a slow ribbon. Remove the bowl from the heat and whisk for a further three minutes until the mixture has cooled slightly. Whisk in 1 tbs of olive oil, then gradually whisk in the rest in a thin steady stream until it is all incorporated and the sauce is a good coating consistency. Season with salt and pepper to taste and add a little extra juice if needed. If the sauce is a little too thick, whisk in a tiny splash of warm water. Keep warm in a bain-marie (or a bowl over hot water) until ready to serve.

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### B B Q Squid With Lemon And Herb Dressing.

#### Ingredients:

1 kg squid tubes (cleaned and cut in to rings)	Juice of 1 lemon
3 cloves of garlic (crushed)	125 mL of good olive oil
1 small red chilli (seeded and chopped fine)	

#### Dressing

juice of 1 lemon	100 mL olive oil
1 tablespoon parsley (finely chopped)	1 clove garlic (crushed)
2 teaspoons Dijon mustard	Salt and pepper to taste

#### Method

In a large bowl add ingredients for marinade and mix well. Add squid, cover and refrigerate for approximately 3 hours or longer if time permits. Meanwhile to make dressing add all ingredients and whisk until dressing thickens slightly. Heat barbeque and on a well-oiled plate fry squid for 2-3 minutes at approximately 180° C or until squid is cooked.



## WHAT'S IN A NAME?

The names of fishes can cause considerable consternation amongst anglers, commercial fishermen and scientists alike. As any travelling fisherman would know, the common name for the same species of fish can change drastically between geographic locations. Take the small tunas and mackerels, for example. A spotted mackerel can be called a snook, doggie mackerel or spotty depending on the regional dialect. A bonito (or bonita) in northern Queensland can be a mackerel tuna (or is that a horse mackerel or little tuna?) or a striped or skipjack tuna elsewhere. The freshwater yellow belly changes its name to a callop when it swims down the Murray into South Australia. Cross international boundaries and the name game becomes even more mystifying. A tailor here is a bluefish in the US is an elf in South Africa is a tassergal in West Africa. The common names can even appear as antonyms, as is the case for the black marlin. A simple enough name, except that the Japanese name for the same fish is Shirokajiki, which literally means white marlin.

The list of confusing common names of fishes is of course practically endless, but these examples serve to show that somewhere along the line, it is important for some consensus to exist as to the proper name of a given species, so that everyone can be in some agreement regarding which fish is under discussion, or under the microscope. In the United States, attempts have been made to standardise the common names of fish, that is, to elect an official common name for each species. This has not been attempted in Australia, although there are mandatory marketing names for many species to protect consumers. We therefore must rely on the scientific names of fish to avoid confusion here.

The bestowing of names on flora and fauna would seem to be an inherently strong human urge.

Anthropologists have theorised that the act of knowing an animal's name transfers some control over the animal to the name-giver or name-holder. And so it seems to be with fishermen, and perhaps even more importantly, fisheries biologists and ichthyologists.

Early classifiers of the living world struggled with naming systems for many years. Towards the end of the 17th century, long, descriptive names in Latin were being used. Thus, the humble carnation plant was called *Dianthus floribus solitarius, squamus calycinis subovatis brevissimis, corollis crenatis*, meaning pink, with single flowers, the scales of the calyx somewhat egg-shaped and very short, with scalloped petals. Obviously something had to be done. Fortunately, a Swiss botanist by the name of Linnaeus entered the scene in the mid-18th century and devised a simple, workable system for classifying and naming all organisms. He strived for a natural order and suggested that all animals and plants could be given a unique, double-barrelled, or binomial, Latin name. The first name would signify the genus, and the second the species. The genera (plural of genus) could then be arranged into families, families into orders and so on, ending with the animal and plant kingdoms. Under this new system, the carnation would simply be called *Dianthus caryophyllus*, and no other species could be given this name. (By the way, the Latinised name is always printed in italics, with the first name, or genus capitalised, but not the second, species name.)

The ingenious system of Linnaeus was quickly accepted by the scientific community, and is the only accepted international nomenclature system in use today, called, appropriately, the Linnæan system.

Even in scientific papers written in non-Latin root languages, such as Japanese and Arabic, the internationally recognised binomial Latinised name of a given animal or plant must be used.

Now that we know the origins of the Latin names of fishes and other animals, it is interesting, not to mention entertaining, to look at a few of the better known species and translate their picturesque names, often bestowed many years ago.

The legendary bonefish and the broadbill swordfish were named by Linnaeus himself. He aptly called the bonefish *Albula vulpes* or "white fox", and the broadbill, *Xiphias gladius*, the two words both meaning "sword", one in Greek and one in Latin. The striped marlin, *Tetrapturus audax* roughly means "bold, with a four-winged tail" (referring to the two pairs of keels on the tail wrist) while the sailfish *Istiophorus platypterus* means "sail-bearer with flat wing". The tailor, as mentioned, has many common names throughout the world, but is always known scientifically as *Pomatomus saltator*, from "serrated operculum" (gill cover), and "one who dances or leaps". Another species with a rather romantic name is the remora, or sucker fish. Called *Echeneis naucrates* by Linnaeus, its name refers to the legendary power of the sucker on its head, and means "a pilot, which holds a ship".

Some Latin names may sound evocative, but their English translations are not so romantic. Many of the flatheads for example, belong to the genus *Platycephalus*, which means, not surprisingly, "flat-headed", while the common yellowtail is called *Trachurus* meaning "rough tailed". The mulloway has been stuck with a real tongue-twister, *Argyrosomus hololepidotus*, but this simply means "silver bodied, with smooth scales". Some names don't seem to capture the true essence of the fish. For example, the threadfin salmon, a great fighting fish in many people's books, is called *Polynemus plebeius*, meaning "many threaded, common, or vulgar". Other names may even seem a little insulting, for example some members of the "sole" family are clubbed *Cynoglossus* which means "a dog's tongue" (although I can see why). Many Latin names of fish refer to their old common names in other countries, and their true origin has been lost. The yellowtail kingfish is *Seriola lalandi*. "*Seriola*" is an old Italian name for this group of fish, while "*lalandi*" refers to Delalande, an early naturalist after whom the species was named.

These notes are attempting here to demystify the nomenclature of fishes and help make the system more friendly. All too often, the joys of science can be clouded through the use of technical terms or jargon.

Taking the time to find out the meanings of names of fish can be fun and downright educational.

Since this paper was put together there has been an Australian Standard issued Australian Standard Fish Names AS-5300-2015. This listing is maintained by a Committee through the Fisheries Research and Development Corporation. (FRDC).

The Australian Fish Names Standard AS 5300-2015: prescribes a standard fish name for each species of fish

- produced or traded in Australia;
- includes over 4,000 Australian and imported species
- was approved by Standards Australia as an official Australian Standard in 2007
- was developed by the Australian Fish Names Committee.

### **Need for Standard Fish Names**

Public and consumer confidence is supremely important to the wellbeing of Australia's \$4 billion seafood industry. Standard fish names:

- remove confusion
- strengthen consumer confidence
- create market efficiency
- underpin effective species-based fisheries management, and
- improve management of food safety

Australia has over 5000 native species of finfish, and many more crustaceans and molluscs. Several hundreds of these species are important commercially, and many others support recreational activities such as fishing and diving. Australia also imports seafood products consisting of many other fish species from around the world to help satisfy the increasing demand for seafood.

Confusion over fish names has been caused by the numerous species Australia has on offer, a species being known by more than one name, or the same name being used for more than one species. As early as the 1920's, meetings were held in Sydney to discuss fish names as the local and regional variations were becoming apparent.

Extensive work on standardizing names used for fish in Australia has been undertaken since the early 1980's by industry, governments, scientists and other stakeholders. Major progress has been made since 1992 as a result of strategic investments by the Fisheries Research and Development Corporation. Seafood Services Australia (SSA) accepted responsibility for standardizing fish names in 2001 and continued to maintain this momentum. SSA was accredited as a standards setting body in 2006 and subsequently developed the first version of this standard. SSA ceased operations in 2013 and the Standard is now maintained by Standards Australia, CSIRO and FRDC.

## 4 WHEEL DRIVING

### **What Spares And Equipment You Really Need.**

Like most recreations in a free market society, the four-wheel-drive world is filled with loads of products. Too many in fact. Thankfully, the general standard of those products is quite solid, but for the first-timer it can be daunting to know what you'll really need. Plus, you can get overloaded with lots of unnecessary stuff like 12 volt hairdryers. Here are the products I believe are the most useful for the first-time 4WD tourer.

#### **Long Handled Shovel:**

It's cheap, it's boring, and it's the single most useful thing you can have with you off-road. Use it to dig your 4WD out of a bog, go to the loo or dig coals for cooking - it's truly versatile. But I'm sure you're thinking that you can get away with a short shovel, perhaps even one of those nifty folding ones. Well, you can't. Only the long-handled shovel can get right under your 4WD to dig under its belly and clear the way. You can store these up on your roof rack with nifty little clamps, available at your local 4WD store.

#### **Snatch Strap, Shackles & Cable Dampers**

If you're travelling with another 4 x 4, 90% of vehicle bogs can be remedied through the use of a snatch strap. This is a large elasticised strap that uses kinetic energy to 'pop' a 4WD out of its predicament. You simply hook up, and the tow vehicle drives off at a slow speed in low range, while the stranded vehicle accelerates. These are wonderful in sand, mud, snow - just about any terrain.

However, as with anything that is commonly used, there are right ways and wrong ways to use the straps and its hardware. For example, most people will attach the strap to their vehicle using shackles. Hardware store D-shackles are a no-no, as they are not rated to take the load. Neither are towballs for that matter. Nope, you need stamped and rated bow shackles from your 4WD store. Of course, make sure that they are rated to the weight of your 4WD, and stamped with a WLL nomenclature, meaning Working Load Limit. Over the years there have been some injuries sustained through recovery points and shackles failing, so now it is considered good practice to place a cable damper over the strap one-third of the way from each end. This way, if the recovery point or the strap fails, it will cause less damage to those involved in the recovery. Of course, all bystanders should stay well clear of any recovery.

#### **Items You Should Have:**

##### **Gloves:**

There are plenty of situations in the off-road environment where your hands can get damaged, and if your day job is deskbound, then chances are your hands are pretty soft. You can do all sorts of harm to your hands around fires, winch cables, hot engine parts, firewood, or picking up pots and pans off the fire. But for a relatively small outlay, you can protect your precious hands from damage.

I like to use soft pigskin gloves, as they give plenty of 'feel' through the leather while still offering lots of protection.

##### **Tyre Accessories:**

Tyre failure is the most common issue when driving in the outback, so it pays to be able to monitor your tyres, deflate them, fix them, and pump them up whenever you need.

Given that most of us drive around with tubeless tyres these days, at the top of my tyre list is a plug kit. With these kits you simply remove the offending material, clean the hole, and pop in the self-vulcanising plug. Then trim it off if you want a neat job. These kits cost less than \$100 and are worth their weight in gold. Make sure you get your punctures checked by a professional when you next get into town, and it's generally not considered good practice to repair holes in sidewalls.

You'll have seen countless references to deflating tyres to suit various off-road terrains. When you're letting your tyres down so frequently, you soon grow tired of pushing twigs and sticks into the valves of

your tyres. Products like the E-Z Deflator from ARB and Staun's tyre deflators make tyre deflation quick and easy.

The E-Z Deflator actually works by unscrewing the valve, but keeping it within the housing of the deflator. It's incredibly fast, and comes with a built-in tyre gauge. For re-inflating tyres, you want a compressor that is fast and reliable. Re-inflating four 4WD tyres is no mean feat, and cheap compressors cut out and fail regularly. And there are quite a few fakes and look-alikes on the market nowadays. So, choose a good brand, and try to track down some comparative tests to make sure of it. Lastly, a good-quality tyre gauge will serve you well for many years. You simply can't guess tyre pressures by looking at tyres - if you do, you're guaranteed to get stuck!

#### **Base Plate:**

It's amazing how many times you might have to lift a 4WD up by a vehicle jack in the bush, whether it's for flat tyres or under-vehicle repairs. But try doing that on mud, sand or dirt, and you'll soon find that you can't. Your slender-bottomed jack simply sinks into the ground, usually slipping to one side as it heads southwards. This means you can't effect your repair, or your vehicle may even fall down while you're working on it - not good! A jacking base plate is your answer, as it disperses the weight of the jack over a much larger area, making the jack a whole lot more stable than before.

Base plates can be as simple as cutting up a slice of 3 mm checker plate (25 cm x 25 cm), or you can go for a manufactured version like the one from Hi-Lift. The latter base is designed to fit perfectly with the Hi-Lift jack, and even has a hole in the corner so you can attach some string and nip it out of a mud hole.

#### **Toilet Kit:**

There's nothing sexy about a toilet kit, but this is certainly one of the most useful accessories money can buy. And with this kit, not only can you stay healthy through a lack of germ transference, but you can also keep the environment sweet too.

The kit is made up of the obligatory toilet paper, an antiseptic alcohol-based hand wash, some wipes, and a firelighter or matches. The hand wash is brilliant because it saves water and kills every germ in sight. Sometimes when people go camping, they can go a little feral and forget about basic hygiene, but this can lead to stomach bugs and serious problems like diarrhoea.

It's good environmental practice to burn your used toilet paper, and you'll soon see why in high-traffic camping locations; it can look like a poorly designed golf course with white flags flying in the breeze everywhere! Of course, in high fire danger periods, you're not allowed to light up, so you instead have to bury everything.

And the final piece of the toilet kit is a good-quality oilskin bag. This means that even when you lay your little bag on the morning dew, the precious paper won't get wet.

#### **Fire Extinguisher:**

Fires rarely happen when you're off-road, but when they do, you want to be prepared and act fast. A good-quality dry powder fire-extinguisher is the way to go - perhaps even two if you can fit them. These can handle electrical fires, fuel fires and grass fires.

When driving through long grass, it's very easy for fires to start underneath a four-wheel drive, as exhaust pipes can get incredibly hot. And when grasses like spinifex are involved, fires can be almost impossible to stop. There are plenty of cheap and tiny fire-extinguishers around, but never go for the smallest size as they only last for a few seconds. It is recommended that you go for the biggest that you can practically fit inside your vehicle, and of course, always make sure that it's easily accessed.

#### **Trouble Light:**

If troubles happen while you're four-wheel driving, chances are they'll happen at night - that's why you need a good-quality trouble light. And because you never know how long your trouble will last, always try to choose a light that has a low power draw. I like the fluorescent light or an LED light - and try to get one with a hook or two so you can position it near your repair.

## Dual-Battery System:

In the modern age of camping, our batteries can take a hiding. There are so many things that can draw power long after our vehicle's alternator has stopped charging the battery. Charging computers, camera batteries, lights, fridges - they all take a big drain on our batteries. And even when we're four-wheel driving, winches and driving lights can take an extra toll on the battery.

So, it's smart to have some power in reserve, and to always preserve the power in the all-important starting battery. Because if you can't start your 4 x 4, then you're not going far. Dual-battery systems separate the starting and the auxiliary battery, so you will always have enough power to start your 4WD no matter how dead your second battery is. The starting battery is also given priority when charging too, so that it's in rip-top condition no matter what.

## First Aid Kit:

Burns, bites stings and broken limbs are all something that we hope never happen while we are off road, but by the simple virtue of being active and in the bush, they're more likely to occur.

Having a good-quality first aid kit, and knowing how to use it through an up-to-date first aid course, is always good practice. Use a soft bag-style first aid kit, because it's easier to pack on top of everything else (so it's easy to access), while it does no damage to the inside of your 4WD.

Choose a comprehensive kit and spend at least \$300 to \$350. Buy a kit with plenty of extra storage space too, so you can load it up with your personal first aid favourites and medications.

## 12 V Refrigerator:

There are practical accessories like first aid kits and base plates, and there are accessories that you just love to have. The 12-volt fridge is one accessory that I rarely go bush without. It works no matter the angle of the vehicle or the heat outside, and you always have chilled tucker and a cold drink at the end of the day. So, you can truly relax in style. Exactly why I put it this far down the list is beyond me...

Good-quality fridges also act as freezers, and can take a battering in the roughest conditions.



Is this your last stop before you go home.?

## BUILT FOR SPEED

Dr Julian Pepperell

Because we humans are creatures of the land and air, the idea of moving through water at high speed is not a natural concept to grasp. The top Olympic swimmers may negotiate the 100 metre freestyle at about 7.5 km/hr (with a flying start and a good shove off the wall at the halfway mark). However, that sort of speed is snail's pace to a wahoo or sailfish, both of which have been clocked at close to 100 km/hr at which speed they would complete the 100-metre dash in under 4 seconds. High-speed predators are certainly superb examples of evolution of body form towards a purpose, in this case sheer speed. Because water offers so much resistance to movement, the predators (and some of their prey) have all evolved an extremely streamlined shape together with other features that all reduce drag. In most of the mackerels, tunas and billfishes, the fins fold beautifully into slots for high-speed bursts. Even the huge dorsal fin of the sailfish folds perfectly into a long groove along the back. I am often asked about the function of the bill of

billfish, and while it can certainly be used as a slashing or striking weapon, some scientists think that the bill's main role is to maximise streamlining, piercing the water first in the manner of the spike on the nose of a Polaris missile. All of these fishes also have other drag-reducing features such as lateral keels on the tail wrist and single or multiple finlets in front of the tail. These adaptations no doubt help to reduce turbulence at the body surface, but as far as I am aware, their actual functions have not been studied under laboratory conditions. Submarine design no doubt owes a fair bit to copying nature's solutions to reducing friction, and I sometimes think that a submarine in the shape of a blue marlin might be a winner (as well as being aesthetically pleasing).

### **Measuring Speed.**

Large fish are difficult to study in captivity. The speeds of sailfish and wahoo mentioned above were estimated by measuring the rate of line peeling off a high-tech reel when the fish were hooked. However, quite a bit of work on burst and continuous swimming speeds has been done on a variety of captive fish. Many of these studies are summarised in a paper by J Videler and CS Wardle (Reviews in Fish Biology and Fisheries, Volume 1, pages 23-40, 1991). These authors reported on a wide array of fish species swimming in circular tanks and analysed for such factors as tailbeat amplitude, maximum and sustained speed, and so on. Scanning their results show some interesting consistencies. For comparative purposes, speeds are measured in terms of body lengths per second (L/sec), and maximum speeds measured in this way include the following: goldfish (3.5-9.3 L/sec), rainbow trout (1.5-11.6 L/sec), Atlantic cod (2.8-3.5 L/sec), slimy mackerel (5.3-18.0 L/sec) and bluefin tuna (9.3 L/sec). While, in general, smaller individuals of a given species will have faster maximum speeds in terms of body length per second, the interesting finding is that the maximum relative speeds are pretty comparable. Having said that, when the body lengths of the bluefin tuna (2.3 metres) and goldfish (7 cm) are taken into account, the absolute maximum speeds measured were 77 km/hr for the tuna and 2.3 km/hr for the goldfish. Sustained speeds have also been measured for a variety of fish, and these tend to range between about 1.5 and 4.0 L/sec (average about 2.0 L/sec) for a wide variety of species. Again, this is a narrow range but, of course, large fish will cover much greater distances than small fish over the same time periods.

I've been interested for quite a while in the maximum rates of travel of tagged game fish recorded on cooperative game fish tagging programs. For species such as tuna, billfish and mako sharks, the maximum rates of movement, as measured in kilometres travelled over days between release and recapture, often average about 20 to 30 km/day for fish of about 2 to 3 metres in length. This works out at an average sustained swimming speed of only about 0.1 body lengths per second over periods of up to a year or more. When I was involved in tracking black marlin using sonic tags, they tended to swim along at a leisurely 2 knots or so. This translates to about 0.3 body lengths per second, so the overall averages derived from tagging programs seem to be in the right sort of range for sustained swimming over long distances. Obviously, extreme speed is only used for hunting or fleeing, but when they do turn on the power, the pelagic predators prove they are really built for speed.

## **6 PHASES OF A PROJECT**

PHASE 1	ENTHUSIASM
PHASE 2	DISILLUSIONMENT
PHASE 3	PANIC
PHASE 4	SEARCH FOR THE GUILTY
PHASE 5	PUNISHMENT OF THE INNOCENT
PHASE 6	PRAISE AND HONOURS FOR THE NON-PARTICIPANTS



## DIY REEL SERVICE

We all hate it when something packs it in on us just when we need it the most. Be it the car, washing machine or fishing reel. I can't speak too much for the other things, but I can give you some useful advice on how to dramatically minimize the risk of fishing reels failing you just when you need them.

For starters, it is important to buy the best that you can afford. A good general indicator of the quality of a reel is the number of ball bearings it contains (look for a minimum of three or four ball bearings for threadlines and two or four for overheads). It's wise also to stick with reputable brands. The bottom line is that the better the reel, the less maintenance it should require. However, this doesn't mean that it doesn't require any. It also means that you shouldn't wait until you have a problem before you decide that you need to look after it.

Preventative maintenance of fishing reels is very simple and extremely effective in extending the life of your favourite reel. As an example, some 40 years ago I bought an ABU Ambassadeur 6500 baitcaster. It was my first baitcaster and recognised at the time as one of the best available. I loved it and subsequently used it often. Even during those tender years, I was aware of the need for ongoing maintenance of my gear and I would completely disassemble, clean, re-tube and reassemble the reel (and all my others) at least twice a year. It even went for a swim off Garth's Rock (13 Mile) at Quobba and I still fish with it regularly. It is still in good condition and catches fish regularly. Aside from the expected cosmetic knocks and bumps, the reel still winds, casts and releases drag as good as the day I bought it. It also shows absolutely no signs of throwing in the towel. If that reel had not been regularly maintained, despite its high quality engineering and parts construction, it would not have lasted anywhere near as long. If you don't put oil in your Lamborghini, you can't expect it to perform forever. The same applies with reels. All that I have replaced over the years is the level wind pawl and the level wind worm.

Ok, so let's assume that you have purchased something of reasonable quality and you want to look after it. So what are the killers of fishing reels? The main one is undoubtedly salt which can be equally destructive if the reel has been totally submersed or just splashed. Salt causes two major problems with reels. Firstly, it corrodes. Usually once the signs of serious corrosion are evident, it's too late to save the reel. Minor problems with corrosion can be as frustrating as locked screws or nuts. These problems are usually a result of medium to long-term exposure and neglect. However, a less obvious problem is that salt wrecks the lubricants inside your reel. When salt water penetrates the housing of a fishing reel the salinity of the water will draw out the lubricating properties of the grease and oil, causing a 'clagging' effect. 'Clagging' means that the reel is running without an effective lubricant. The end result is that it reduces the grease and oil to a pasty mess that is about as useful in lubricating your reel as sand. This problem can manifest itself very quickly. A reel that is fully immersed in saltwater will start to show sign of 'clagging' in as little as 12 hours.

While salt is your worst enemy, particles of sand, dust or grit that get into the working parts of the fishing reel can accelerate the wearing process.

It is important to note that these problems only become serious when combined with neglect. You can drop your reel to the bottom of the ocean or bury it in sand and dust but it will only mean the end of the reel if you do nothing about it. Conversely, I don't think people should fish with their reels zipped up in a plastic bag so they don't get any salt on them at all. It's inevitable that your fishing reel will be exposed to some degree of risk. It is what you do about it that will make the difference. Here we have some trouble shooting tips to help ensure that your reels are in the best condition for the longest period.

### **Wash down**

The most effective and simple long-term preventative maintenance activity you can perform is to wash your reels down after every outing. Before you start remember to tighten up your drag before washing the reel to prevent water intrusion. A light spray from a spray action bottle filled with water will do the trick. It washes off salt crystals preventing them from building up and starting to establish a base for corrosion. Let it drip dry on a piece of old towelling, free the drag system so that it doesn't bind and store it away from heat and light. Giving the reel a light spray with a suitable spray lubricant won't hurt. I recommend using Inox. Once sprayed wipe it down with the towelling and store it away.

### **Minor service**

This involves the dismantling, or at least lubricating, of the major external parts. These parts should be cleaned, re-lubricated and checked before re-assembly. This includes the bail arm, level wind, drag systems, handle and rotor head (for threadlines). A minor service should be carried out after every six or so outings, or three times a year. This is based on the assumption that the reel is regularly washed and inspected. This will prevent screws getting locked in by corrosion.

### **Major service**

The major service involves completely pulling apart every component of the fishing reel. These parts should be cleaned, de-greased, re-lubricated and inspected prior to re-assembly. A major service should be carried out at least once a year, but preferably every six months or when a reel has been completely submersed in saltwater or dropped in sand or dust. Unless you have had some experience pulling reels apart, you should seek the advice of a tackle retailer to do a major service.

### Lubricants

Most decent reels you buy will come with a tube of oil and/or grease. You should keep these and use them regularly. If you don't have any, a light (SAE 10) sewing machine oil is excellent. It is light and very fine, making it perfect for fishing reels. Many people use WD40, RP7, CRC 66 Marine or similar products to lubricate reels. These products serve as a good immediate to short-term fix, but not as a long-term lubricant. They are mainly a de-watering agent rather than a lubricant. (WD 40 is Water Displacement fluid and was the 40<sup>th</sup> attempt to develop it). Application of oil and grease to a fishing reel is usually best explained in the paperwork that accompanies your purchase. These notes tell you where and how much lubricant to apply to get the best life from your reel. If you no longer have, or have never read these notes, application of oil should be applied to all the external moving parts. For a threadline, this includes the handle knob and bail arm. For a baitcaster, it means the handle knob, the level wind and the cast release mechanism. For an Alvey, it really only needs to be applied to the handle knob. Grease is normally only applied to the internal moving parts of a reel.

When you buy a reel, there should be a handbook and exploded diagram of the parts of the reel. You should always keep these. They will help you to know part numbers if you have to order a new part or help you understand the basic assembly of the reel should you choose to pull one apart to give it a full clean up job.

As a tip when doing a service to lubricate the mechanisms, use a small paint brush to apply grease to the working surfaces of the reel. DO NOT use excess amounts of grease in either a threadline or an overhead reel. I use a grease for threadlines that was made by the WA reel guru John Devitt, and it is brilliant. John developed this grease following a request from an international manufacturer and it is still in use in their reels.

Also DO NOT USE Vaseline as a lubricant – it is not a lubricant and when the temperature drops it gels up and the reel doesn't work. I once had a client that used it in a very expensive threadline reel. I cleaned and lubricated the reel and 4 weeks later I got the reel back as it wasn't working. I again cleaned the reel and charged him for the time to remove the Vaseline and then service the reel again. I returned it to him at his country location and he rang up quite irate about 3 weeks later saying the reel had seized up again. I asked had he put Vaseline back inside it and his reply was that is what I have always used. When I told him I would re clean and lubricate the reel for an enlarged fee he took it to another repair agent. I told the other person what to expect and he quoted my exorbitant fee as a standard repair fee for a reel in that condition. When I saw the reel owner a few months later I asked how was the reel performing and he replied that that brand of reel was no good and was overrated and he was using a different brand.

### Do it yourself

Learning to maintain your own equipment will save you money because well-maintained reels are less likely to break down and therefore less likely to require repair or replacement. Having said that, if you have a problem that seems serious and you don't know how to fix it yourself, take it to your local tackle retailer. They can arrange for a professional service or repair job to be done.

As a tip don't take the reel to them in a plastic ice cream container in pieces as the cost of repairs doubles instantly as there are bound to be parts (springs) missing or it is assembled incorrectly and won't work. If you don't know – don't fiddle it - will be cheaper in the long run.

