GENERAL INTEREST ITEMS:

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CLARE PEDDIE
SCIENCE REPORTER

SCIENTISTS want to develop a new industry alongside aquaculture, using seaweed to soak up excess nutrients from fish farms.

Researchers have spent $1.1 million over three years to try local seaweed species next to tuna and yellowtail kingfish farms in the Spencer Gulf.

"There is potential to add substantially to our existing aquaculture industry," said project leader Dr Jason Tanner, from the South Australian Research and Development Institute. "If it really works well, there's potential for hundreds of hectares."

Seaweed is used in Asian dishes and many processed foods. Extracts are used as setting agents and bioactive substances for pharmaceuticals and cosmetics.

Dr Tanner described seaweed farming as a "win-win", for aquaculture and the environment, because fish farms produce nutrient-rich waste that is food for seaweed.

Agriculture Food and Fisheries Minister Michael O'Brien said Australia imports almost $20 million of seaweed every year, so it would make sense to grow our own.

"There is considerable potential for expansion, especially of ocean-based fish farming," he said.

LETTER TO THE EDITOR – November, The Advertiser

ANGLERS NOT TO BLAME

I refer to the article on page 9 in The Advertiser on Wednesday November 10, 2010 headlining comments by the surf lifesaving movement in South Australia blaming anglers for attracting sharks inshore. Interestingly this same issue was vented on page nine on January 12 of this year and in previous years.

I feel compelled to put the angler's point of view on this long festering issue. As in many debates the argument is often 9/10ths emotion and perception (sometimes called red herrings), rather than reality and fact based on good science and robust research statistics.

Perhaps anglers attract sharks; perhaps sharks and other sea creatures see jetties as habitat; perhaps sharks have a liking for dangling limbs from surfboards; perhaps sharks are attracted by humans in the water; and perhaps we will never know!

But this debate needs clarity of fact rather than "firing from the hip with headline emotion". Let's conserve our energies in an objective and constructive manner.

To frequently attribute shark attacks on humans to anglers activities on jetties are emotional red herrings. Perhaps we should ban surfing and swimming in the marine environment because these activities also attract sharks. Sadly, there are serious Statistics across the world over many years that would support this.

Let's address this issue in an objective manner by collectively calling for a serious and sustained blitz by the Fisheries Compliance unit, on select jetties in the metropolitan region where shark angling is known to take place, to enforce recreational angling regulations where necessary.

Jetties and near shore areas are sharks and other marine species back yard and they are there all the time, seeking out prey, we just don't see them. It's their habitat!

Anglers are generally responsible members of the community and are getting very tired of the blame game, particularly when misleading and ill informed statements such as these are presented in the media and then picked up by other media thus aggravating the situation.

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Parasites worming their way into the catch of the day

Recently we went fishing at Port Victoria on Yorke Peninsula and caught five whiting. On cleaning the fish, I found they contained white worms about 1-2cm long in the stomach and flesh. I threw them in the bin, but I was wondering what would have happened if they had been eaten. - J.M. (Burnside)

The worms were most likely parasitic round worms, or nematodes. In larval form, they are found in the gut and the flesh of many fish with the cod worm and the herring worm most common.

Fish pick up the parasitic worms during the normal food cycle; they then live in the stomach or burrow through the flesh.

The cod worm, which is often found in cod, is also found in many other species. Its scientific name is *Phocanema decipiens* and it can grow up to 4cm long in fish.

It varies in colour and is frequently found in the flesh of fish, particularly in the belly flaps, where it often remains for long periods curled up and encased in a sac-like membrane produced by the fish tissue.

The herring worm, or *Anisakis simplex*, is often found in herring, mackerel, whiting and blue whiting, but also occurs in many other species.

It grows up to 2cm long in fish, is almost colourless and is found tightly coiled and encased in the gut and flesh, sometimes in considerable numbers, particularly in the belly flaps. *Anisakis* can migrate from gut to flesh in fish left ungutted after capture. They are likely to make you sick should you consume any raw or lightly cooked fish they infest. However, cooking the fish at temperatures of 60C or greater will kill any worms present - fillets 3cm thick should be cooked for 10 minutes.

Freezing infested fish for 60 hours at -20C will also kill all worms. Cold smoking will not kill them, but hot smoking will. They are highly resistant to salting.

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