

**Submission  
No 39**

# **MANAGEMENT OF SHARKS IN NEW SOUTH WALES WATERS**

**Name:** Mr Steven James

**Date Received:** 21/10/2015

Dear Committee,

I am writing to express my concerns regarding the existing Shark Management Program that is implemented in NSW waters. I am totally against the current netting program for the following reasons:

- The nets are NOT a barricade, and don't prevent sharks from getting near the beach. They are designed as a culling mechanism simply in place to entangle and kill animals that are passing by. In NSW, nets are 150m long, 6m tall and usually set in 12m water – allowing sharks to swim over and around them. They are also only in the water for 8 months of the year, and only for 17 days in each month – so a lot of the time they're not even in place.
- There is no science showing that the nets make our oceans any safer for beach-goers. In fact, a 2009 government report stated that 'the annual rate of attack was the same both before and after the meshing commenced'. While the number of shark fatalities has decreased since the nets were put in the water, this is most likely due to improved medical assistance since the 1930's and not due to the nets themselves.
- Over 17,000 animals have been caught in these nets in NSW alone. Australia-wide, about 100 species such as endangered turtles, dolphins, dugongs, ray, seabirds, harmless sharks and whales have died in the nets. They have even killed orcas, little penguins and people. That's right, shark nets have killed 2 people – one in NSW and one in QLD.
- In 2013 a baby humpback drowned in the nets in Mona Vale, while its mother helplessly watched on. Each year many whales become entangled in the shark nets during their annual migration and often it is the babies that are the victims. Just to clarify, these deaths are not a trade-off for the protection of people, but are unnecessary deaths in an out-dated system that does not protect anyone. Shark nets and drum lines are lethal culling programs that impact sharks and other marine creatures that are increasingly threatened with extinction. Sharks are apex predators and keep the ocean in

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balance. Without sharks, it is predicted that the entire marine ecosystem is predicted to collapse. Over 90% of the sharks in the ocean have been killed. Right now we need to do everything possible to protect them.

I firmly believe that non-lethal alternatives are available - Recent technological improvements that are based on our increasing understanding of how sharks work have provided us with a range of superior alternatives:

- CSIRO program – SMS messages sent by sharks that have been tagged via Surf Life Saving. People can be removed from the water when a shark swims past an acoustic receiver on popular beaches. Currently being used in WA and Northern NSW.
- Brazilian Program – capture and tag sharks, then tow them out to sea. This program boasts a 97% reduction in shark bites and sharks are monitored to collect scientific data on their movements and none have returned to the beach where they were caught.
- Eco Shark Barrier – A 3 year trial at Coogee beach in WA began in 2014. This method forms a complete barrier between swimmers and shark with no way of entangling marine animals.
- Clever Buoy – Currently being developed in WA. A sonar device much like a fish finder that can recognise the swimming pattern of sharks in the area and send an instant message to lifeguards to get people out of the water.
- Shark Safe Barrier – Currently being trialled in South Africa, it's a visual and magnetic barrier resembling a kelp forest which deters sharks by using magnets in the structure which sharks will not cross even to get bait.
- Shark Spotters Program – Used in South Africa volunteers use a series of flags to signal to beachgoers the presence of sharks and if the water is clear enough to see them – so people can make informed decisions when to swim.
- Aerial patrols and observation towers – Currently being used in NSW.
- Fish Hoek exclusion net – A net that is constantly monitored for animal entrapment and is deployed each morning and removed in the evening. It provides a complete barrier between swimmers and sharks.
- Shark Shield devices – Used by the Australian Navy which have proven effective.
- Shark Attack Mitigation Suits – SAMS in conjunction with University Western Australia, have created two wetsuits to reduce the chance of shark incident – one for surfers and one for divers.
- Repellants – audio, chemical and bubble repellants are being developed by the University of Western Australia.

- Beach Mufflers – to disguise the sound of swimmers at the beach. This technology is being developed by Curtin University.

The following text is from National Geographic

(<http://www.australiangeographic.com.au/topics/wildlife/2014/09/australias-keystone-endangered-species>):

*Carcharodon carcharias*

Found swimming in our ocean's depths, the great white shark is yet another top-order predator under threat of extinction. Like other marine predators, great whites consume a wide array of species but due to the difference in size from the juveniles to adults, this characteristic is particularly prevalent among white pointers. From 1.5m to 3m in length these sharks are highly agile and can therefore hunt fast moving fish. The largest specimens, females have been known to reach up to 6m long, usually hunt seals and sea lions and congregate near colonies of these animals.

Their need for large food surpluses help control the populations of marine species. Population estimates are extremely hard to estimate due to the lack of understanding shark migration habits.

Data has found, however, that their numbers were around 10,000 in the 1950s, and the average number of sharks caught in beach protection nets has decreased by 70 per cent since that time.

While sharks are currently protected under state legislation, sharks are frequently caught in commercial fishing nets and on fishing lines. This is currently the greatest threat to their survival.

One of the key messages that I'd like to pass on to you is that education is key. Public education is by far the most effective way to make people safer.

The Australian Shark Attack File states 'sharks have killed 52 people in the past 50 years (1.04 per year) in Australian waters', so rather than an over-emotional response it provides the following advice:

Swim at beaches that are patrolled by surf lifesavers.

Do not swim, dive or surf where dangerous sharks are known to congregate.

Always swim, dive or surf with other people.

Don't swim in dirty or turbid water.

Avoid swimming well offshore, near deep channels, at river mouths or along drop offs to deeper water.

If schooling fish start to behave erratically or congregate in large numbers, leave the water. Do not swim with pets and domestic animals.

Look carefully before jumping into the water from a boat or wharf.

Do not swim at dusk or at night.

Do not swim near people fishing or spear fishing.

If a shark is sighted in the area leave the water as quickly and calmly as possible.

Finally, to close my submission, the chances of being attacked by a shark are statistically incredibly unlikely – less likely than being killed by a vending machine, or by lightning, or by a coconut falling from

from a tree. However we all take a calculated risk whenever we enter the ocean, something could go wrong as it could anywhere in life. You have a 1 in 11.5 million chance of being bitten by a shark and 1 in 264 million chance of being killed by a shark.

We should just accept that the ocean is where sharks live, and we're entering their territory when we're in the water – and the territory of all the other ocean creatures. After all, that's one of the things that makes the ocean so great!

Other considerations are:

Several of the sharks that will be killed are protected by state and federal laws, and the white shark is especially vulnerable.

There is no clear evidence that killing sharks will reduce risk (and may increase risk as the baits attract large sharks into the vicinity of ocean users).

Much of the evidence that the state relies upon to support the proposal is Fisheries data and hence cannot be considered objective.

If Australia kills protected sharks while protecting whales, it is hypocritical which damages our international reputation.

We live in a more eco conscious society - people care about the environment and expect their government to help protect it.

Science has shown that the removal of keystone species such as large sharks from the marine environment damages that environment.

Humans need healthy oceans, and healthy oceans need sharks.

Many marine scientists, shark experts and conservationists have stated that that they do not support drumlines or shark nets.

The public do not support indiscriminate killing of sharks – Many surveys suggest that 70-80% of people said “no” to netting or drumlines.

The main reason why the state wishes to kill sharks is to help protect tourism. However, they provide no scientific evidence that shark attacks have damaged our tourist industry – indeed, their action could deter eco conscious tourists.

Yours sincerely,

Steven James

21st Oct 2015