

**Submission  
No 11**

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

**Name:** Ms Clara Wong  
**Date Received:** 19/10/2015

## INQUIRY INTO THE MANAGEMENT OF SHARKS IN NEW SOUTH WALES

A country with an engrained beach culture, there is little wonder why matters surrounding the management of sharks, especially after news of attacks, conjure emotional and passionate responses from the Australian community. The public, alongside the media is often quick to call for tougher control measures in the interests of human safety, including culling practices.

However, this goes against the resounding scientific evidence that is available, which indicates that more research needs to be done on the efficacy of the current procedures in place to regulate sharks in our waters. Furthermore, the reason for increased shark attacks cannot be pointed to a greater number of sharks in the water. On the contrary, the long-term trend suggests that it is due to the growing human population. As West, coordinator of the Australian Shark Attack File from the Taronga Conservation Society explains, “The rise in Australian shark attacks coincides with an increasing human population, more people visiting beaches, a rise in the popularity of water-based fitness and recreational activities and people accessing previously isolated coastal areas.”<sup>1</sup> In some instances, it is a case of mistaken identity. Their highly sensitive teeth and taste cells means that often it is not until a shark actually takes a bite that it realises it does not actually want to eat a human.<sup>2</sup>

Even the assertions made by established and reputable organisations within our society are going unnoticed. For example, Surf Life Saving NSW has stated that “there are many types of sharks in Australian waters. Most are harmless to humans.”<sup>3</sup> Of these different species, only three are widely accepted as dangerous and known to attack without provocation: bull sharks, great white sharks and tiger sharks.<sup>4</sup> To put things into perspective, there is a much higher risk of drowning at the beach than from being bitten or killed by a shark.<sup>5</sup>

As a population, we are misinformed about sharks.

Taking into consideration both standpoints – the conservation of our environment as well as the protection of our beachgoers – this submission will demonstrate that dispelling misconceptions on sharks will come to the benefit of fostering circumstances which allow sharks and humans to coexist peacefully.

- a) Measures to prevent attacks by sharks, including strategies adopted in other jurisdictions

There are many lessons to be learnt from Western Australia’s government implementation of drumlines to control the shark population and prevent them from entering protected beach zones.

---

<sup>1</sup> John G. West, ‘Changing Patterns of Shark Attacks in Australian Waters’, *Marine and Freshwater Research* 62, (2001): 744.

<sup>2</sup> Rahni Sadler, “A New Way to Handle Sharks?”, *Sunday Night*, 11 October 2015, <https://au.news.yahoo.com/sunday-night/features/a/29780418/a-new-way-to-handle-sharks/>, viewed 15 October 2015.

<sup>3</sup> Surf Life Saving New South Wales, *Beach Safety*, <http://www.surflifesaving.com.au/beach-safety#MarineCreatures>, accessed 15 October 2015.

<sup>4</sup> NSW Department of Primary Industries, *Fishing and Agriculture: Sharks*, 2015, viewed <http://www.dpi.nsw.gov.au/fisheries/info/sharks#>, viewed 15 October 2015.

<sup>5</sup> ABC News, “Fact File: Protecting People from Shark Attacks”, *ABC News*, 5 Jan 2015, <http://www.abc.net.au/news/2013-12-22/fact-file-protecting-people-from-shark-attacks/5164882>, viewed 15 October 2015.

Aimed at targeting great white sharks, the irony lies in the fact that the first casualty of the policy was actually a tiger shark. All in all, no great white sharks were caught in the duration of the policy trial. These results are unsurprising with culls performed in Hawaii in the 1950s sharing the same conclusion that “there was no measurable effect on the rate of shark attacks on people.”<sup>6</sup>

Put simply, culls have not reduced the risk of an attack. They have not worked and do not work.

This is a position not only taken by myself, but one that extends to the greater public including the credible voices of scientific and environmental experts. Surfers and even victims of families are not exempt from this view. On Western Australia’s controversial shark killing policies, Sharon Burden, mother of a young body boarder mauled to death by a great white shark offered the remark that she “would like to see a legal challenge that requires the government to provide evidence to support their decision.”<sup>7</sup>

#### b) Adequacy of management strategies

The systematic killing and deliberate reduction of shark population size whether it be in the form of nets and drumlines or catch-and-kill regimes, raises questions about the feasibility of policies that take this direction. Since sharks themselves are highly migratory fish that can swim thousands of miles in a season, it does not make sense to target them in one place.<sup>8</sup>

Environmentally speaking, the damage caused is extensive and not limited to sharks. There is no way of monitoring or even knowing that the right marine life is being captured, let alone the right species of shark until it is too late. Culls could push certain species like the grey nurse shark to extinction if the numbers killed are only slightly higher than the species’ natural mortality rate.<sup>9</sup> Caught in a shark barrier or hooked on a baited line, there is also every possibility that rays, turtles, dolphins and even whales end up being killed too. The statistics speak for themselves – in South Africa, an average of 42 dolphins a year were caught in shark nets between 2005 and 2009.<sup>10</sup>

Not only this, a false sense of security can be created with the public being led to believe that the beach is safer. In the same vein, a false sense of confidence may be instilled, whereby people engage in risky behaviour when they go back into the ocean, such as going to more remote places or further offshore.<sup>11</sup>

---

<sup>6</sup> Ibid.

<sup>7</sup> Australian Associated Post, “Shark Attack Victim’s Mother Wants Legal Challenge to ‘Bait and Kill’ Policy”, *The Guardian*, 12 December 2013, <http://www.theguardian.com/world/2013/dec/12/shark-attack-victims-mother-wants-legal-challenge-to-bait-and-kill-policy>, viewed 14 October 2015.

<sup>8</sup> Brian Clark Howard, “What You Should Know About Shark Attacks After Recent Bites”, *National Geographic*, 15 June 2015, <http://news.nationalgeographic.com/2015/06/150615-north-carolina-shark-attacks-science/>, viewed 14 October 2015.

<sup>9</sup> ABC News, “Fact File: Protecting People from Sharks”

<sup>10</sup> ABC News, “Can Governments Protect People from Killer Sharks?”, *ABC News*, 22 December 2013, <http://www.abc.net.au/news/2013-12-22/can-governments-protect-people-from-killer-sharks/5158880>, viewed 14 October.

<sup>11</sup> Jane J. Lee, “Western Australia’s Controversial Shark Cull Claims First Casualty”, *National Geographic*, 28 January 2014, <http://voices.nationalgeographic.com/2014/01/28/western-australias-controversial-shark-cull-claims-first-casualty/>, viewed 14 October 2015.

Economically, ongoing culling of sharks would reduce the amount of commercially valuable fish we would have access to. This is because an absence of sharks means the number of rays and smaller fish would increase and these smaller species are what feed on commercially valuable fish.<sup>12</sup>

The only thing cull-styled policies have succeeded in doing is disrupting the ocean's fine ecological balance and posing more dangers to beachgoers.

### c) Recommendations

In the age of increased environmental awareness, culling is definitely not the path to go down. Effective government policy that balances ecological concerns with economic ones thus begins with the people. When we are the ones disturbing their natural environment, it is only fair that this should be the case.

More research into the cues that entice sharks to bite people in the first place so that we can avoid attacks in the future acts as a preventive approach that does not have to come at the sacrifice of the environment.

Following this, campaigns dedicated to increasing awareness of the human behaviours that may put people in danger of shark attacks in the waters are not only practical, but sustainable. The current SharkSmart campaign is on the right track, recognising that "when people enter open water, they are entering the shark's domain." However, it needs to be more widespread and the "shark SMART tips" of:

S – Swim between the flags at patrolled beaches

M – Mates swim and surf in groups, close to shore

A – Avoid swimming or surfing at dusk or dawn

R – Respond if the alarm is sounded and leave the water

T – Tell a lifesaver immediately if you spot a shark

need to become common public knowledge.<sup>13</sup> Analysis into the context behind NSW's latest shark attack victim emphasises this urgency, as surfer Justin Daniel was knocked off his surfboard at North Shelly Beach just after 6am<sup>14</sup> – a time, under the SharkSMART campaign, that swimming and surfing should be avoided for your own safety.

Since the economy does have an effect on the number of shark attacks that occur, increased exposure of the campaign during our summer season when more tourists are likely to flock to our beaches via social media and traditional advertising platforms could see a positive change. This could

---

<sup>12</sup> Dr. Euan Ritchie, "Predators such as Sharks Essential for World's Health", *The Herald Sun*, <http://www.heraldsun.com.au/news/opinion/predators-such-as-sharks-essential-for-worlds-health/story-fni0ffsx-1226811556040>, 28 January 2014, viewed 14 October 2015.

<sup>13</sup> NSW Department of Primary Industries, *Fishing and Agriculture: Sharks*

<sup>14</sup> Gina Rushton, "NSW Surfer Becomes State's 14<sup>th</sup> Shark Attack Victim This Year", *The Australian*, <http://www.theaustralian.com.au/news/nation/nsw-surfer-becomes-states-14th-shark-attack-victim-this-year/story-e6frg6nf-1227518492044>, viewed 14 October 2015.

run in a complementary fashion to the already prevalent sun safety campaigns. With budgetary implications in mind, both the economy and our beach culture would not have to be compromised.

To take things further, a potential avenue to explore is the capitalisation on sharks for tourism. Jim Abernethy's Scuba Adventures in south Florida, Mexico and the Bahamas is proof of how a controlled setting does not deter people from entering the water. Rather, it allows people to get up close and personal with sharks to shift their understanding of the creature whilst simultaneously conditioning sharks to the presence of humans.

Ultimately, policy pursued should aim to protect people with minimal impact on the environment.<sup>15</sup>

---

<sup>15</sup> Steven Deare, "Shark Attacks Won't be Stopped with Sonar Satellite Yet, Taronga Zoo Summit Hears", *The Daily Telegraph*, 29 September 2015, <http://www.dailytelegraph.com.au/newslocal/northern-beaches/shark-attacks-wont-be-stopped-with-sonar-satellite-yet-taronga-zoo-summit-hears/story-fngr8hax-1227549339309>, viewed 14 October 2015.