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NSW Shark Meshing (Bather Protection) Program

How can you reduce the chance of being attacked by a shark?

While shark attacks are exceptionally rare events, there is a risk inherent in swimming in any waterway. The only way that you can 100% guarantee you will not have a shark encounter is not to go into the water.

The fact is that the ocean is a shark's territory. Sharks are a natural part of the ocean environment, and when we enter open waters we are entering their domain – not a swimming pool.

No program or combinations of programs can ever totally eliminate the risk of a shark attack.

One of the simplest things swimmers can do is to stay between the flags when swimming at the beach. This is the best place to swim because the area is patrolled and observed by lifesavers and lifeguards who are there to ensure the safety of swimmers.

Other steps to improve safety at the beach include:

- Don't swim too far from shore – this will isolate you.
- Swim in groups as sharks are more likely to attack an individual.
- Avoid swimming when it's dark or during twilight hours when sharks are most active and have a sensory advantage.
- Avoid murky water, waters with known effluents or sewage and areas that are used by recreational or commercial fishers.
- Avoid areas with signs of baitfish or fish feeding activity – diving seabirds are a good indicator of such activity.
- Do not rely on sightings of dolphins to indicate the absence of sharks – both often feed together on the same food.
- Exercise caution when swimming near steep drop offs – these are favourite hangouts for sharks.
- Do not swim near or interfere with shark nets.

For more information on shark attacks, minimising the risks, statistics and maps, please see:

- [SharkSmart](http://www.dpi.nsw.gov.au/fisheries) – know the risks and minimise your chance of a close encounter with a shark:
<http://www.dpi.nsw.gov.au/fisheries>
- [Australian Shark Attack File \(ASAF\)](http://www.zoo.nsw.gov.au/tcsa/conservation-programs/australian-shark-attack-file.aspx)
<http://www.zoo.nsw.gov.au/tcsa/conservation-programs/australian-shark-attack-file.aspx>
- [International Shark Attack File \(ISAF\)](http://www.flmnh.ufl.edu/fish/Sharks/ISAF/ISAF.htm)
<http://www.flmnh.ufl.edu/fish/Sharks/ISAF/ISAF.htm>
- [Surf Life Saving Fact Sheet 10](http://www.slsa.asn.au/site/_content/resource/00000348-docsource.pdf)
http://www.slsa.asn.au/site/_content/resource/00000348-docsource.pdf

The NSW shark meshing program

The NSW Government's shark meshing program has been effective in helping to provide a safer environment for swimmers and surfers since it was first introduced at most of Sydney's ocean beaches in 1937.

The program involves using specially designed nets along 51 beaches from Newcastle to Wollongong, where the majority of people in NSW swim and surf.

The nets do not stretch from one end of a beach to the other. They are not designed to create a total barrier between bathers and sharks – they are designed to deter sharks from establishing territories, thereby reducing the odds of a shark encounter.

While the nets cannot provide a guarantee that a shark attack will never happen, we believe they have been effective in greatly reducing the number of attacks.

Since the NSW shark meshing program was put in place in 1937, there has only been one fatal attack on a meshed beach. That fatality occurred at Merewether Beach, Newcastle, in 1951.

Before the program was in place, during the period from 1900 to 1936, there was an average of one fatal shark attack every year in NSW waters.



How the shark meshing program works

Specialist contractors carry out shark meshing operations. The nets are 150 metres long by 6 metres deep and have a mesh size of 60 cm. They are a 'sunk net' set below the surface in about 10 to 12 metres of water, within 500 metres of the shore.

The program extends from 1 September to 30 April each year. The nets are not in place from May to August during the majority of the whale migration season.

The nets are checked regularly by contractors for maintenance purposes and to see if there is any marine life caught in the nets. Contractors are required to free all live marine life found in the nets where it is practical and safe to do so.

Nets may not be in place on every beach every day. They are, however, currently required to be in place at each of the 51 beaches on the weekends to help minimise the risk of a shark encounter during the peak beach period (sea conditions permitting).

The location of the shark meshing nets is determined by the prevailing and forecast wind, sea conditions and currents, generally parallel to beaches near the surf clubs and patrolled swimming areas.

Rough seas can damage the nets so they are put in place only when sea and weather conditions are favourable.

Minimising impacts on other marine life

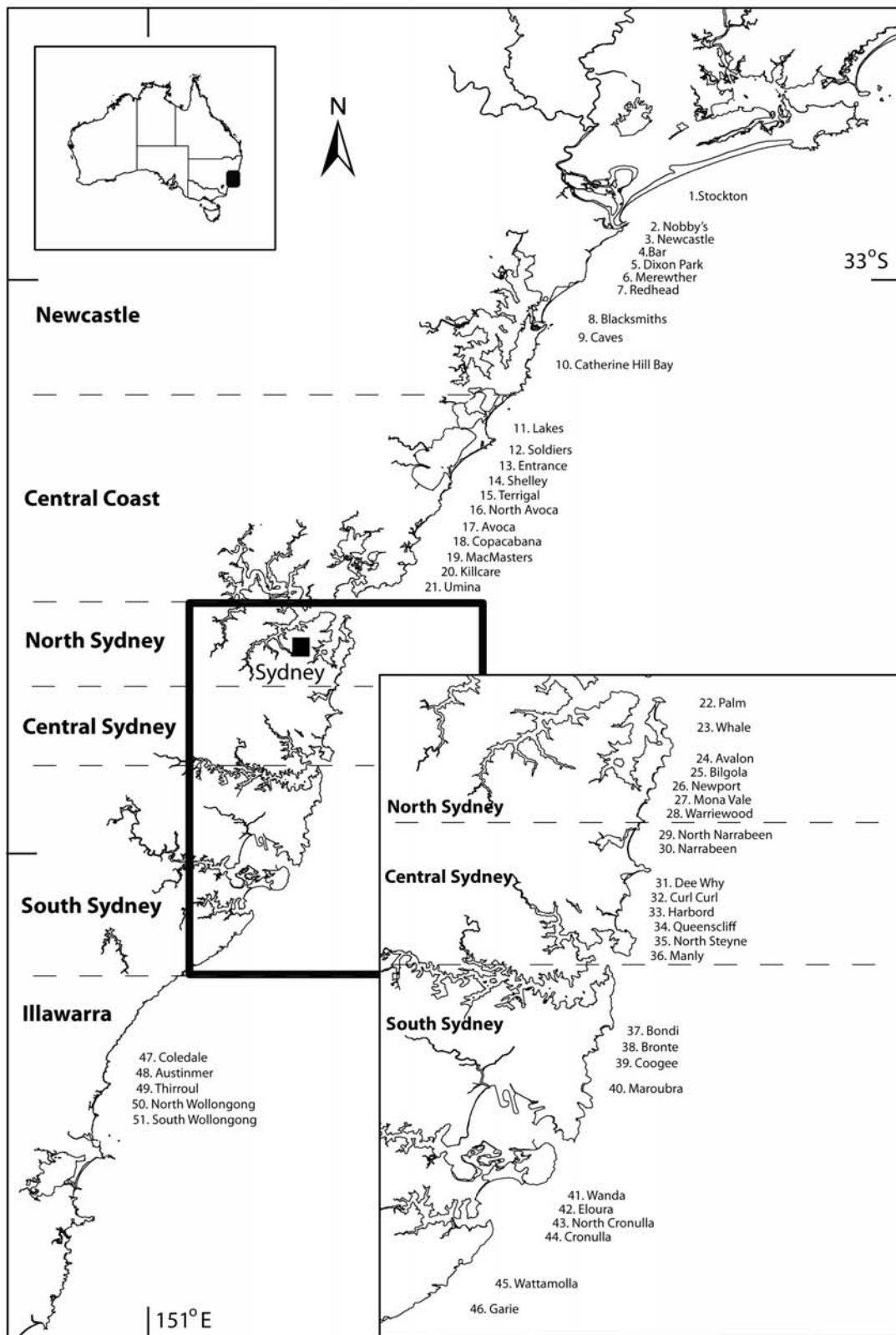
While the NSW Government remains committed to its shark meshing program, it is also looking for ways to reduce the impact the nets may have on other marine life:

- The program is [managed under joint management agreements and a management plan](#). For more information go to our website: <http://www.dpi.nsw.gov.au/fisheries>
- Acoustic devices that use high-pitched sonar, known as 'pingers', have been fitted to all nets to alert dolphins.
- Similarly, whale alarms specifically designed to alert whales, which respond to a lower frequency than dolphins, have also been fitted to all nets.
- As nets are set near the sea bed, in about 10 to 12 metres of water, which reduces potential impacts on turtles and other air breathing animals, and further reduces dolphin entanglements.
- Shark meshing nets are not in place during the majority of the whale migration season from May to August.
- The nets are checked regularly by specialist contractors (weather permitting at least every 72 hours).

The six regions and 51 beaches of the Shark Meshing (Bather Protection) Program:

Newcastle	Central Coast	Sydney North	Sydney Central	Sydney South	Illawarra
Stockton	Lakes	Palm	North Narrabeen	Bondi	Coledale
Nobbys	Soldiers	Whale	Narrabeen	Bronte	Austinmer
Newcastle	The Entrance	Avalon	Dee Why	Coogee	Thirroul
Bar	Shelly	Bilgola	Curl Curl	Maroubra	North Wollongong
Dixon Park	Terrigal	Newport	Harbord	Wanda	South Wollongong
Merewether	North Avoca	Mona Vale	Queenscliff	Elouera	
Redhead	Avoca	Warriewood	North Steyne	North Cronulla	
Swansea-Blacksmiths	Copacabana		Manly	Cronulla	
Caves Beach	MacMasters			Wattamolla	
Catherine Hill Bay	Killcare			Garie	
	Umina				

Figure 1. The map displays the six regions and 51 beaches of the Shark Meshing (Bather Protection) Program.



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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (September 2010). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Industry & Investment NSW or the user's independent adviser.