

APOLA



Australian Professional Ocean Lifeguard Association

Australian Professional Ocean Lifeguard Association Incorporated. (APOLA Inc.)

APOLA Inc is a non-profit professional association that is recognised as the peak professional association for Australian professional beach inspector ocean lifeguards. It promotes best practice in ocean water safety and beach management and coordinates professional ocean lifeguard activity in the areas of lifeguard training, community education, tourism support, public relations, regulation and risk management in consultation with Councils and their professional lifeguard services staff. APOLA membership is predominantly full-time career professional beach inspector ocean lifeguards who are employed by Coastal Councils. Typically Council professional ocean lifeguards wear the nationally endorsed workplace uniform for Council Professional Ocean Lifeguards that is a long sleeved white workshirt with blue collar and cuffs and the word LIFEGUARD in block red on the front and back.

Report for Supersprint Series **The Nissan BRW Corporate** **Triathlon Sydney 5th April 2009**

Background

There have been 83 unprovoked shark attacks in the Sydney area since 1791. A large proportion of these attacks occurred prior to the shark meshing which began on Sydney's beaches in 1937. Shark populations have been reduced by this meshing programme. In these 208 years there have been 30 shark attacks in Sydney Harbour, the last fatality was in 1963. Prior to the recent shark attacks, in the 45 years since 1963 there have been five Sydney Harbour attacks recorded; two on scuba divers near the ocean floor off North Head by relatively harmless Wobbegong Sharks, two on surf skis no injuries, and one on a night swimmer in the Parramatta River. The risk of shark attack in Sydney Harbour is infinitesimally small when compared with the number of days when swimming can take place per year, multiplied by over 217 years of records.

The Nissan BRW Corporate Triathlon Sydney 5th April 2009

The triathlon will take place in Farm Cove, approximately 8 kms from Sydney Heads. The Bull Shark, one of the whalers, is often found in Sydney Harbour, sometimes far up into the freshwaters of the Sydney basin. This is the type of shark that swimmers have come in contact with from time to time in Sydney Harbour.

The Bull Shark is the most probable shark responsible for the attacks in Sydney Harbour, and its seasonal migration the most likely reason that all harbour attacks occurred in warm water months. The warmer months bring increased bait fish activity and increased swimmer activity, increasing the presence of Bull Sharks. Obviously it is impossible to accurately predict when and if an attack will occur.

Of the 370+ species of sharks in the world, "...nearly all fatal attacks can be attributed to only four species" (Last & Stevens, 1994:8). These are:

- 1. Great White Shark**
- 2. Bull Shark**
- 3. Tiger Shark**
- 4. Oceanic White Tip**

All four species of shark can be found in Sydney Harbour. Of these four sharks the Bull Shark is most likely to enter the Harbour as far as Farm Cove. The Bull Shark is found in Sydney Harbour especially during the summer months as part of its normal migratory behaviour.

Meshing

The break down of meshed beaches in NSW Managed by NSW Fisheries is as follows:

- 10 beaches meshed in Newcastle
- 9 beaches on the Central Coast
- 15 on Sydney's north
- 10 on Sydney's south
- 5 beaches at Wollongong.

Mesh nets have never been set in Sydney harbour, bays, or the estuaries of the Sydney area. There are a number of shark protected bathing areas, which areas are usually protected by mesh netting set between large pylons.

The primary task of the lifeguard unit during the swim stage of the Nissan BRW Corporate Triathlon in Sydney on 5th April 2009 will be to prevent swimmers from engaging in hazardous behaviour or placing themselves in life threatening situations.

Research from the Nature Conservation Council of NSW states that Shark numbers have decreased world wide.

PREDATORY sharks have not increased in numbers, but they might be congregating in new locations with an abundance of food, according to the CSIRO's Great White shark expert Barry Bruce.

Several marine biologists and shark experts said the recent spate of shark attacks in and around Sydney could be explained by a surge in numbers of kingfish, salmon and other fish, driven by tight controls placed on commercial fishing. (The Australian 6th March 2009).

The following is an extract from the report “**Summary of Shark Sightings 2008-09 and Recommendations for towers, jet skis to assist reduction in the interaction of Sharks and Humans**” compiled for the Hon. Ian Macdonald MLC, Minister for Primary Industries, Minister for Energy, Minister for Mineral Resources, Minister for State Development

NSW Coastal Council Ocean Lifeguard Services

Coffs Harbour

Shark sightings - No change in professional ocean lifeguard shark sightings, however 2 confirmed sightings - one in a creek land locked during high tides in January, the other sighting by a recreational aircraft of shark off Diggers Beach.

Port Macquarie Hastings

Shark sightings - No change in Professional Ocean lifeguard shark sightings.

Newcastle

Shark sightings - No change in Professional Ocean lifeguard shark sightings.

Lake Macquarie

Shark sightings - No change in professional ocean lifeguard shark sightings, however increased incidence of public informing lifeguards of possible sightings

Wyang

Shark sightings - No change in Professional Ocean lifeguard shark sightings.

Gosford

Shark sightings - No change in professional ocean lifeguard shark sightings – increased bait fish off-shore.

Warringah

Shark sightings - No change in Professional Ocean lifeguard shark sightings.

Manly

Shark sightings - No change in Professional Ocean lifeguard shark sightings.

Waverley (Bondi, Bronte, Tamarama)

Shark sightings - No change in professional ocean lifeguard shark sightings - the shark alarm has not been used any more than last season. Recent attack on surfer is first attack in 80 years.

Randwick (Maroubra, Coogee)

Shark sightings - No change in Professional Ocean lifeguard shark sightings.

Sutherland (Cronulla, North Cronulla, Wanda, Elouera)

Shark sightings - No change in Professional Ocean lifeguard shark sightings - although there has been an increased incidence of public informing lifeguards of possible sightings

Wollongong

Shark sightings - No change in Professional Ocean lifeguard shark sightings - although there has been an increased incidence of public informing lifeguards of possible sightings

Shellharbour

Shark sightings - No change in Professional Ocean lifeguard shark sightings.

Kiama

Shark sightings - No change in Professional Ocean lifeguard shark sightings

Proposed Actions for 5th April 2009

The actions to take place to reduce the likelihood of interaction between swimmers and sharks are as follows:

1. Elevated surveillance
2. Motorised boats
3. Bait fish surveillance
4. Qualified personal
5. Radio communications
6. Designated warm up swim area
7. Having expert advice on hand.

Lifeguard in an Elevated Position

An elevated surveillance system is recommended for the prevention of interaction between humans and sharks. The position of this should give the lifeguard an unobstructed view of the swimming area and surrounds of the harbour, elevation for the purpose of viewing a greater area.

The view of swimmers that the lifeguard has from an elevated position is far superior to that obtained from either a ground level station or boat station. Therefore the lifeguard stationed in an elevated position must be the foundation of and the most important part of the surveillance system. The elevated lifeguard must be in a position with an unobstructed view with no possibility of distractions. This lifeguard must have radio communications to the lifeguard team. Major distractions will come from the general public and competitors. With this in mind the Lifeguards must be away from any and all distractions.

Lifeguards must be on a raised platform such as a covered scaffolding structure with very limited possibility of interaction with the general public and competitors. The height of the platform must be a minimum of 2 metres, if possible with an unobstructed view of the entire course. The foreshore on the eastern side of Farm Cove is shaped in such a manner that two structures will be required. The positions must provide an unobstructed view, however this can not be guaranteed due to the trees along the foreshore which cause obstructions.

The qualifications of the Lifeguards in the elevated position are vital for success. An experienced Professional Ocean Lifeguard employed by one of NSW coastal councils with a minimum of 10 years *in the sand experience* is required. Having this experienced Lifeguard will ensure they have the observation skills necessary to survey and observe the course and surrounds, as well as having excellent communication skills.

APOLA

The Lifeguards must have Binoculars with a minimum field magnification of 10 x 50 – 114m @ 1000m. Lifeguards' duties will be to observe the warm up area, 400m race course and surrounds, and be the foundation of and the most important part of the surveillance system. They will also communicate with water craft regarding shark or bait fish sightings. **The Lifeguards must be in position by 7am.**

Position of Farm Cove to Sydney Heads



Farm Cove



Positioning of the Observation Platforms



First
observation
platform

Second
observation
platform

Motorised Boats/Rescue Boards

A minimum of four (4) motorised boats must be provided for the surveillance of the swimmers and to patrol between the swimmers and the main channel. Motorised boats have the advantages of speed and elevation. The motors in the water will aggravate sharks from the immediate vicinity. Canoes, kayaks or surf boards without motors do not achieve this.

Two boats will survey the entrance area to Farm Cove and two boats will support the swimmers in the race area. The boats that are not involved in the set up of the swim area and warm up area will perform designated search patterns prior to and during the swim section of the triathlon. A boat and rescue board paddler will escort swimmers to the wave start of their swim section.

The rescue boards have the advantages of closeness to the competitor without disturbing their swimming pattern and have been a constant tool in the guarding of swimmers during race time. Over the 400m course area there must be a minimum of eight (8) professional ocean lifeguards spaced out in intervals of fifty (50) metres.

Bait Fish Surveillance

Experienced professional ocean lifeguards have the ability to recognise the signs and position of large schools of bait fish. Bait fish are small fish caught specifically to catch larger, mostly game fish. Types of bait fish are halfbacks, scad, and white bait. There is no doubt that large schools of bait fish attract larger fish including sharks. It will be a main objective of key personnel to observe the surrounds of Farm Cove to identify bait fish. Once found they will then to be split up and moved away from the Farm Cove area. Other species that feed on bait fish are sea birds and sea birds which will be active in feeding and diving. This is a key observation professional ocean lifeguards use to observe larger fish or sharks entering areas where humans are swimming.

Qualified personnel

The qualifications of the personal on the water safety team are a key factor in ensuring quality and safety. The motorised boat operators and crew must have a current NSW Maritime licence have been a professional ocean lifeguard for a minimum of five (5) years and currently employed as a lifeguard for a NSW coastal council. The rescue board operators must be currently employed by a NSW or QLD seaside council. Employment by a seaside council ensures lifeguards have undergone specific training and recruitment policies set out by the NSW Local Government Practice note 15. See Appendix 1 for Recommended Competencies

Radio communications

Communications are a vital factor between lifeguards. If a shark is sighted by any of the surveillance team in the area of the swimmers, a quick response is necessary. There must be radio communication between the lifeguards in the elevated positions and each motorised boat must be connected to the race coordinator/director.

Designated warm up swim area

Competitors will wish to warm up for the swim section of the race. It is therefore advised a warm up swim area be set up using buoys close to the shoreline. This area should measure fifty (50) metres in length ten (10) wide. This will ensure swimmers will not swim solo out in the middle of Farm Cove or the entrance to the Harbour. This area will be overseen by one of the elevated observation points and two lifeguards on rescue boards.

Having expert advice on hand

In having expert advice on hand, the Supersprint Series Nissan BRW Corporate Triathlon Sydney 5th April 2009 will have the advantages of easing the minds of competitors and the general public. Having one-on-one contact with competitors who may be fearful of sharks will ease their mind so as they can ultimately have an enjoyable and seamless race. Expert advice allows the Triathlon organisers to post or email advice, show their intentions on the race day to reduce shark hazards and ensure competitor safety.

A brief CV of Ian Vaughan

Ian has been employed as a professional ocean lifeguard for 26 years with Wyong Shire Council.

- **Cert IV in Professional Ocean Lifeguard.**
- **Cert IV in Paramedical Skills.**

APOLA Advisor to the Hon. Ian Macdonald MLC, Minister for Primary Industries, Minister for Energy, Minister for Mineral Resources, Minister for State Development, Shark Summit 2006, March 2009.

Appendix 1. Recommended competencies – beaches

Council employed lifeguard or contracted lifeguard:

1. Fitness and strength

Swim 800m in a 25m to 50m length pool in a time less than 14 minutes.
Lifeguard mission (ocean swim, beach run, rescue board paddle and beach run over a set M shape course commencing with 600m swim, followed by a 800m beach run, followed by a 600m rescue board paddle and concluding with a 800m beach run, within a time determined by the council). Overall time recorded for comparison with other candidates.

Simulated board rescue (paddle to rescue an unconscious patient, demonstrate rollover, demonstrate deep water resuscitation simulation, return patient unassisted and simulate patient care including placing patient in recovery position).

Rescue tube rescue (swim with rescue tube to rescue an unconscious patient, demonstrate securing patient in rescue tube, demonstrate deep water resuscitation simulation, return patient unassisted and simulate patient care including placing patient in recovery position).

Simulated motorised craft rescue (using IRB/PWC where appropriate).

2. Demonstrated experience through skills including:

Ability to perform effective first aid and resuscitation following a rescue from an aquatic environment (possess current senior first aid and advanced resuscitation certificates from a registered training provider)

Communication/interpersonal skills to promote compliance with safety rules and regulations and respond to an aquatic emergency

Application of casualty management procedures

Application of supervision techniques in an aquatic environment

Recognition and appropriate response to aquatic emergencies requiring basic and advanced water rescue techniques

Water Safety | 51

52 | Department of Local Government

3. Demonstrated knowledge and understanding including:

Organisational emergency procedures

Occupational Health and Safety and other relevant legislative requirements

Identification of individuals who may be at risk

Signs and symptoms of physical injury

First aid techniques and procedures
Crowd control in emergency situations
Rescue equipment used in aquatic emergencies
Hazardous behaviour that poses risks to clients
Facility or environmental hazards
Role of lifeguard