

Curriculum for Training Seminar:

Diving with Oceanic Whitetips Safe Diving Practices & Guidelines

by Dr. Elke Bojanowski

Introduction

Personal introduction and professional background Explaining the reasons for and structure of the Training Seminar

Outline of the Seminar:

1. Oceanic Facts...

- 2. Shark Sensory Systems & Behaviour
- 3. Diving with Oceanic Whitetips
 - (incl. Safe Diving Practices & Guidelines)
- (4. Shark Monitoring and Incident Reporting)?

Part 1: Oceanic Facts...

Biological Facts on Oceanic Whitetips: description, systematics, distribution, feeding behaviour [*video of oceanics & whale carcass*] & how it influences interactions; the Red Sea population.

Part 2: Shark Sensory Systems & Behaviour

Explaining and showing video simulations of the seven major shark senses and how they influence shark behaviour & interactions: hearing - smell/ chemoreception [*video*] - vision - pressure (lateral line system) [*video*] electroreception (ampullae of lorenzini) [*video*] - touch - taste.

Recognising aggression in sharks: threatening display [2 videos], functions of pectoral fin positioning, and comparison between relaxed and excited swimming patterns in oceanics [2 videos].

Part 3: Diving with Oceanic Whitetips (incl. Safe Diving Practices & Guidelines)

Slide 1:

General shark diving rules apply: do not chase after or harrass sharks in any way, keep noise & activity levels to a minimun, do not touch sharks [*video*].

Slide 2:

- Respect them for what they are: wild predators!
- Avoid anything that makes you look like prey!

Slide 3: Stay Calm

- Avoid quick and erratic movements with arms and fins, keep your hands tucked in closely.
- When approached closely, slowly take a vertical position in the water column.
- Example 1 [video: diver franically finning away from oceanic at Brothers].
- Example 2 [video: diver freezing in the presence of an oceanic at Brothers].

Slides 4&5: Keep your eyes on the shark(s)

- Stay alert, look around and pay attention to other divers to avoid being surprised by an approaching shark.
- Follow the movement of the shark by pivoting in your vertical position with minimal movement.
- If you notice a change in shark behaviour (getting 'excited' or 'agitated'), keep your distance or leave the area/water in a calm and orderly fashion.
- Do NOT turn around and swim away from a shark.
- If you need to leave the water with oceanics close by, fin backwards towards the boat/reef with slow, deliberate movements while watching the shark(s).

Slide 6: Control your buoyancy

- Stay in a minimum depth of 5 meters to avoid dangerous situations near the surface, i.e. zodiac traffic above you.
- Quick, uncontrolled changes in depth (both up & down) can spark a shark's curiosity and may cause it to follow [*video: diver loosing their buoyancy with oceanic following*].

Slides 7&8: Limit your time on the surface

- Do not swim or snorkel in areas with possible oceanic whitetip sightings.
- When jumping off the back of the boat, descend as quickly and safely as possible.
- In case a surface line has to be used, divers should calmly pull themselves along with their hands only, stay alert, and stop to turn and face sharks that approach.
- For a zodiac pickup (especially away from the reef), reduce the number of divers on the surface at the same time; send them up singly or in pairs.
- If necessary, tell guests to leave their dive kit floating on the surface (after making sure they inflated their BCDs!!!), get themselves in the zodiac, and collect the kit after.
- Check for oceanics close to or underneath you, before jumping off the back of your boat or rolling off a zodiac.

Slides 9&10: Close approaches

- Oceanic whitetips are more likely to closely approach single or isolated divers, not groups of divers.
- They rarely come close to the reef, most approaches occur shallow, underneath mooring boats or in the blue.
- At close range (within ~ 30 cm) push a waterwave towards an approaching shark (ideally towards the gill area) to make it turn away [*video: diver pushing waterwave towards approaching oceanic*].
- To prevent a shark from touching you, calmly get your fin, a camera, or any other object in place as a buffer [*video: diver presenting fin to approaching shark and the interaction after*].
- As a last resort, guide or gently push a shark away from you with your hand(s) [video: divers around pushy oceanic, being guided away by hand].
- Do not act overly aggressive towards a shark; it might trigger a defensive reaction.

Slide 11: Some remarks...

- There is a fine line between scaring people before jumping in the water, and making sure they know what to expect and how to react...
- Do not claim, that diving with sharks is risk-free! Because it isn't... the risk of diving with sharks, including oceanic whitetips, is minimal though.
- Sharks in general are not dangerous to people. But we still need to make sure, that our presence and behaviour do not create dangerous situations.

Part 4: Shark Monitoring & Incident Reporting

TBC: Explaining how the guides and their guests can help with monitoring the oceanic whitetip shark population in the Egyptian Red Sea. Some examples of the data collected so far by the Red Sea Sharks Trust.

Define which type of behaviours/incidents should be reported, also how and to who...

