

# Endangered Wildlife Trust Perspective on Baited Shark Diving

The Endangered Wildlife Trust's (EWT) mission is to conserve threatened species and ecosystems in southern Africa to the benefit of all people.

This statement represents the EWT's position on the practice of baited shark diving. As a legal practice that falls within the ambit of a non-consumptive utilisation of sharks, we recognise that the baited shark diving industry contributes to both the country's economy and the tourism sector. Even so, and despite protection measures, sharks are still vulnerable to consumptive exploitation by humans. This concern is compounded by <u>recent research</u> that shows both extremely low, and declining numbers of Great White Sharks (*Carcharodon carcharias*) in South Africa's waters. Given several contentious issues that cloud the industry, the EWT does not presently support the practice of baited shark diving.

### What is baited shark diving?

Baited shark diving refers to both the activity of a human being lowered into the sea in a protective steel cage, as well as free diving, in the close vicinity of sharks that have been attracted to a site with the use of bait. In South Africa, diving operators traditionally use chum – a mixture of minced tuna and sardines with fish oil that is mixed with seawater - to attract sharks to their boats. Cage dives typically target the Great White Shark as the marine equivalent of the 'Big Five' land mammals. In addition, operators may use bait lines and/or drag decoys behind their boat to lure sharks closer or entice them to breach. Cage diving allows tourists to view these sharks underwater and in close proximity from inside a cage. Free diving with baited sharks is aimed at a variety of species other than the Great White Shark, including Tiger Sharks (Galeocerdo cuvier), Blacktip Sharks (Carcharhinus limbatus), Zambezi (Bull) Sharks (Carcharhinus leucas) and Dusky Sharks (Carcharhinus obscurus). During this activity sharks are attracted to the site with the use of a bait ball or drum suspended approximately 10 m below the surface, which drifts with the ocean currents. Divers are expected to drift freely with the current, along with the sharks that have been attracted to the bait ball. It is notable that tourists get to interact much more closely with these sharks during a baited shark dive than they will with any land-based predator on a wildlife drive. The EWT considers several aspects of the baited shark diving industry that, in its current form, make it an unethical and poorly regulated practice:



## 1. Attracting and feeding sharks can change their behaviour

There are legitimate concerns that attracting sharks with chum alters their natural behaviour. Operators contest this opinion, claiming the sharks would be found in the general area in any case. From the EWT's perspective, one of the key conservation issues is the frequent conditioning of wild animals to divert them from their natural behaviour to engage directly with humans in response to stimulation (e.g. chumming or feeding). This is a wholly different activity from observing marine life such as sharks by scuba diving or snorkelling underwater with no bait. Through chumming, operators trigger an indiscriminate feeding response in sharks, without providing any nutritional return. Interference like this goes from simply observing to interacting with sharks. A number of studies have revealed that regular baiting of sharks leads to significant increases in residency time, and changes in diel pattern of habitat use within those particular vicinities, thus altering their natural movements and behaviours. While not monitored in South Africa, this trend has been observed for other shark species elsewhere -in Silky Sharks (Carcharhinus falciforms) in the Red Sea, Sicklefin Lemon Sharks (Negaprion acutidens) in the Society Islands, Whitetip Reef Sharks (Triaenodon obesus) in the Coral Sea, and Great White Sharks in Southern Australia. Additionally, in Hawaii, smaller Sandbar Sharks (Carcharhinus plumbeus) were found to be excluded by larger sharks at provisioning sites. Although the long-term effects associated with alterations in the natural movements and behaviours of sharks are currently inconclusive – and difficult to quantify

- some authors suggest that changes in home range size, inter-species aggression and shark community structure may directly impact shark energy expenditure and metabolism. The EWT accepts that it is more difficult to see sharks in their natural environment than land-based predators and that observing sharks in the ocean can have a positive effect on the general public's perceptions of sharks. However, baiting land-based predators – such as lions – is also widely condemned as unethical by many conservation bodies. For the same reason we denounce the use of chumming by marine-based operators simply to allow guests to experience a close encounter with a shark. While moderate levels of bait-associated ecotourism may only have a minor effect on the behaviour of <u>Great White</u> <u>Sharks</u> in False Bay (South Africa), the long-term effects of this expanding industry on the overall fitness of sharks remain largely inconclusive. We therefore call for adopting a precautionary approach.



#### 2. <u>Sensational marketing</u>

Sensationalism plagues the baited shark diving industry. Operators often market baited shark diving experiences for their adrenalin rush. This fear-mongering approach towards sharks – while heightening the sense of excitement for paying tourists and increasing demand – does nothing to correct misconceptions and biases about shark behaviour. Rather, operators should use baited shark dives as an opportunity to promote our understanding of and the conservation of sharks – for instance through alerting guests to the millions of sharks fished illegally across the globe every year. Although the industry claims to support and expand shark conservation efforts, it is often not clear how these are actually benefitting the various shark species in South African waters.

#### 3. Inadequate industry regulation

The Department of Environmental Affairs' (DEA) <u>policy on the cage diving industry</u> – through the Marine Living Resources Act, 1998 – states that Great White Shark cage diving must be managed so that it does not interfere with the normal functioning of these sharks, and does not threaten either the safety of divers or the wellbeing of the sharks. The policy encourages the expansion of the shark cage diving industry in order to promote economic growth. The lack of capacity within the DEA to properly enforce regulations; and the continued issuing of permits in areas where the number of operators is already high, all exacerbate the risk of behavioural conditioning in sharks in response to human interaction and unnatural provisioning.

While the DEA requires permit holders to carry independent observers on cage diving excursions, it also remains unclear as to who these independent observers should be, their qualifications, and under what circumstances they are needed. So while compliance with permit regulations must be ensured, it remains uncertain whether this requirement is being implemented. Additionally, certain terms and conditions laid down in cage diving permits by the DEA are ambiguous and open to misinterpretation. As operators are largely left to self-regulate, this provides unscrupulous operators an opportunity to abuse the permit system by, for example, subjectively deciding what type of behaviour may be considered shark harassment or disturbance. Authorities, on the other hand, rely on operators to 'do the right thing' with little or no consequences for non-compliance.



In addition, client expectations, as well as competition within the industry, are exceptionally high. Significant pressure therefore exists for operators to disregard certain operational regulations, as set down by South African legislation, in order to meet these expectations. For instance, as tourists expect good sightings, this exerts pressure on operators to intentionally feed sharks – rather than just chumming – an activity that permit regulations currently prohibit.

In short, it is the EWT's position that baited shark diving is currently problematic and not entirely conducive to generating a healthy appreciation and respect for this misunderstood and highly threatened taxon. In principle, baited shark diving could provide a viable nonconsumptive industry, but given the many regulatory and ethical issues, we call for a precautionary approach to the industry, and strongly recommend that additional research is conducted to determine the conservation effects associated with baited shark diving. Additionally, we recommend a revision of the current policies, regulations and law enforcement associated with this industry with increased capacity for enforcement of these regulations.

> The EWT bases its perspectives on the best available information and data available at the time. Our positions and opinions may change as more information and data become available.