



MEDIA RELEASE

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DRUMLINES TO REPLACE SOME SHARK NETS IN THE KWADUKUZA MUNICIPALITY AS A MEASURE TO REDUCE CATCHES OF MARINE ANIMALS

Shark nets protect bathers primarily by fishing for potentially dangerous sharks. By reducing the number of these sharks in the vicinity of each protected beach, the probability of an encounter between a bather and a shark is reduced. The nets have been very effective in reducing the risk of shark attack but there is an environmental cost. Not only do the nets catch potentially dangerous sharks, they also catch certain shark species that pose no threat to bathers, as well as various species of dolphin, ray and turtle and, occasionally, large bony fish.

The Board has received approval from the KwaDukuza Municipality to introduce the mixed gear concept at its protected beaches. This is an environmental measure to reduce catches of non-target species by replacing up to half of the shark nets with drumlines. A drumline consists of a single, large baited hook suspended from an anchored float and forms an alternative method of fishing for potentially dangerous sharks. Drumlines, which have been in use in the bather protection program of Queensland, Australia, since 1962, have the advantage that they are far more selective than nets in terms of what they catch. It should be noted, however, that while both shark nets and drumlines have an excellent safety record where they are in use, neither provide absolute protection from shark attack. Only a physical enclosure is capable of achieving that, and the construction of such enclosures at surf beaches is impractical.

The Sharks Board conducted experiments with drumlines in KwaZulu-Natal for over a decade and thereafter introduced mixed gear at all beaches on the Hibiscus Coast and uMhlatuze in 2007. Results have shown that this type of fishing gear is capable of catching potentially dangerous sharks and has reduced the capture of non-target species by 47% at the Hibiscus Coast beaches. Drumlines take a reduced by-catch, which is the catch of animals other than those sharks. Not only is the by-catch of dolphins, rays and turtles greatly reduced but so too is the catch of certain shark species that pose little threat to bathers, such as the spotted ragged-tooth shark and the spinner shark. Drumlines tend to catch more young dusky sharks, however, and this aspect is monitored carefully.

The drumlines will have red floats that are considerably larger than those currently on the shark nets. They will be deployed in the vicinity of the nets that remain in each installation and will be easily detected by small craft. The hooks will be baited each week day at the same time that the nets are routinely serviced. The bait used will be fish species taken as bycatch in South Africa's hake fishery.

An obvious question is whether sharks might be attracted by the presence of several baited hooks. The distance over which sharks are thought to be sensitive to smell is of the order of a few hundred metres as opposed to kilometres. While attraction to baited hooks is the mechanism whereby drumlines fish for sharks, the baits are likely to attract only those sharks that are already in the vicinity of the beach where the drumlines are anchored. Also, it should be remembered that each

drumline has only one baited hook and that most installations will only have between four and eight drumlines, so the total quantity of bait present in an installation is not large.

Another question is whether the baits will be scavenged off the hooks by small sharks and fish. The answer is that scavenging does occur, but that experimental fishing with drumlines and the current mixed gear installations on the KZN coast have shown that catches of potentially dangerous sharks nevertheless take place. It should be borne in mind that both nets and drumlines achieve their protective function by fishing over the long term in the vicinity of each protected beach and so the effectiveness of the drumlines is not dependent upon the hooks having bait on them at all times. Secondly, the frequency of baiting will be higher than is the case in Queensland, where the hooks are baited on approximately 14 days in every 28. Finally, it should be remembered that each beach will be protected by a combination of nets and drumlines.

Reductions in costs to local authorities are unlikely. Most operational costs relate to personnel and to running a fleet of skiboats and these costs will continue to be incurred. In addition, there will be an ongoing requirement for bait.

Members of the public are reminded that drumlines constitute life-protecting equipment and are the property of the Sharks Board. They are urged not to tamper with the drumlines and should be aware that the Board will not hesitate to prosecute anyone who does so. It is an offence to interfere in any way with shark preventive netting or appliance, which includes drumlines.

The introduction of drumlines is an initiative aimed solely at reducing the environmental impact associated with the provision of safe bathing. Sharks Board CEO Mthokozisi Radebe, emphasizing that bather protection remains the priority, appeals to the public to assist the Board in ensuring the success of this initiative by reporting to the Board's staff anyone seen tampering with the equipment and by reporting the presence of any displaced equipment found along the KZN coast.

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