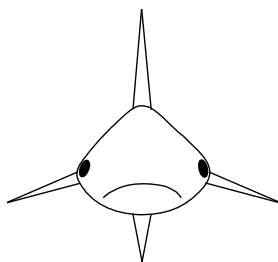


NATAL SHARKS BOARD

of the Province of KwaZulu-Natal, South Africa
Constituted in terms of Ordinance 10 of 1964

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DRUMLINES

Frequently Asked Questions

- **How do shark nets and drumlines work?**

They are not physical barriers that keep sharks out of a bathing area. Instead, they fish 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. Both shark nets (in South Africa and Australia) and drumlines (in Australia) have been very effective in reducing the risk of shark attack. Drumlines have been used successfully for more than 40 years in Queensland, Australia (see <http://www2.dpi.qld.gov.au/fishweb/2920.html>). It should be noted, however, that neither shark nets nor drumlines 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.

- **Why replace some nets with drumlines?**

To reduce environmental impact. Drumlines are more selective than nets in terms of what they catch, taking fewer harmless animals. Also, certain shark species that pose little threat to bathers, such as ragged-tooth and spinner sharks, are seldom caught on drumlines. It is probable that more young dusky sharks will be caught, however, and this will have to be monitored carefully.

- **Will drumlines catch potentially dangerous sharks?**

Yes – experimental fishing on the KZN coast has demonstrated that drumlines are effective at catching Zambezi, tiger and great white sharks.

- **Will more captured sharks survive on drumlines than in nets?**

The answer is still not clear. Only 2% of sharks were found alive on the drumlines during experiments at Richards Bay, but the figure was 10% at La Mercy and 35% at Mzamba. The answer may vary according to species, and should become clearer with time.

- **Will live sharks be tagged and released?**

Yes, live sharks caught on the drumlines will be tagged and released, just as they are from the nets. This policy will be subject to review, however, as data on survival rates are accumulated. Note that the safety of the crew during the release process is of paramount importance and no unnecessary risks will be taken.

- **Will there be a bycatch of harmless animals on the drumlines?**

Yes, but greatly reduced compared with nets. Only one brindlebass and one green turtle (foul-hooked) were caught during all the experiments with drumlines in KZN. Both these animals were released alive.

- **Why use red mullet (southern rover) and false jacobever as bait?**

Cost and availability. These fish are caught as bycatch in South Africa's trawl fishery for hake. Also, KZN research on drumlines has been conducted using these baits.

- **Is scavenging of baits a factor**

Scavenging does occur, but experimental fishing with drumlines on the KZN coast has shown that this hasn't prevented the capture of potentially dangerous sharks. It should be borne in mind that both nets and drumlines provide protection by fishing over the long term in the vicinity of each protected beach and so the effectiveness of the drumlines does not depend on the hooks having bait on them at all times. Also, the hooks will be baited 19-20 times a month and this is a higher frequency of baiting than is used in Queensland, where scavenging also occurs and where the hooks are baited on approximately 14 days in every 28. Finally, it should be remembered that each beach will be protected by both nets and drumlines.

- **Won't sharks be attracted to the area by the baits?**

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 bathing beach. Also, it should be remembered that each drumline has only one baited hook and most installations will have between four and eight drumlines only. Each bait weighs about 500 g. Hence the quantity of bait present in a drumline installation is not large. The total quantity of bait that will be used on drumlines on the KZN coast as a whole will be a small fraction (less than 5%) of that used in rock-and-surf angling.

- **Will there be a reduction in operating costs?**

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.

- **Will the drumlines be a hazard to boaters and other sea users?**

The buoys are highly visible and the drumlines will be deployed in the same area as the shark nets. The public should be aware, however, that each drumline has a large fishing hook and so should not be approached unless absolutely necessary.

08 March 2007