

Graeme Kruger



Chris King

Become a shark citizen scientist

Chantel Elston explains how ELMO uses public participation for the conservation of sharks and rays

When somebody says ‘shark’ to you, perhaps the *Jaws* music starts to play in your head and you envision a scary great white shark. But did you know that South Africa is a global hotspot for shark and ray diversity? We have a little over 200 species in our waters, including pyjama sharks, hammerheads, bronze whalers, short-tail stingrays, honeycomb rays, twin-eyed skates – and the list goes on!

Unfortunately, the diverse lives of these animals remain a mystery to us. Simple questions like “how many individuals are there?” or “where do they like to live, and why?” remain unanswered. One thing we do know, though, is that many of these species are in trouble. The sad reality is that about 30% of sharks and rays in South Africa are considered at risk of extinction. How can we hope to protect these animals if we know so little about them?

This is why ELMO – short for Elasmobranch Monitoring South Africa – was born. (Elasmobranch is a group name for sharks and rays within the cartilaginous fish class, Chondrichthyes.) The overarching goal of ELMO is to use public participation to collect vital information on the sharks and rays that live in South Africa’s waters. Gathering data in a traditional scientific manner is time-consuming and expensive, but beachgoers, fishers, boat operators, drone pilots, scuba divers and snorkelers may encounter sharks and rays on a regular basis.

species encountered as well as the date and location of the encounter. This goes into our database, helping us to monitor population trends and to figure out where these species live.

But collecting information on eggcase finds is just as important as spotting the animals themselves. Some shark and all skate species lay eggs rather than giving birth to live young. The eggcases, popularly known as mermaids’ purses, often wash ashore after the young have hatched. Finding out where and when these eggcases come ashore doesn’t only tell us which species live in an area, but could also suggest which areas are important nursery grounds for those species. Identifying nursery grounds and protecting them is one of the best ways we can conserve sharks and rays in our waters.

ELMO partners with a number of local NGOs that also collect information on sharks and their eggcases, so our database now contains more than 5 700 eggcase finds and over 25 000 encounters, spanning the entire South African coastline. This is a treasure trove of information and some of the data has already been provided to scientists working on the conservation of these animals.

So if you encounter a shark or ray, or one of their eggcases, please let us know about it! Send a WhatsApp message with the photo, date and location to 076 897 5474. Our website (www.elmoafrica.org) contains useful information, such as guides on how to identify eggcases, and we are active on Facebook (@elmoafrica) and Instagram (@elmo_africa).

Dr Chantel Elston completed her PhD on stingray community ecology at Rhodes University in November 2018 and is now a postdoctoral researcher with the South African Institute of Aquatic Biodiversity (SAIAB), investigating the distribution and movement patterns of rays along South Africa’s coastline.

Tafjana Good



ELMO collects two major types of data from members of the public – animal sightings and eggcase finds. For animal sightings, we want to know about the