

Maxine's Journey & the SOS Foundation M-Sea Programme

by Lesley Rochat

The Save our Seas Foundation "Maxine Science, Education and Awareness Programme" (M-Sea) is a unique ocean conservation programme which focuses on the release of Maxine, a large female ragged-tooth shark, from the Two Oceans Aquarium in March 2004. Maxine is a shark with a fascinating history, who will play a pivotal role in raising awareness and educating the public regarding the importance of sharks in particular and ocean conservation in general off the African continent.

The *Save our Seas Foundation M-Sea Programme*, which recently received an endorsement from the World Conservation Union (IUCN), is a partnership initiative between the AfriOceans Conservation Alliance (AOCA), the Two Oceans Aquarium and the Save Our Seas Foundation.

The *SOS Foundation M-Sea Programme* will underpin an ongoing, long-term effort to promote ocean conservation in Africa and ensure the survival of Africa's sharks. Whilst the initial programme will be limited to South Africa, the intention is to extend it to neighboring African countries where the threat facing sharks and marine resources is of growing concern. This unique ocean conservation programme combines science, education and human interest in a powerful and high-profile manner. It is separated into three main component parts namely the Science Programme, the Education and Awareness Programme and Documentary Films.

The Science Programme, which includes South Africa's leading shark experts, Dr Leonard Compagno and programme leader, Dr Malcolm Smale, involves the tagging of ragged-tooth sharks with satellite and ultrasonic tags. Maxine, the first shark to be released from the Aquarium, was returned to the waters off Struisbaai on the southern Cape Coast on 18 March 2004 and it is hoped that she will join other ragged-tooth sharks in their annual migration up the east coast. The main objective of this programme is to conduct important scientific research into behaviour and migration patterns of ragged tooth sharks along the South African coast, about which very little is known. The other four ragged-tooth sharks on display in the I&J Predator Exhibit will also be released over the next two to three years.

Sharks are the most feared of all the marine creatures and the least understood. *The Maxine Education and Awareness Campaign* aims to change the negative public perception of sharks as dangerous 'man-eaters' and as vermin. At the same time it will promote ocean conservation. Key elements of the campaign include AOCA's multi-functional website (www.aoca.org.za) and its 'project Update' link, which will keep the public informed throughout the duration of the programme. Updates will include information

on Maxine's whereabouts, as monitored by her tags, and the progress of the film crew who will be travelling along Maxine's breeding migratory path to document her history.

Other prime elements include educational workshops and packs for coastal schools; a shark information display in the Two Oceans Aquarium; permanent shark information boards erected at key sites along the South African coast and a national competition in which the public will be invited to speculate as to where Maxine's satellite tags will surface months later.

The *Documentary Film Productions* component consists of a one-hour television documentary on Maxine's unique life story for international and national television release, a television insert about her release and the *M-Sea Programme*, and an educational video.

We all remember the penguins 'Peter', 'Percy' and 'Pamela', who became icons in the "Treasure" oil spill disaster. These penguins became household names throughout the world as their journey home was followed on the news and on the Internet. Likewise through the regularly updated AOCA website, the aggressive media strategy, the far-reaching education and awareness campaign, and the film productions, Maxine is set to become an icon representing the importance of ocean conservation throughout Africa's oceans.

Who is Maxine?

On 4 August 1995 a large female spotted ragged tooth shark, was caught in the shark nets at Amanzimtoti in Kwa-Zulu Natal, South Africa. Fortunately members of the Natal Sharks Board found her alive during a routine net maintenance check. They promptly tagged her with a tag supplied by the Oceanographic Research Institute (ORI) and released her. Although badly injured by the nets during her struggle to free herself, she continued along her breeding migratory path. Ninety-one days later and 1,369 kilometres further down the coast she arrived at Die Plaat in Struisbaai where a "Tag and Release" Tournament was taking place. Weighing a handsome 89 kg, she was pulled from the ocean by Border angler André Small. The anglers had been informed that the Two Oceans Aquarium in Cape Town was looking for a ragged-tooth shark of her size, and that if they should catch one, they were to contact the Aquarium immediately. (The anglers noted that she had already been tagged and relayed this information to the ORI in Durban, who informed them that she had been tagged only 91 days prior off Amanzimtoti!)

A very tired and stressed shark was then transported on the back of a van to the only protected pool in the vicinity, a public pool at Cape Agulhas, nearly 20 kilometres away, where Aquarium staff would collect her. Twenty minutes after being caught she was carefully placed in the pool. By then she was close to

death. Again she was saved, this time by the team manager named Mackie. Being determined to revive the shark, he jumped into the pool and swam around with her for over an hour until she was strong enough to swim alone. Eleven hours later the Aquarium staff arrived to collect her. It was Maxine's first moment in the limelight as bright lights lit the pool and curious residents gathered to witness her transfer into a holding tank. The transport back to the Aquarium was successful and upon arrival she was introduced into the largest display, the I&J Predator Exhibit.

Given that Mackie had saved her life and that initially she was thought to be male, she was called Max, which was later changed to Maxine.

Maxine is indeed lucky to be alive since only 40% of ragged tooth sharks that are caught in the shark nets off Kwa-Zulu Natal survive and fishermen kill many more annually. Now eight years later, only a faint scar remains behind her gills as a reminder of her entanglement with the shark nets. She has grown into a magnificent animal of 190 kg, patrolling the I&J Predator Exhibit and enthraling visitors from around the world. In her own right Maxine is a minor public figure. She has been a wonderful ambassador for her species and she has returned to her world to brave its elements once more.

Maxine's Tags

Prior to her release, the programme's shark specialists and an independent vet examined Maxine to ensure that she was returned to the ocean in a healthy condition. She was then transported back to Struisbaai, where she was captured in 1995. Before being released offshore, Maxine was tagged with three tags to monitor her movements after her release - one ultrasonic coded tag and two pop-up archival satellite tags. The ultrasonic tag, which has a unique identifying number, will continue to transmit signals for up to two years. If she moves within 300 metres of the many receiver base stations positioned along the South African coast, her presence will be recorded when routine downloading is carried out by scientists in these areas. Stations are positioned at sites favoured by ragged-tooth sharks. Should she move into diving areas, such as the Aliwal Shoal, divers will also be able to report her presence. The two pop-up satellite tags will gather information on depth, temperature and daylight patterns. These have been set to surface approximately three and six months after her release.

Help us to Save our Sharks

As each shark is released from the Aquarium over the next few years, we will offer you the opportunity to become a proud parent of that particular shark. Maxine is the first shark to go and this is a great opportunity to adopt the most famous shark in Africa!

Your symbolic adoption of these ragged-tooth sharks will help to support the first scientific research on aquarium sharks being re-introduced into the wild. Together with the tagging of several wild sharks, this research will ultimately help us in our efforts to save the sharks of Africa. Please log onto

www.aoca.org.za to find out how to adopt Maxine, to follow her progress once she is released, and to find out more about the SOS Foundation M-Sea Programme.

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