

Billfish tagging in South Africa – what’s the catch?

By Bruce Mann and Stuart Dunlop (Oceanographic Research Institute, Durban)

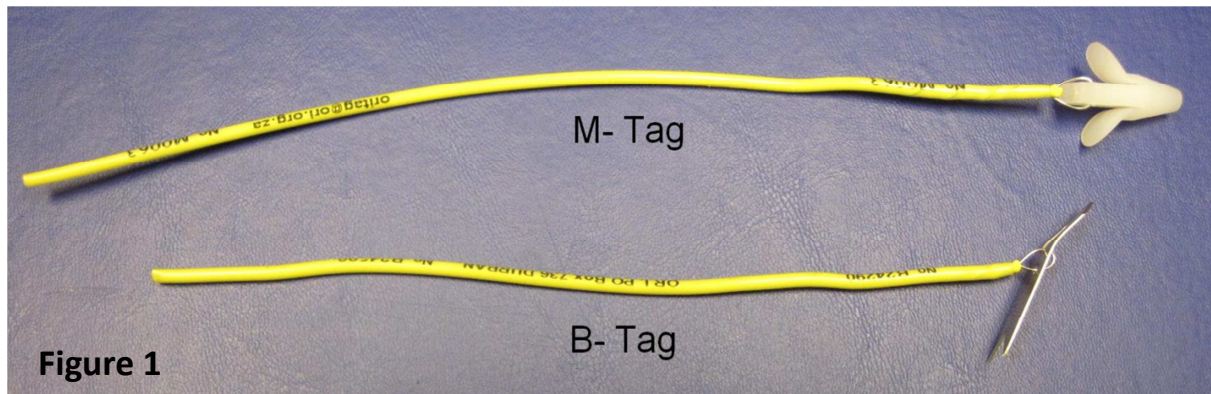
The Oceanographic Research Institute (ORI) initiated tagging of billfish in South Africa in the 1970s. To date, after nearly 30 years of tagging, there have been surprisingly few recaptures (Table 1).

Table 1. The number of billfish tagged and recaptured in the ORI Tagging Project from 1984-2010.

Species	Number tagged	Number recaptured	% recaptured
Sailfish	3336	28	0.84
Black marlin	612	1	0.16
Striped marlin	348	1	0.29
Blue marlin	256	0	0
Broadbill swordfish	78	1	1.28
Shortbill spearfish	23	0	0

The question is why is the recapture rate so low? Well, these results are not unique to South Africa and conventional billfish tagging programmes around the world have generally reported extremely low recapture results. There are a number of possible reasons for this including tagging mortality (fish die after being caught and tagged), tag shedding (tags fall out), non-reporting of recaptured fish (accidental or deliberate), highly nomadic/migratory movement behaviour, large population size dispersed over a huge area, etc. It is likely that all of these reasons are playing a role to some extent. As a consequence, there is relatively little new information/knowledge being generated about billfish movement and growth from tag and release studies using conventional tags. In some countries this has resulted in the stopping of conventional billfish tagging programmes and instead recreational billfish anglers are simply encouraged to “tip and release” hooked billfish in order to improve their chances of survival.

In order to address this issue here in South Africa, ORI undertook a review of our billfish tagging efforts and decided to implement a few changes. The first of these was to change our billfish tag from the old steel head B-tag, to a new double-barbed nylon M-tag (Figure 1). This decision was based on communication with our tag supplier in Australia (Hallprint©) and because of better reported retention rates for this type of tag, both in Australia and the USA. Additionally, to further increase the reporting of recaptures, a dedicated cellphone number (079 529 0711) and email address (oritag@ori.org.za) have been printed directly onto the new M-tags. Our tagging members who would like to change their old marlin tags for new ones (which includes a new applicator) are welcome to contact the ORI Tagging Officer (see contact details below). The second change was to request SADSAA not to promote tagging of billfish in their competitions by not offering extra points for tagging. While this may seem strange or even counterintuitive, experience has taught us that when anglers are fishing for points, they need to comply with the IGFA rules for line class strength and as a consequence the fight is often of extended duration, especially on lighter tackle. In such competitive situations we believe that it is far better to adopt the “tip and release” approach as this will ultimately maximise the fish’s chance of survival and minimize the tagging of weak or even dead fish. We also advocate using this approach in bonanza type competitions where anglers are fishing for prizes. For those anglers with a genuine interest in tagging billfish, we suggest that they should approach ORI and become individual members of the Tagging Project. In this manner we can supply them with detailed instructions, tags, applicators and certificates in recognition of their achievements and more importantly they can focus their efforts on the effective tag and release of billfish. In this way they are tagging the fish in the interests of research and conservation and not merely as a way to get points or win prizes.



To tag and release a billfish well, you need to be properly organized. Fishing should be conducted with strong tackle to minimise the duration of the fight and the use of barbless circle hooks is strongly advocated. Once the fish is near the boat, the wireman with leader in hand, needs to be wide awake and bring the fish in alongside the gunwale of the boat without hurting the fish or the angler and crew on board. Ideally, the fish should then be held firmly by the bill while a third person, who is ready with the applicator and tag loaded, can tag the fish and make an estimate of its size (and immediately record this information onto the tag card). Depending on the condition of the fish it can then be immediately released or towed slowly forwards through the water to help resuscitate it.



It is certainly not our intention to discourage the tagging of billfish, however, we do believe that we should be taking a more responsible approach. By using better tags and better methods of tagging billfish, it is hoped that we will get better survival rates and ultimately more recaptures, which will help us learn more about these remarkable gamefish species. We would like to make a special request to all billfish anglers to be on the lookout for tagged fish. If you do happen to catch or see a tagged billfish (yellow spaghetti tag in the left or right “shoulder” of the fish under the dorsal fin), please make

a concerted effort to try and get the number of the tag, even if it means pulling it out of the fish. The tag number, species, approximate length or weight of the fish, date, locality, angler, skipper and boat name should be reported to the ORI Tagging Officer (see contact details at the end of this article).



ORI has been in touch with the Billfish Foundation (TBF) and we are aware of their billfish tagging programme worldwide. It is the prerogative of South African billfish anglers to use TBF tags if they wish and ORI will collaborate with TBF in the reporting of recaptured billfish. However, we do encourage South African anglers to stick to using ORI tags when tagging billfish in South African waters purely to avoid confusion (and perhaps for a touch of patriotism).

The proposed IGFA/SADSAA billfish telemetry tagging programme being conducted in association with Stanford University, USA, is supported by ORI and we believe that this new, innovative approach holds great promise in enabling us to learn more about our billfish.

ORI Tagging Officer
PO Box 736, Durban, 4001
Tel: 031-3288159
Cell: 079 5290711
Email: oritag@ori.org.za