

NEW ZEALAND BILLFISH NEWS



December 2024

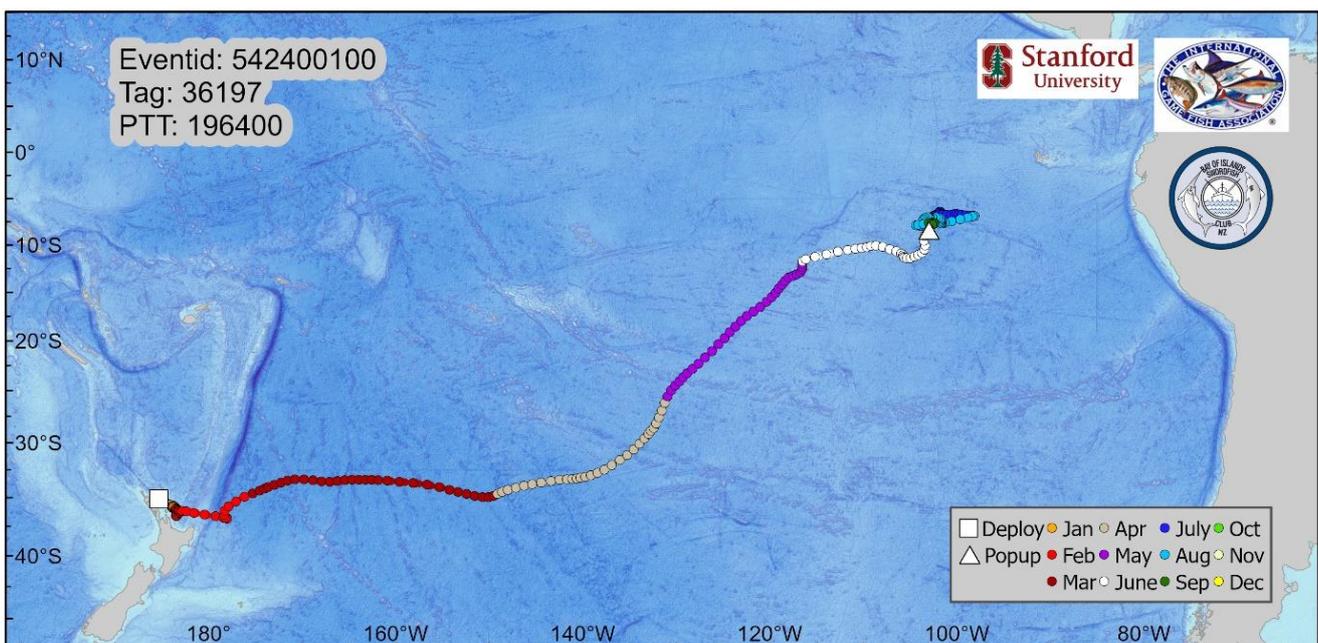
An early start

It seems that summer has arrived early this year bringing warmer water and bait with tuna and billfish caught already. We are posting out logbooks and shirts to billfishers who returned data in 2024. If you are reusing your logbook that is fine. If you need a new logbook or tags please let us know. Could we have another great striped marlin run in January 2025 and good numbers of marlin caught out of Hawkes Bay as we did this year? Catch and effort data from New Zealand will be used again next year in the revised stock assessment of Southwest Pacific striped marlin.

The latest satellite tag result

You may have seen the 8 month striped marlin track from a pop off archival tag online. This fish was tagged on 6 January 2024 off the Cavalli's by Dave Woof on board Nammu. The straight line distance was 4740 nmiles which is about 2000 nmiles longer than any other striped marlin with IGFA Great Marlin Race tags. It is also the first tagged striped marlin shown to leave the southwest Pacific region from any conventional or electronic tagging programme.

The track was generated using a spatial model to estimate the daily locations and colour coded by month. This fish spent January and some of February off East Northland, left NZ waters in March, travelled through warm waters in May and June then stayed in an area with few seabed features less than 3000 m deep on the eastern side of the East Pacific Ridge for two months. The sea surface temperature was about 24 degrees and there may have been currents that made the area attractive.



Track from data recorded by a pop off archival satellite tag on a 90 kg striped marlin in January 2024.

There has been one longer striped marlin track from a satellite tag deployed off Hawaii that popped up after 365 days off Brisbane. This was not an IGFA marlin race tag. These two examples show some interchange of stiped marlin across fisheries management boundaries. What is not known is the extent of exchange between the stocks in the North Pacific, SW Pacific and Eastern Pacific which are defined as separate management units.

Latest tag technology

The expanding use of pop off satellite tags has produced detailed information on billfish location, temperature and depth. For many of the marlin and swordfish there are a few tracks recorded longer than 8 months and most fish stay within a region.

There is a new generation of tow tags that can provide reasonably accurate locations (<10 km) in near real time for up to 3 years. These are SPOT tags similar to the ones attached to the tails of striped marlin in New Zealand that require the aerial to be out of the water for a few minutes to get a location from a simple transmission. These tags are in a streamlined float that is towed on a 60 cm to 120 cm tether. These tags are cheaper and there has been a prototype tracking a blue marlin for 900 days.

Multiyear tracks can help answer questions about the location of spawning grounds and post spawning feeding site fidelity. (Are the marlin tagged in New Zealand returning every year?)



Some other new tags carry an accelerometer that can detect tail beat speeds. These have shown that marlin have distinct gaits and tend to switch between different tail beat ranges. It is common for marlin to bounce dive, probably to assist in feeding where they ambush prey from below. At the start of the dive the tail beat is strong in the initial descent, then slows. Short bursts of rapid swimming indicate feeding behaviour. These tags have also shown that sailfish can detect and orientate to ocean currents and tend to swim harder when moving up current.

Gamefish tagging recaptures

There were 5 striped marlin recaptured in 2023–24. The first was caught in the Coral Sea in August 2023, but no release information has been received. Two striped marlin tagged early in the 2023–24 season off East Northland were recaptured. One was caught 45 nautical miles north after 60 days, and the other was recaptured 65 nautical miles south after 81 days. A further two striped marlin were recaptured in February 2024 by recreational fishers. One fish tagged on the west coast of the North Island was recaptured 2 days later, 91 nautical miles north, and a fish tagged off Hawkes Bay was recaptured off Whangaroa after 33 days – a distance by sea of 425 nautical miles. Both of these fish were retagged and released.

We are always keen to add more fishers to the Logbook Programme. If you have friends that are interested, ask them to get in touch or pass their details on to us.

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