

## Yellowtail Kingfish Monitoring Report 2017

### Final results from the MPI kingfish monitoring project

The Ministry for Primary Industries use the age distribution of kingfish sampled from recreational catch to monitor the stocks in north eastern New Zealand. During 2014–15 a total of 1183 length measurements and 271 otolith (ear bone) pairs were collected for aging from the East Northland/Hauraki Gulf region and 1039 fish were measured and 213 otolith pairs collected from the Bay of Plenty and East Cape. Overall, 32% of measured kingfish were retained and the rest released.

Kingfish grow rapidly, with some reaching 75 cm as three year olds. All six year olds are over that size. The oldest fish sampled from East Northland was 29 years old, a 134 cm fish caught at the King Bank. This sets a new record as the oldest fish aged for this species.

The age data is used to estimate fishing mortality rates in each area. In offshore areas, where large fish are available year round, the exploitation rate is low. The mortality estimate for inshore Northland area is relatively high, this may be due to the seasonal movement of larger fish which aren't available all year.

### Please measure your released fish

We would like you to accurately **measure the nose to tail fork length of ALL of the kingfish that you release**, rounding down to the nearest cm. We would prefer these fish to be tagged if they exceed 75cm in length. Enter this length onto your tag card for us to collect when your tag cards are submitted. We will be measuring landed fish again this year at the weigh station.

### Results from Bay of Islands Yellowtail Tournament 2010 to 2016

The BOI International Yellowtail Tournament continues to provide an excellent opportunity to measure a cross section of the kingfish population at the same time every year. This helps monitor pulses of small fish entering the fishery and how they grow over the years.

Islands Swordfish Club, New Zealand Sport Fishing Council and LegaSea.

The average length of kingfish caught steadily increased from 2010 to 2013, as shown below.

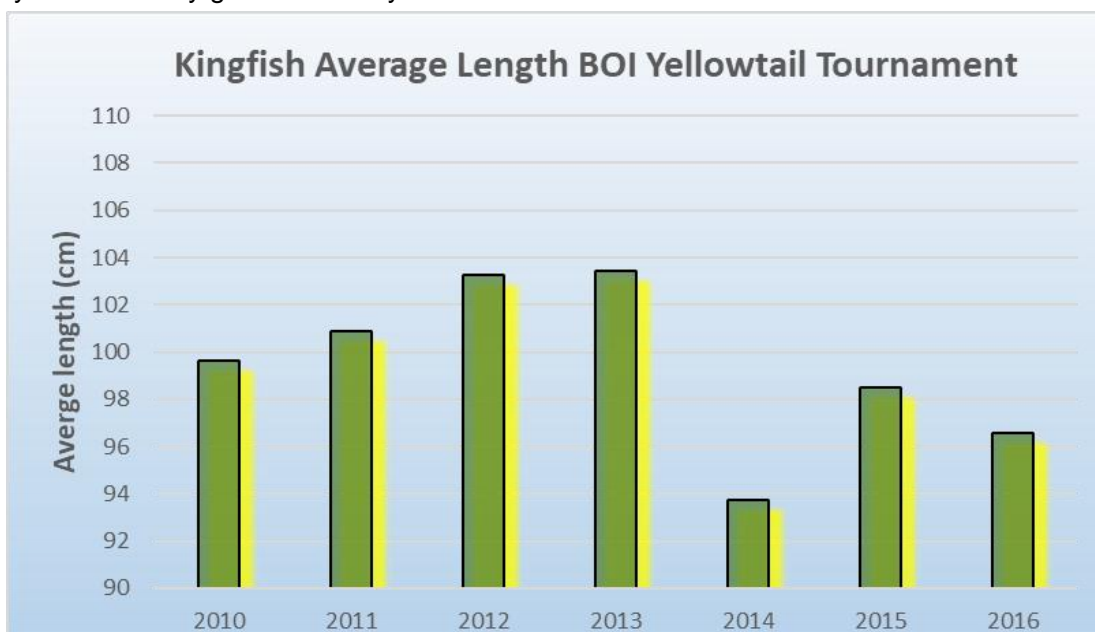
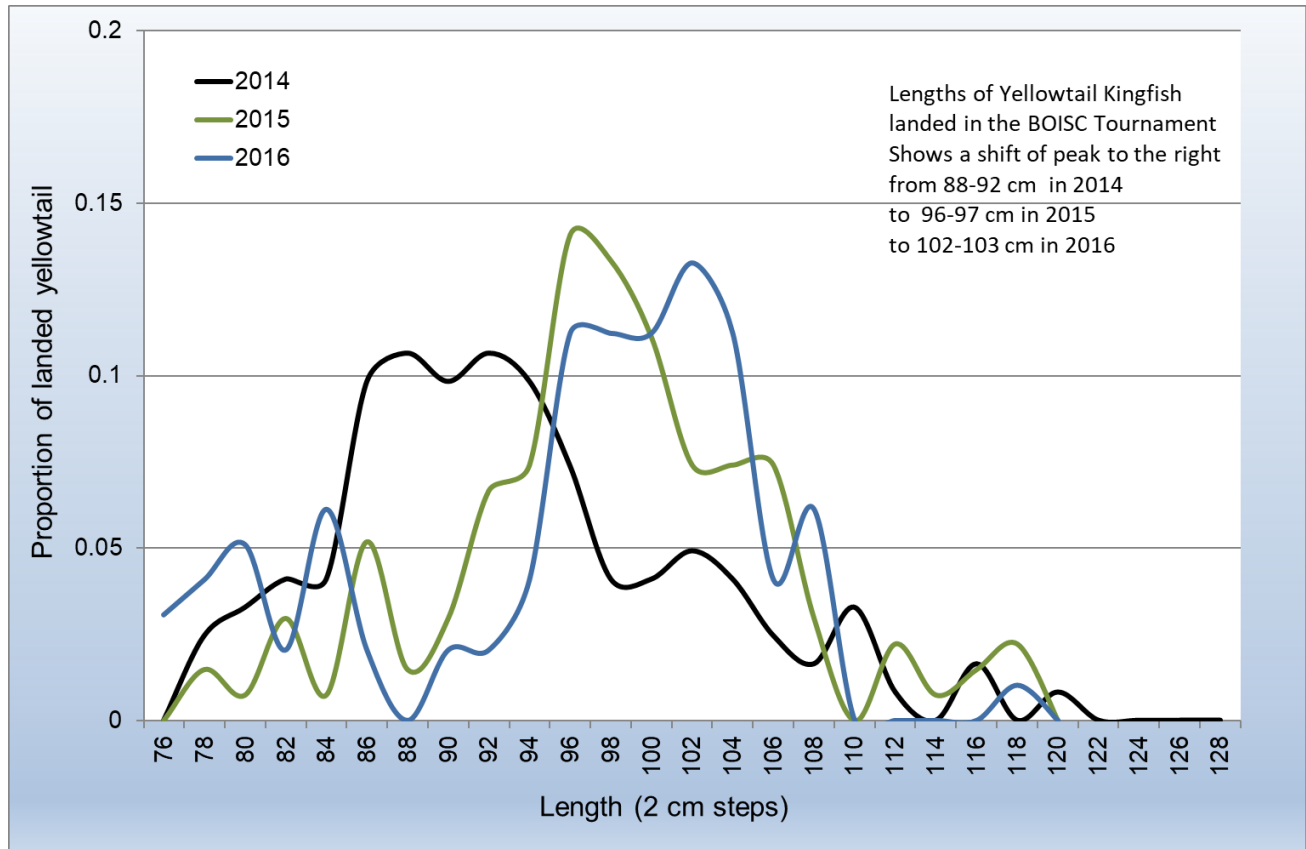


Figure 1. The average length of kingfish measured in the BOI International Yellowtail Tournament by year.

The weather conditions in the 2014 BOI Yellowtail Tournament restricted where boats could reasonably fish. So the size distribution may reflect the kingfish available inside the Bay of Islands at that time rather than the usual fishing area in the tournament.

Although the average size did not increase from 2015 to 2016 (Figure 1), the peak in the length distribution moved from 96 cm to 102 cm (Figure 2). There were, however, few fish over 110 cm in 2016 which lowered the average size.

*Thank-you for your support, & good luck with your fishing!*



**Figure 2: The proportion at length by year of yellowtail measured in 2014 (90 fish), 2015 (135 fish), and 2016 (98 fish) during the Bay of Islands International Yellowtail Tournament. Does not include fish tagged and released.**

**Become a Legend**

The on-going collection of kingfish lengths is supported by the Bay of Islands Swordfish Club, New Zealand Sport Fishing Council, and LegaSea to enable recreational fishers to gather useful information to help monitor kingfish stocks.

Become a LegaSea Legend now and help maintain our world class yellowtail kingfish fishery [www.legasea.co.nz/legend](http://www.legasea.co.nz/legend)

The 2014–15 kingfish age and growth project was funded by the Ministry for Primary Industries and conducted by Blue Water Marine Research, Stock Monitoring Services and NIWA. The full Fisheries Assessment Report is available at: <http://fs.fish.govt.nz/Page.aspx?pk=113&dk=24204>