

Yellowtail Kingfish Monitoring Report 2015



Background

Yellowtail kingfish are one of the premier sports fish in New Zealand. The number of recreational fishers targeting yellowtail has increased in the last 5 years. While many of the fish caught are released, the large size of the fish kept means that total harvest is significant.

In 2011-12 it was estimated that 64,700 yellowtail were kept by recreational fishers in New Zealand, for a total weight of 662 tonnes ($\pm 11\%$). Most were caught by rod and line from boats, but land based and spearfishing methods also feature.

So this puts yellowtail at number three in the national recreational harvest by weight, for all species in the survey, behind snapper and kahawai. The 662 tonnes is also quite a lot more than the commercial catch for that year of 235 tonnes.

This year recreational charter and private fishers around the upper North Island are working with us to monitor the status of kingfish stocks.

This Government funded project will provide another snapshot of the size and age of kingfish in the recreational catch. This target fishery catches a more representative sample of the population than commercial fishing methods.

Annual growth rings in thin slices of the otolith (balance or ear bone) were used to age the kingfish and estimate an exploitation rate for each area. This will be compared to the age data collected in 2010 during a similar project.

The Bay of Islands International Yellowtail Tournament has provided a valuable opportunity to measure a large number of fish at the same time every year.

This helps monitor what is happening with the population in the years between ageing projects. This work is funded by fishers, not the government, through the support of the Bay of Islands Swordfish Club, New Zealand Sport Fishing Council and LegaSea.

Keep up the good work

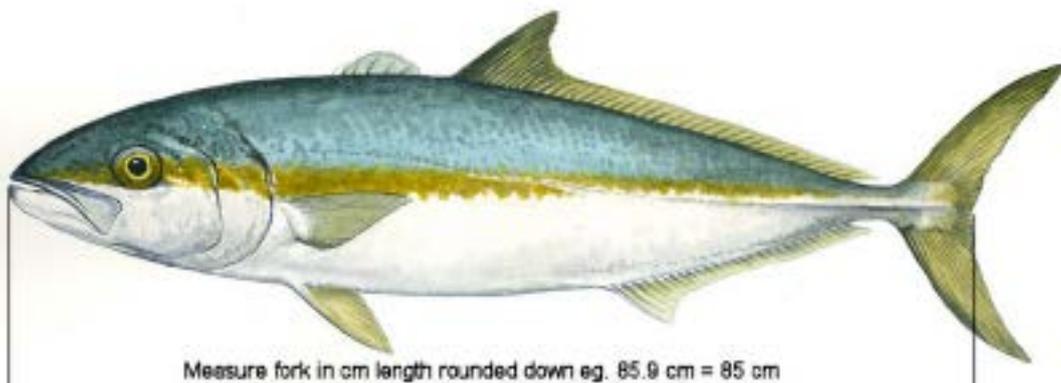
With your assistance and support, we would like you to accurately measure the upper jaw to tail fork length of ALL of the kingfish that you release, rounding down to the nearest cm.

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.

Any recaptured fish should also be measured.

We will be measuring landed fish again this year at the weigh station.



Thank you for your support and good luck with your fishing!

Results from Bay of Islands Yellowtail Tournament 2010 - 14

The Bay of Islands International Yellowtail Tournament is the largest kingfish tournament in New Zealand and has been running for 46 years, with both junior and senior teams representing fishing clubs from New Zealand and Australia. The size of fish in the landed catch steadily increased each year from 2010 to 2013, as shown in Figure 1 below.

The weather conditions in the 2014 BOI Yellowtail Tournament were pretty bad. Two days fishing were cancelled and the days that were fished, bar one, were marginal. This restricted where boats could reasonably fish. So the size distribution may reflect the size of kingfish available in the BOI during the Tournament rather than the usual fishing area. On the bright side, these fish may represent a new cohort entering the fishery, so it will be very

interesting to see what the size distribution is like this year. The data is showing that there has been strong recruitment from successful spawning events nine or ten years ago. This also coincides with the time that the TACC was reduced and the minimum size increased. It appears that these management changes may well have been successful. These fish appear to have stayed in coastal waters and grown 2 to 4cm per year. If they are still around there should be some good size fish caught in this year's tournament.

We also observed huge schools of juvenile kingfish (25 – 35 cm in length) offshore in 2013, and have received numerous similar reports from throughout the north-east coast.

One school encountered outside the Pinnacles off Tutukaka contained many thousands of fish, aggregated under a log. If these fish settle into the coastal population it is likely that excellent kingfish fishing will continue to be available in future years.

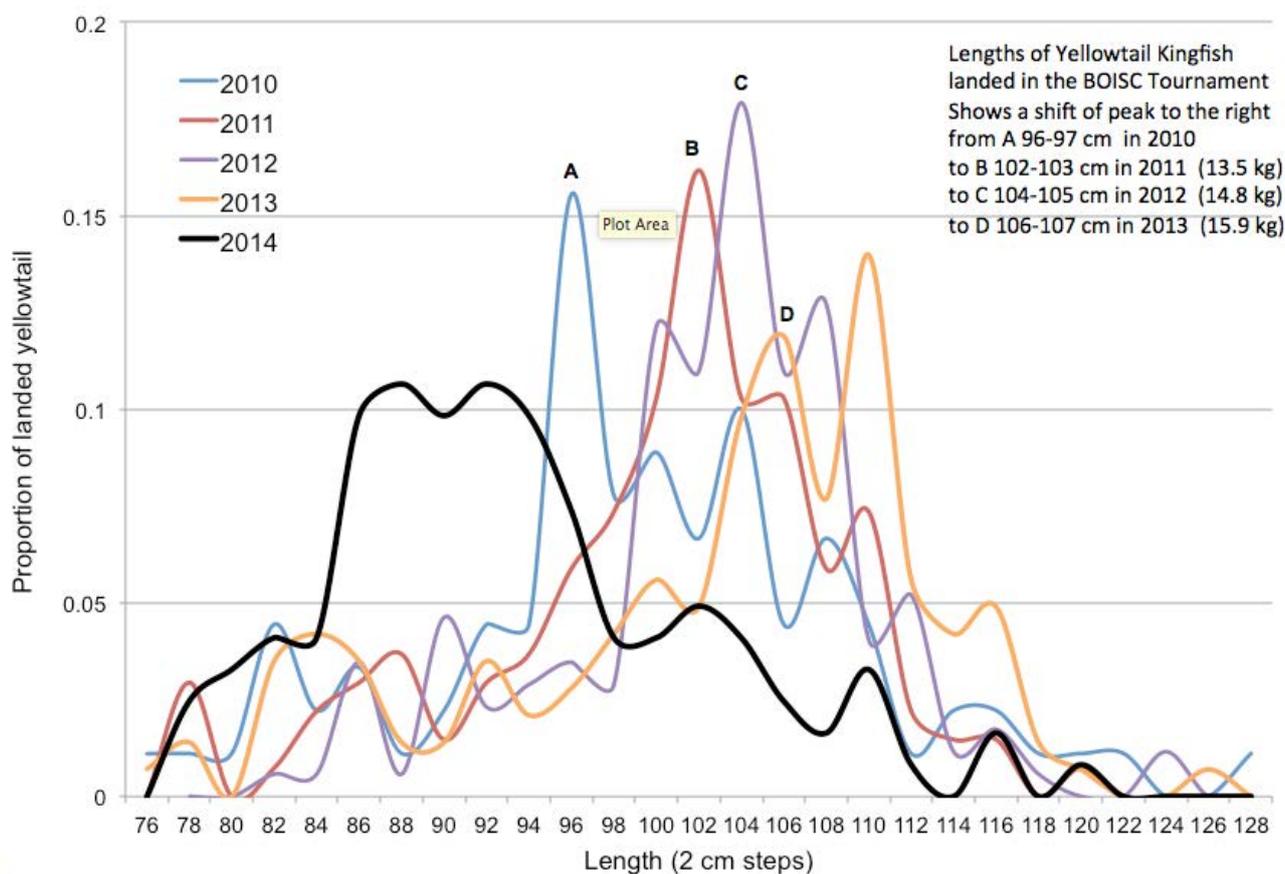


Figure 1: Plot of the proportion at length by year of yellowtail landed in 2010 (90 fish), 2011 (136 fish), 2012 (173 fish), and 2013 (144 fish) during the Bay of Islands International Yellowtail Tournament. Does not include fish tagged and released.

Kingfish Projects

The 2010 kingfish age and growth project was funded by the Ministry of Fisheries (now the Ministry for Primary Industries) and conducted by Blue Water Marine Research, Stock Monitoring Services and NIWA. Report at <http://fs.fish.govt.nz/Page.aspx?pk=113&dk=23125>

The on-going collection of length data to monitor kingfish in Northland 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