

Assessing fish catch trends in the St Helens to Cape Hillsborough NFZ

OCTOBER 2015 – APRIL 2017

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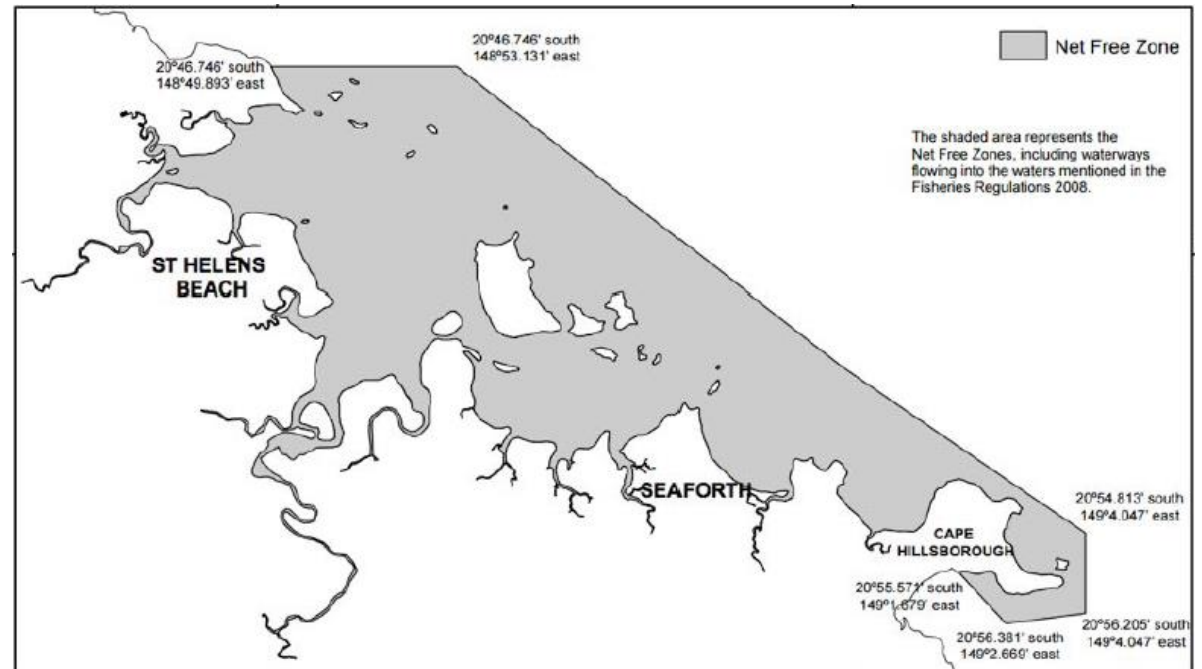


Intent

- * The intent of the data gathering exercises is to gauge a thorough understanding of fish numbers, fish sizes and species diversity prior to the implementation of the NFZ and then repeat the process annually to see how stocks are improving as a result of NFZ implementation.
- * Quantify changes/improvements/measuring effectiveness
- * Data collected via boat ramp surveys – Citizen Science

Data were assessed in relation to:

- ✦ Change in catch rates
- ✦ Change in fish kept and legal fish
- ✦ Change in size composition
- ✦ Change in time taken to catch a legal fish



Summary of data collected and catch rates

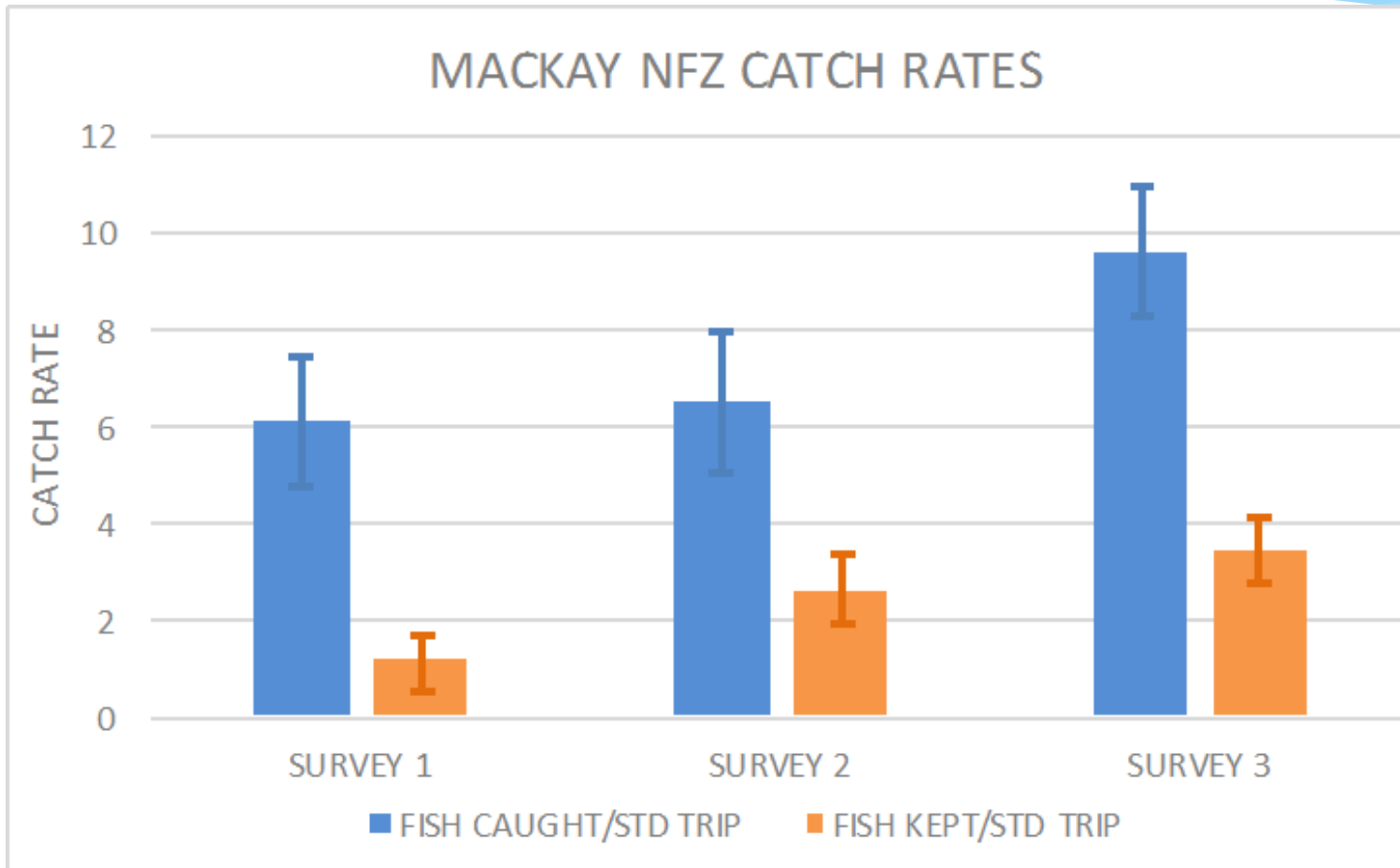
Survey 1: October 2015

Survey 2: February – April, 2016

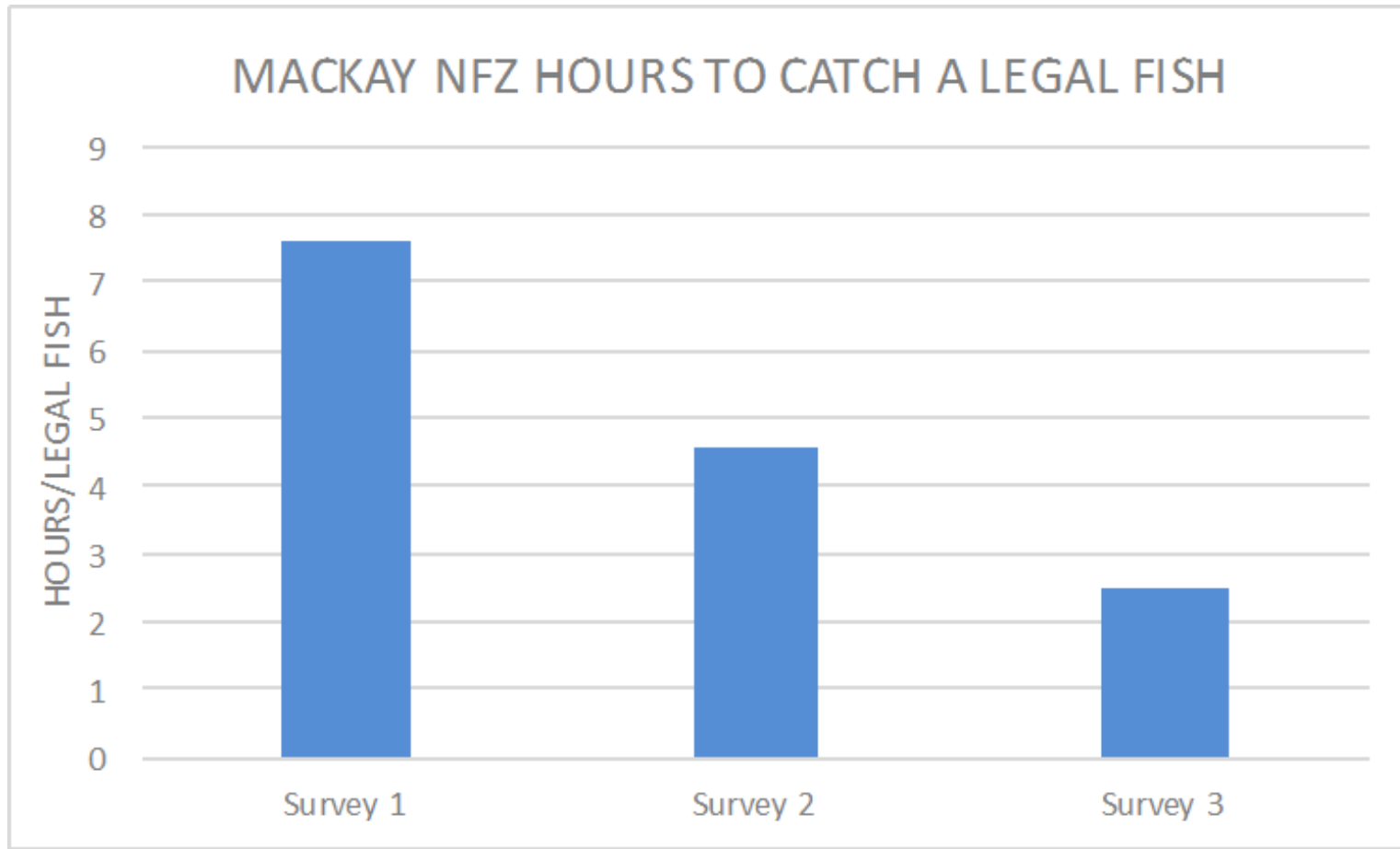
Survey 3: February – April, 2017

	Survey 1	Survey 2	Survey 3
CATCH TRIPS	83	92	108
NO CATCH TRIPS	12	1	2
TOTAL TRIPS	95	93	110
FISHING DAYS	21	52	54
FISHER DAYS	230	242	214
FISHING HOURS	1348.67	1541.83	1485.17
FISH CAUGHT	553	563	939
FISH KEPT	116	249	343
FISH LEGAL	177	339	598
FISH CAUGHT/STD TRIP	6.09	6.48	9.61
FISH KEPT/STD TRIP	1.23	2.61	3.46
% LEGAL	32.01	60.21	63.68
HRS/LEGAL FISH	7.62	4.55	2.48

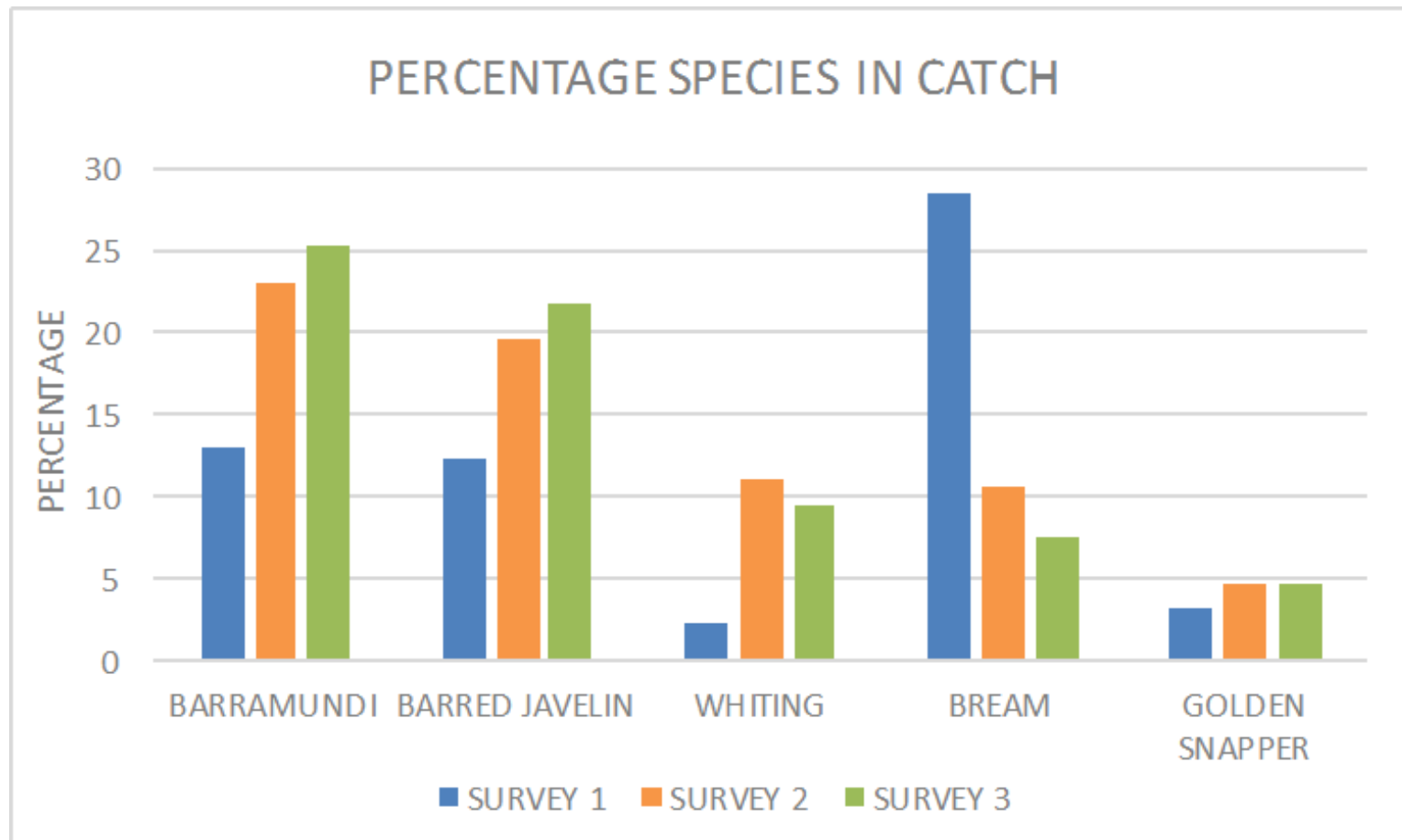
Catch rates per standard trip in each survey



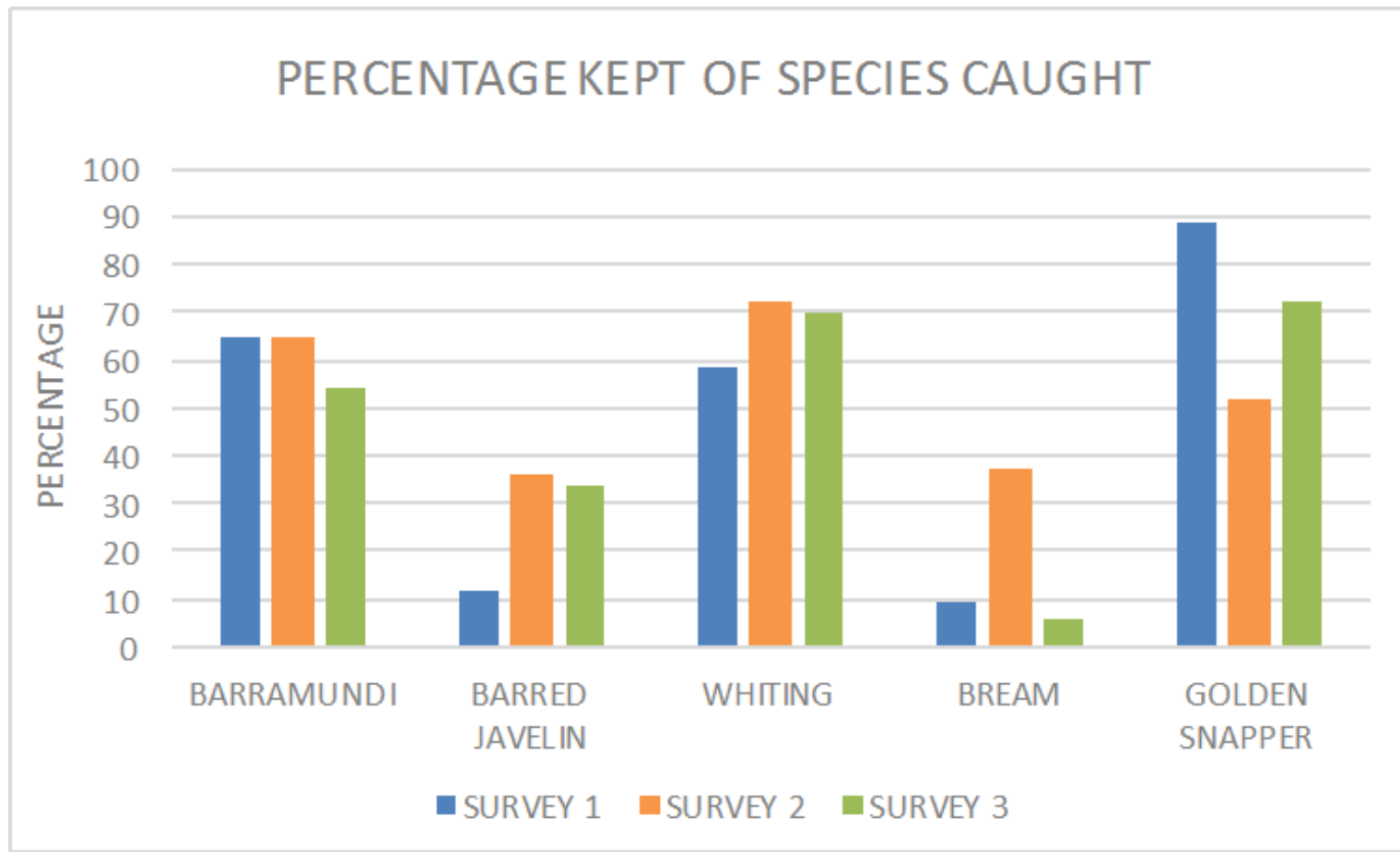
Time taken to catch a legal fish



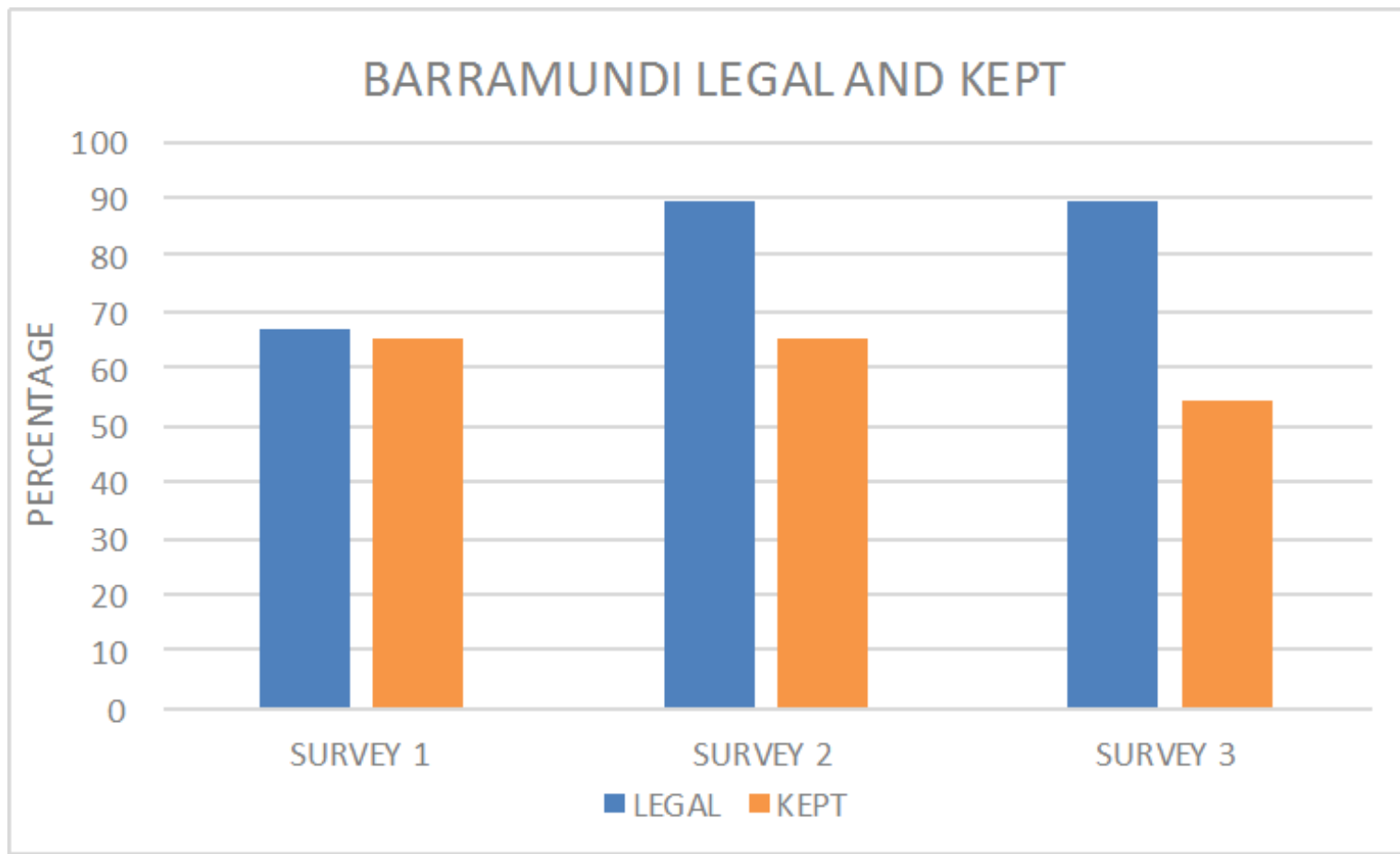
Percentage of key species in catch in the 3 surveys



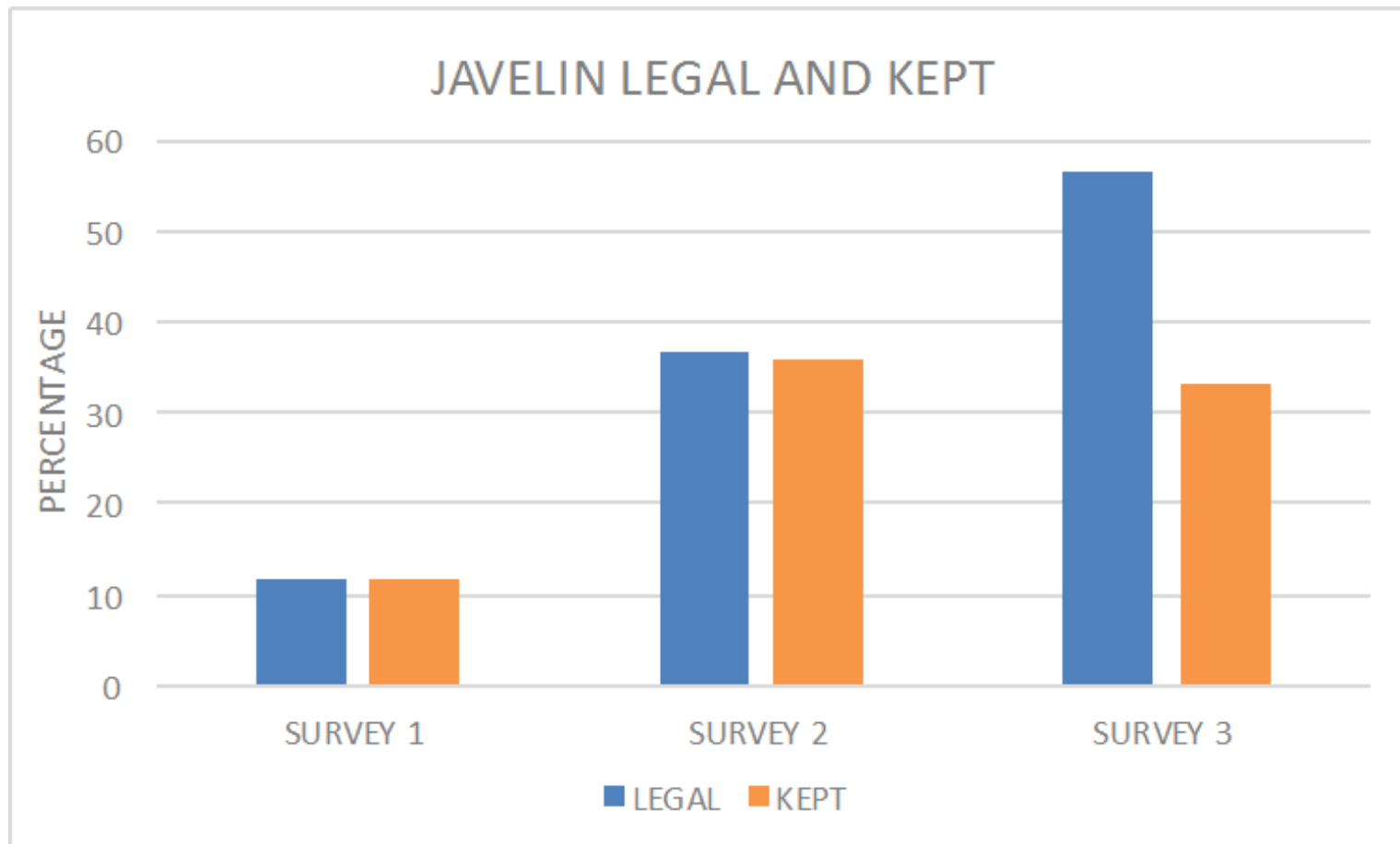
Percentage kept of key species caught in the 3 surveys



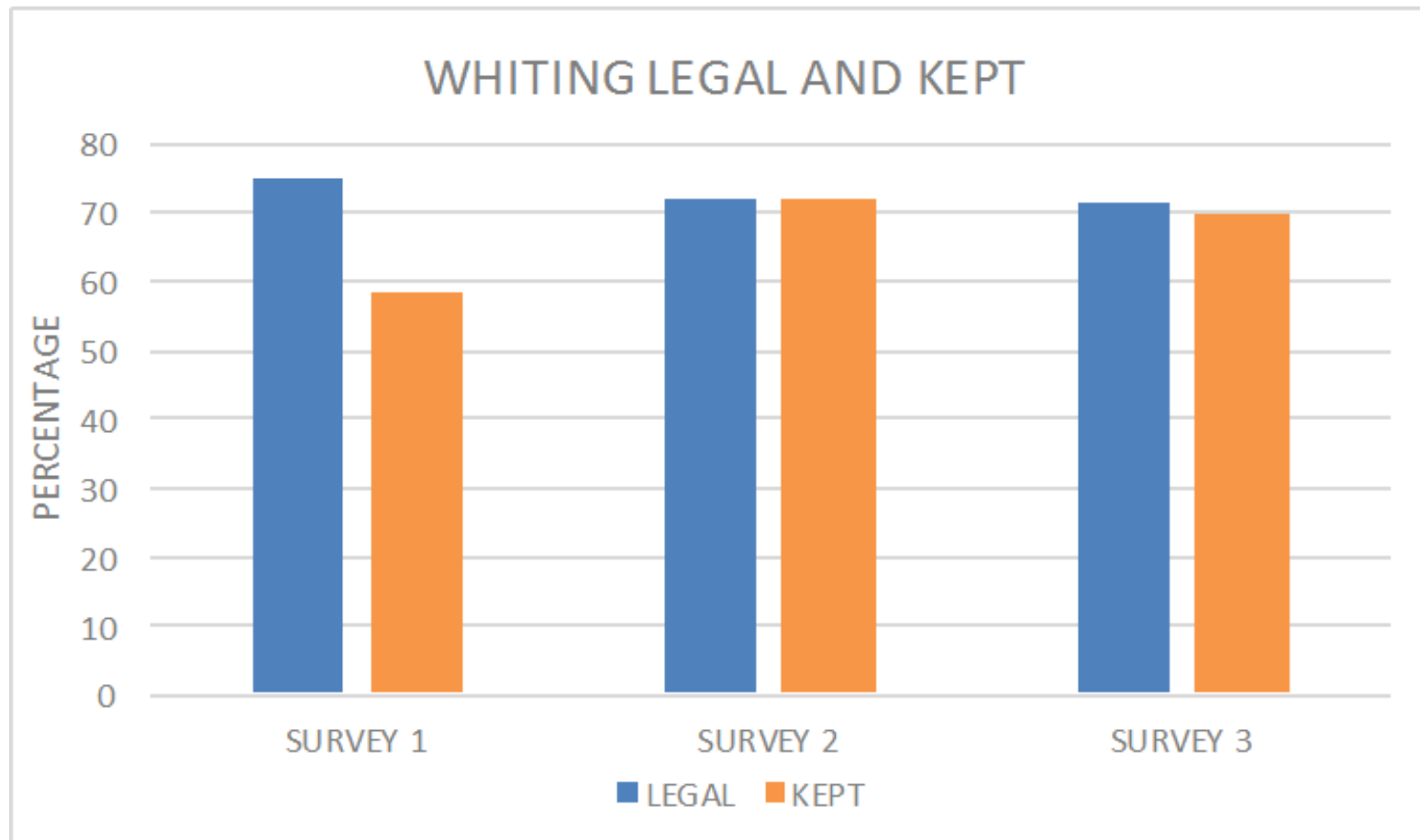
Percentage of Barramundi caught that were legal and kept in the 3 surveys



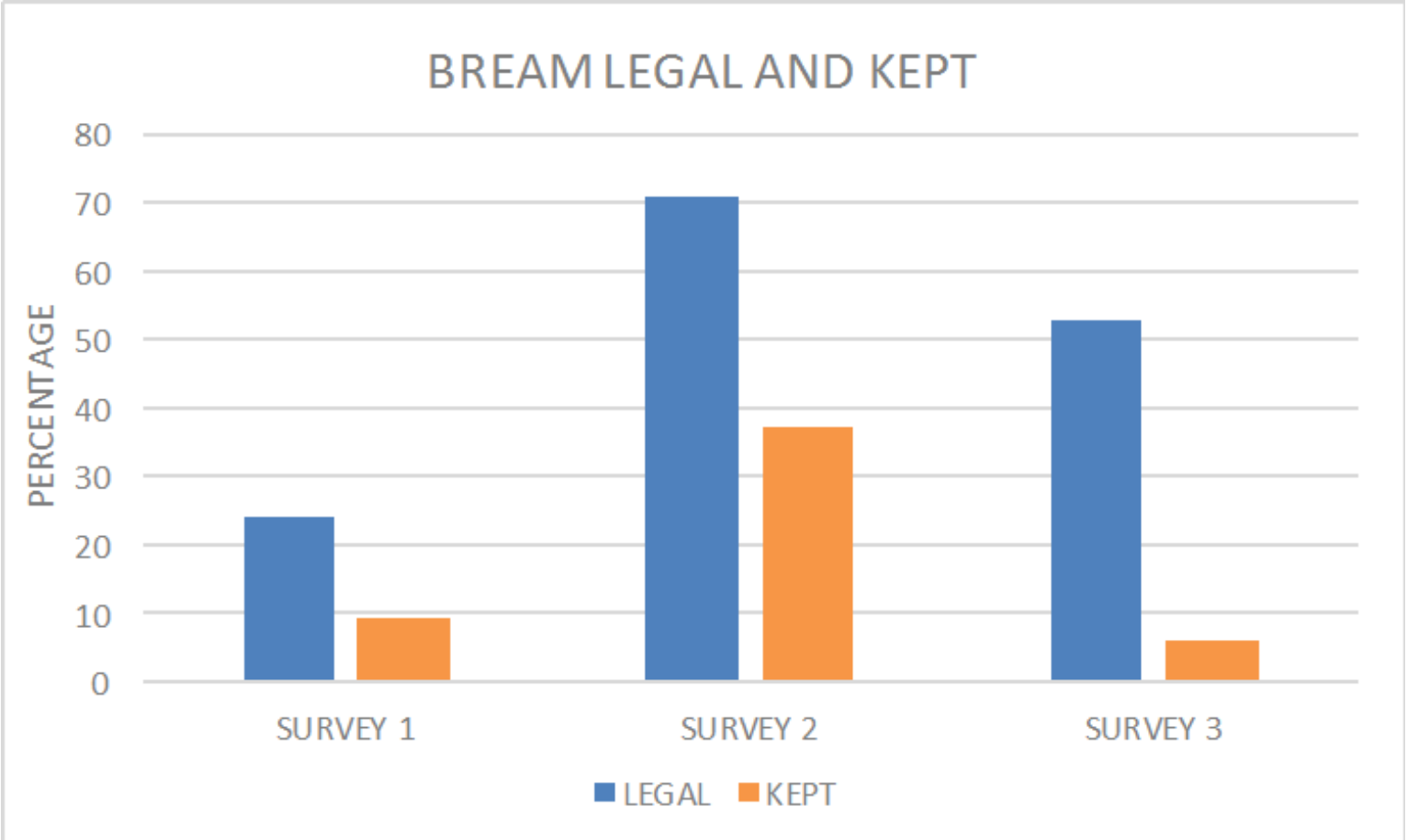
Percentage of Javelin (Grunter) caught that were legal and kept in the 3 surveys



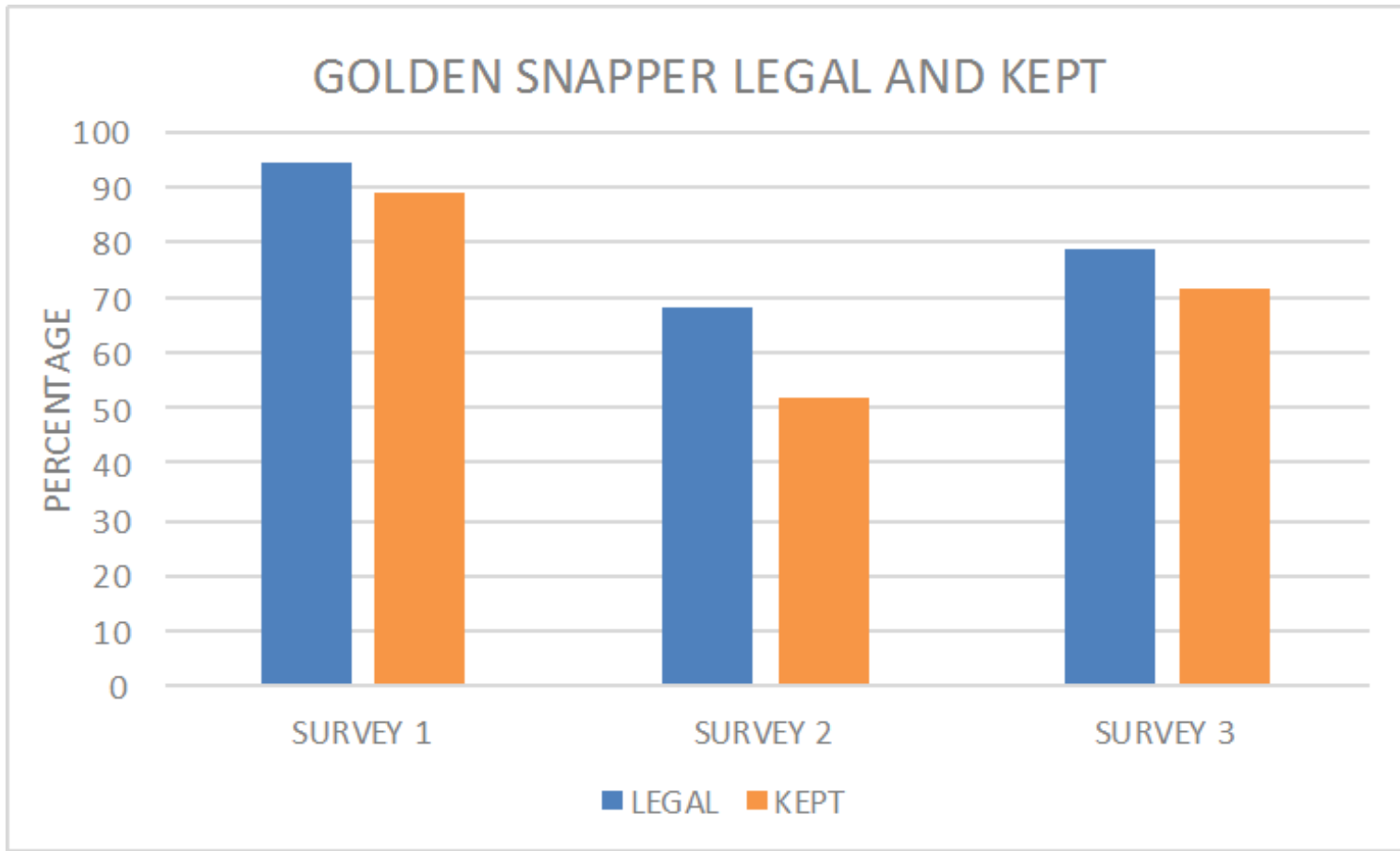
Percentage of Whiting caught that were legal and kept in the 3 surveys



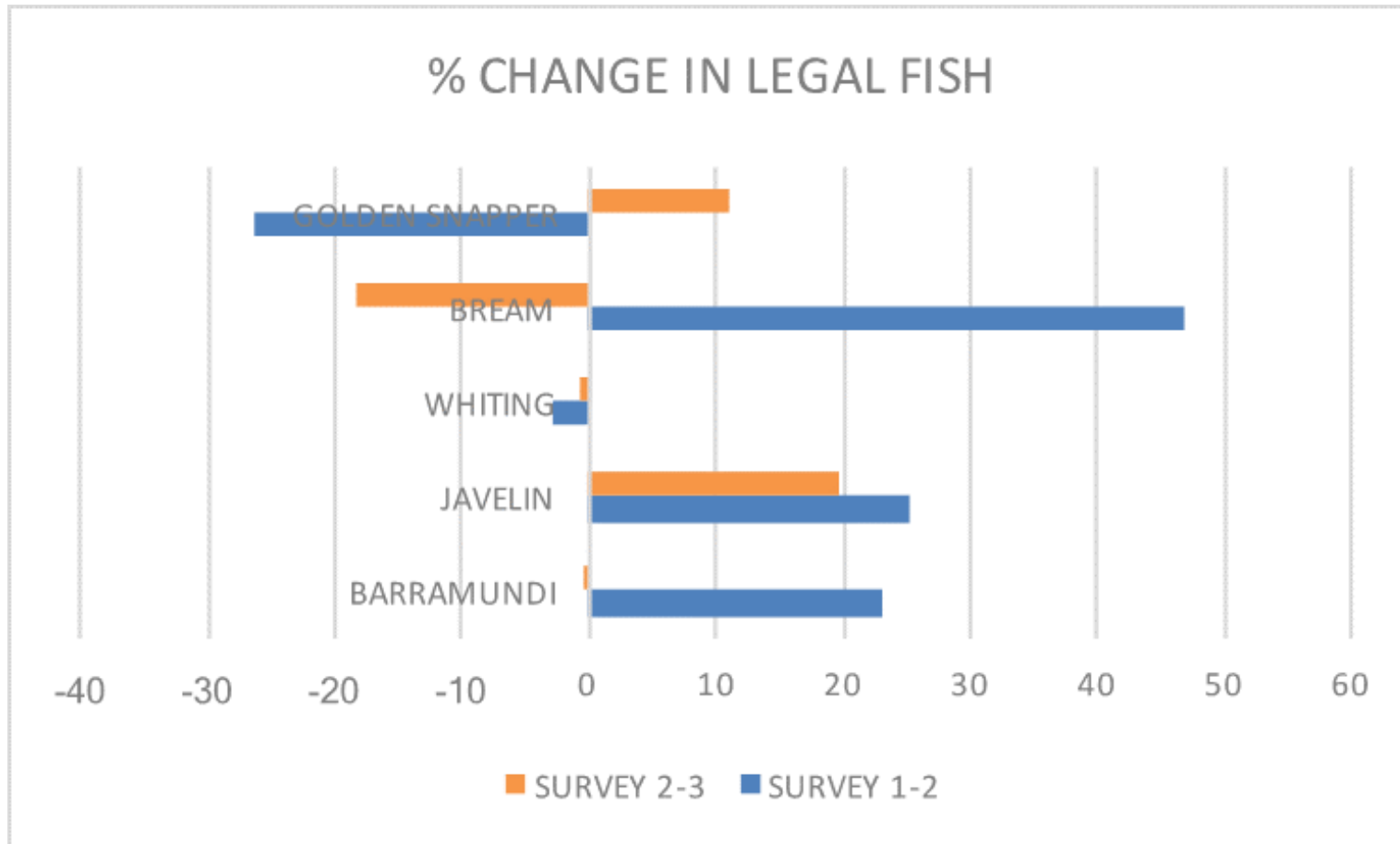
Percentage of Bream caught that were legal and kept in the 3 surveys



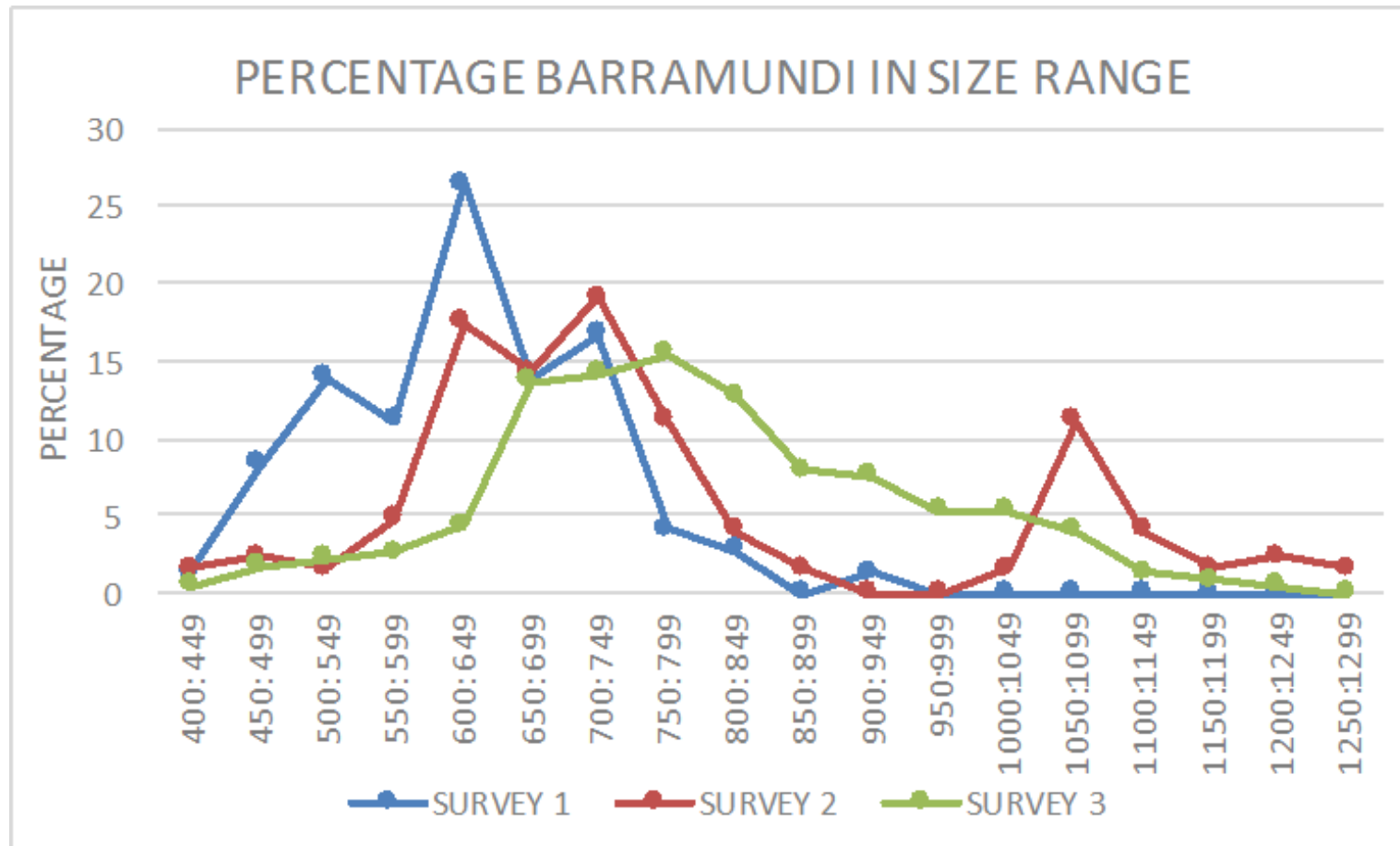
Percentage of Golden Snapper (Fingermark) that were legal and kept in the 3 surveys



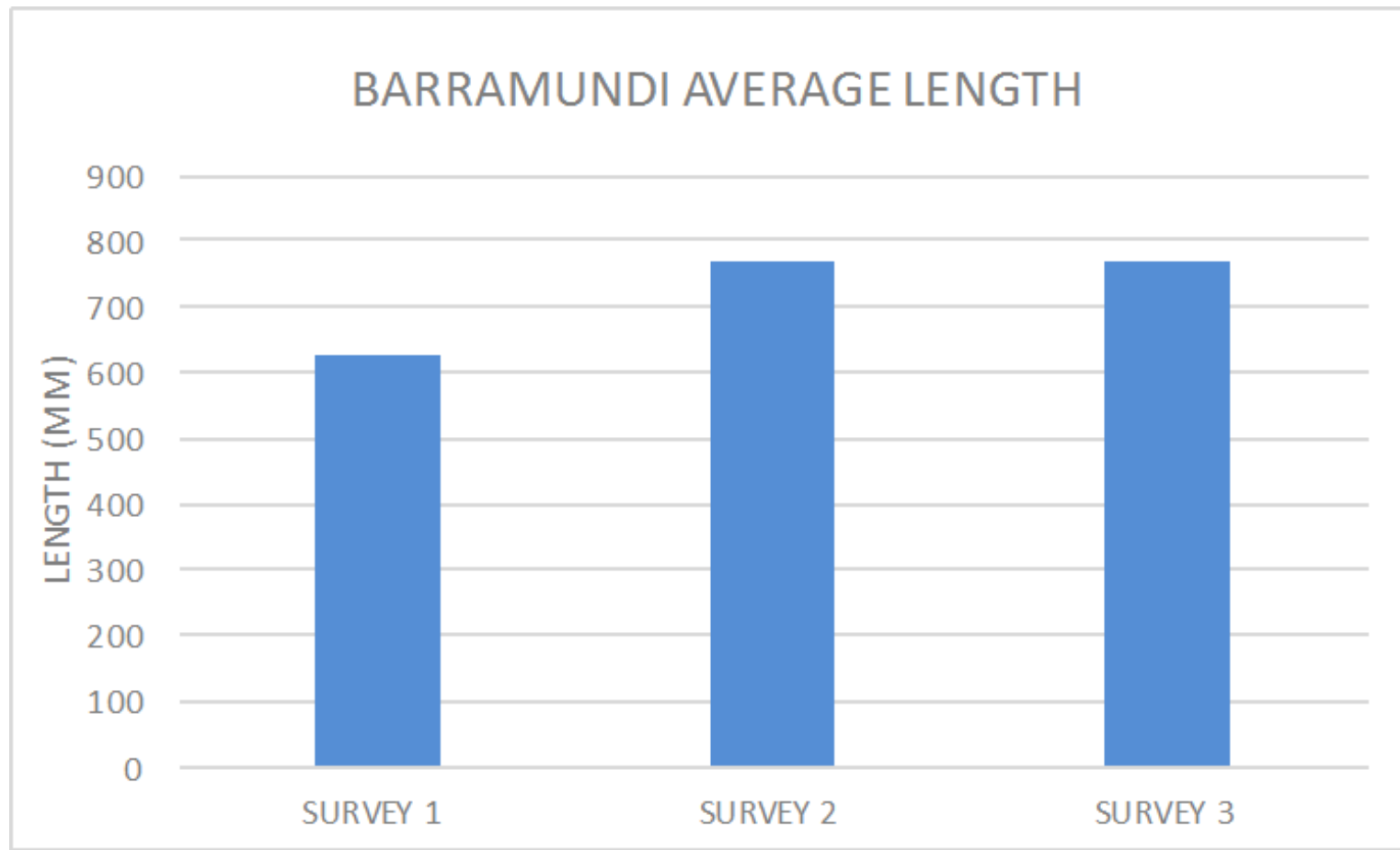
Percentage change in legal fish between surveys



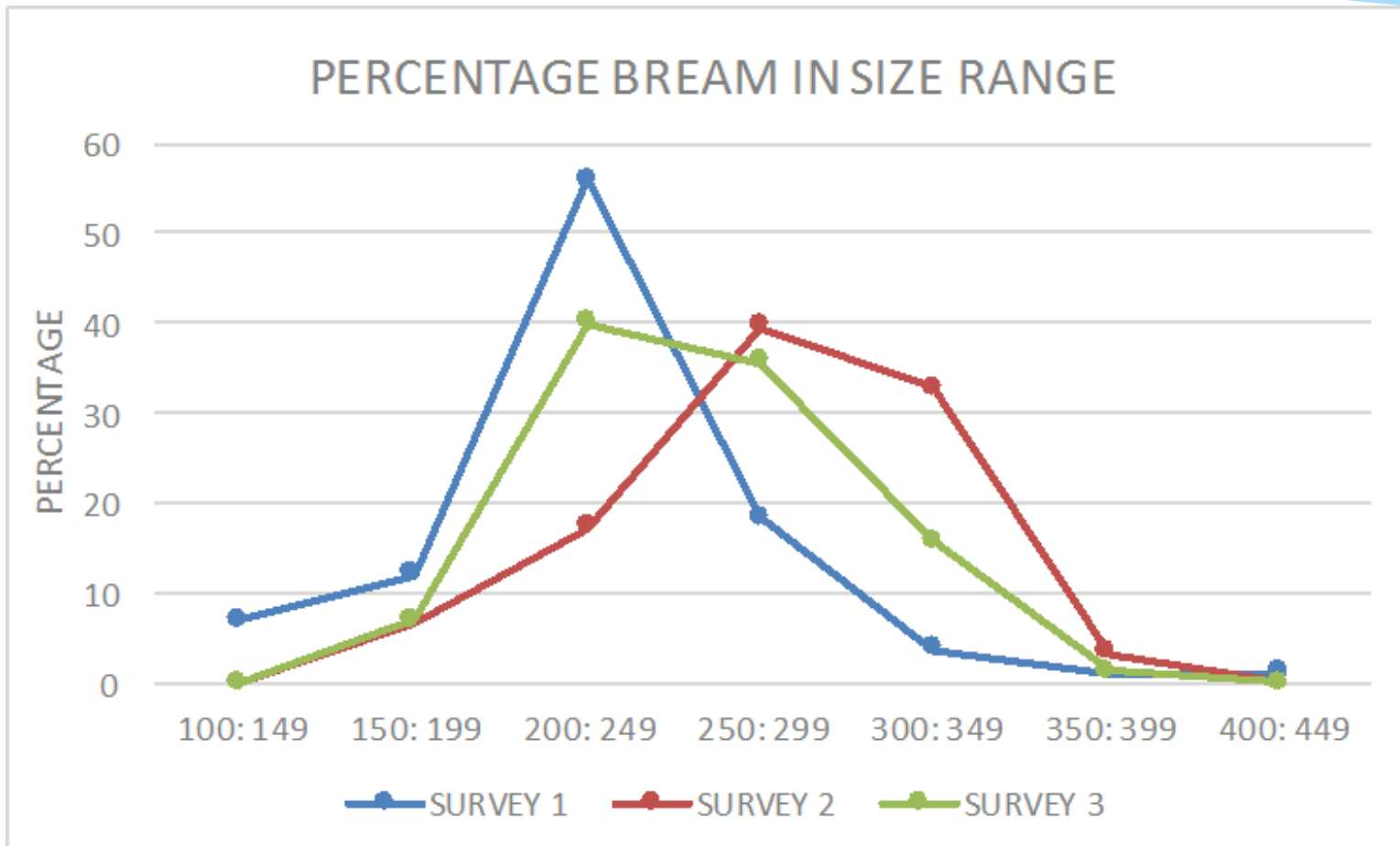
Percentage of Barramundi in size ranges (mm) in the 3 surveys



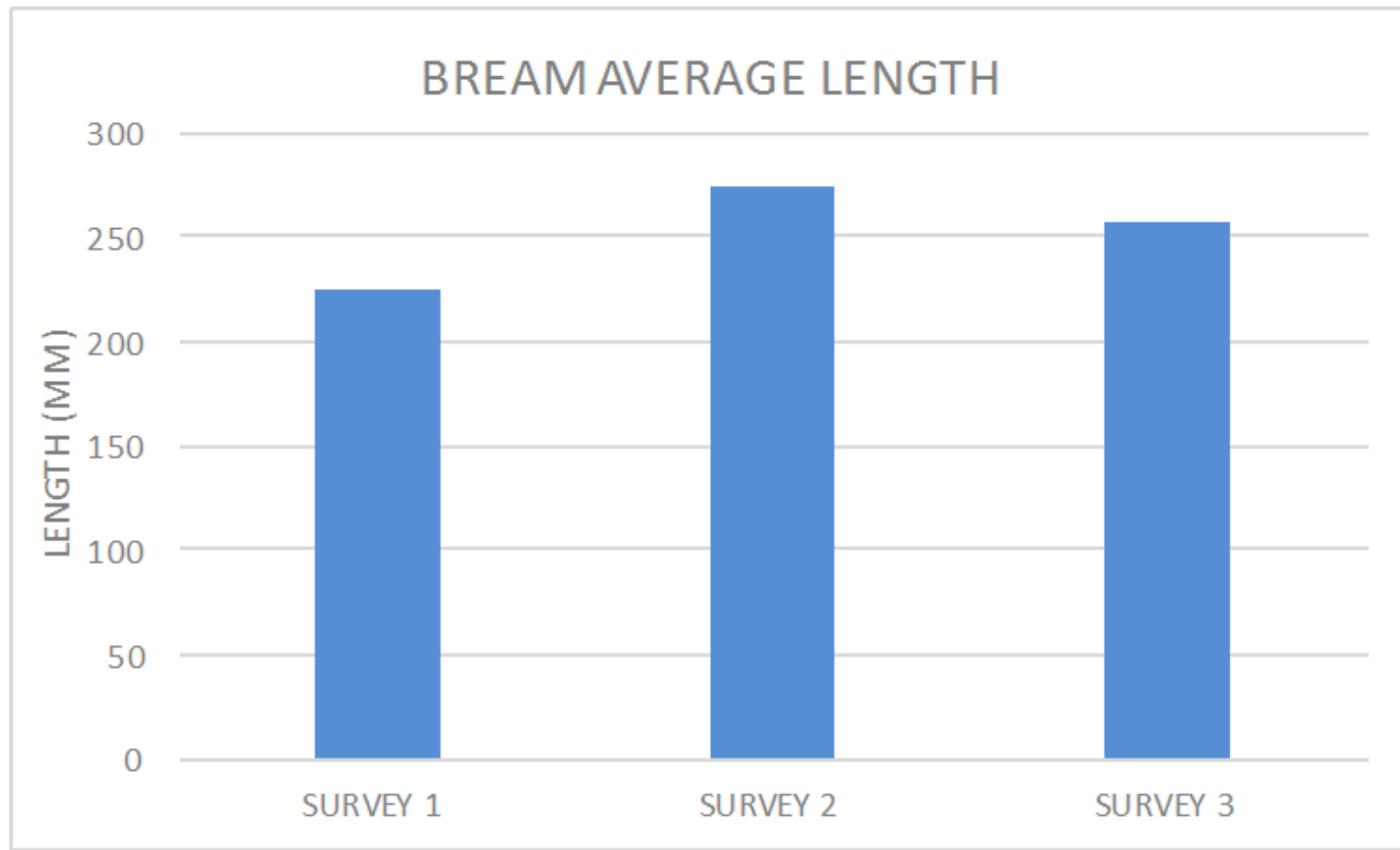
Average length of Barramundi in the 3 surveys



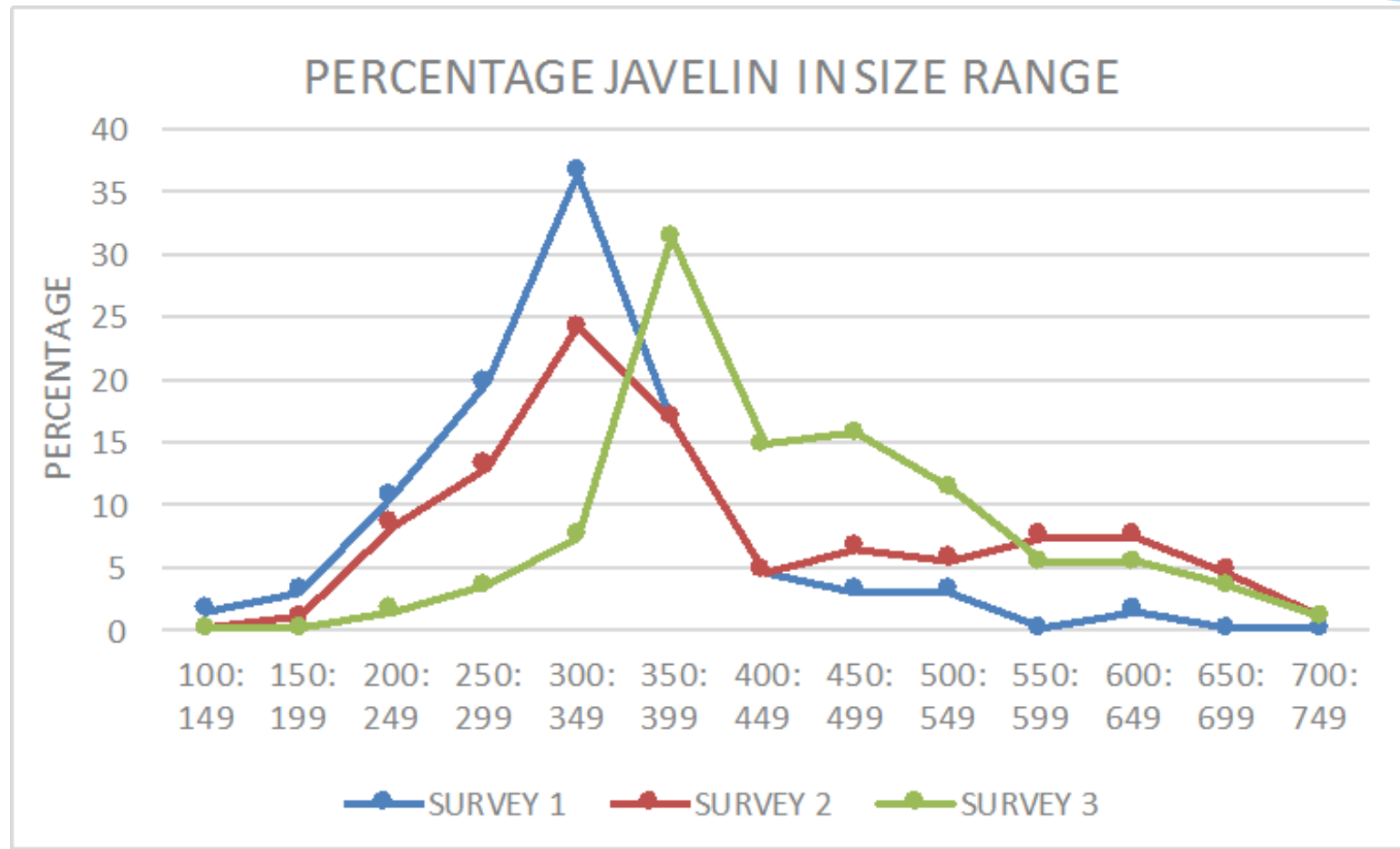
Percentage of Bream in size ranges (mm) in the 3 surveys



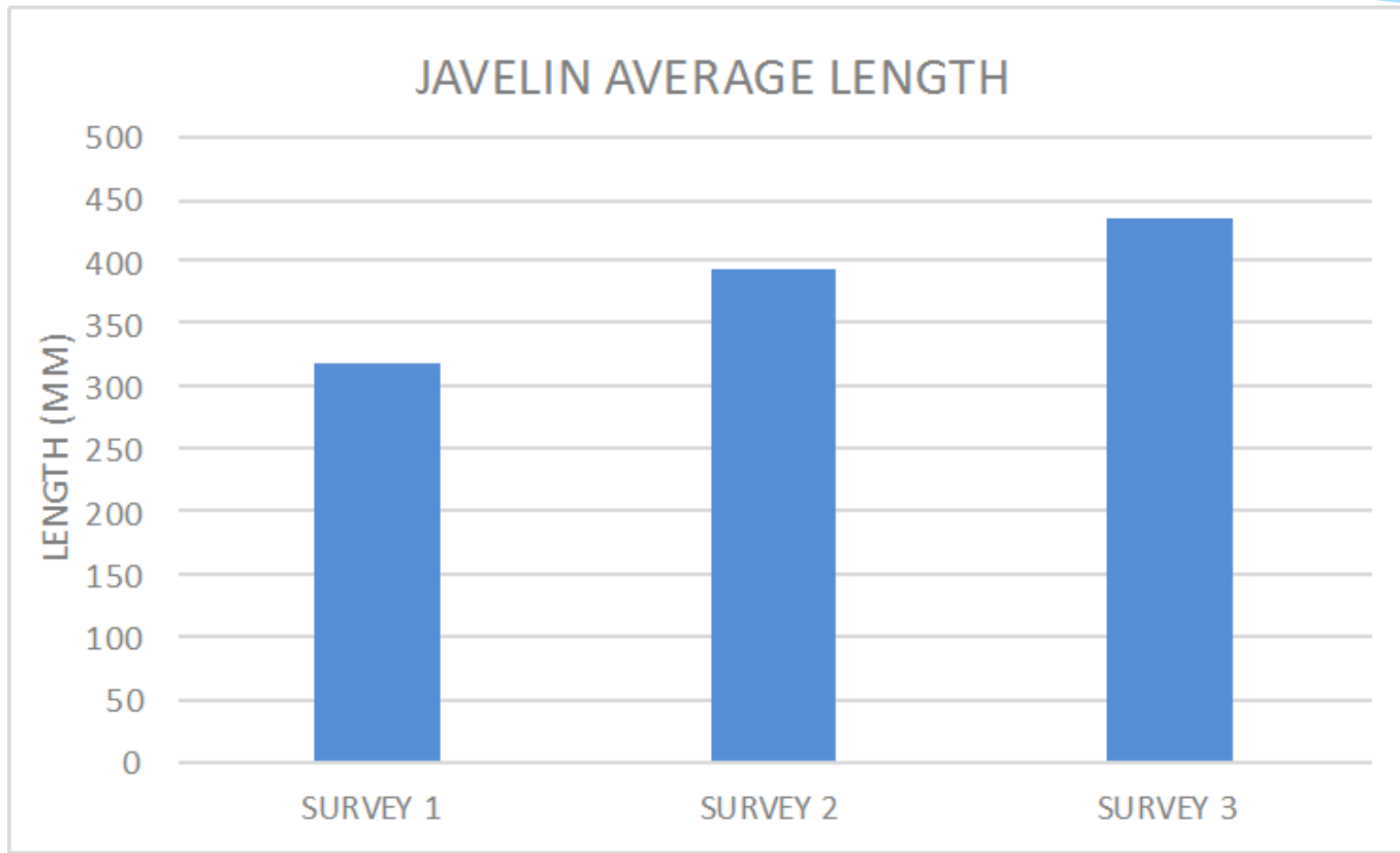
Average length of Bream in the 3 surveys



Percentage of Javelin (Grunter) in size ranges (mm) in the 3 surveys



Average length of Javelin (Grunter) in the 3 surveys



Closing Summary

- * For the key species catch rate trends were positive for both fish caught and fish kept (except for Bream) and the time taken to catch a legal fish declined significantly over the 3 surveys. There was also a trend towards releasing more legal fish except for Whiting and Golden Snapper
- * The size distribution of Barramundi and Javelin shows a significant increase in the fish over legal size and with the increasing trend in legal fish being released there are likely to be a continued increase in legal fish in the future.
- * The reduction in Bream in the catch may be a factor of a different profile of fishers in survey 1 and/or it could be a shift to more sought after species such as Barramundi, Javelin (Grunter) and Golden Snapper (Fingermark) as they become more readily caught. This is supported by the large numbers of legal Bream in the catch but with low numbers of those fish actually kept.
- * Barramundi is an icon and key target species and valued by those fishing in the NFZ. The proportion of legal fish released has increased over the 3 surveys and was not related to the possession limit. This is particularly demonstrated by all Barramundi caught that were over 1m were released. This may provide some useful information in the development of a voluntary code of practice.

Onwards and upwards baby!!!!

Questions??????

