

Beyond the Catch: Promoting Sustainable Recreational Fishing

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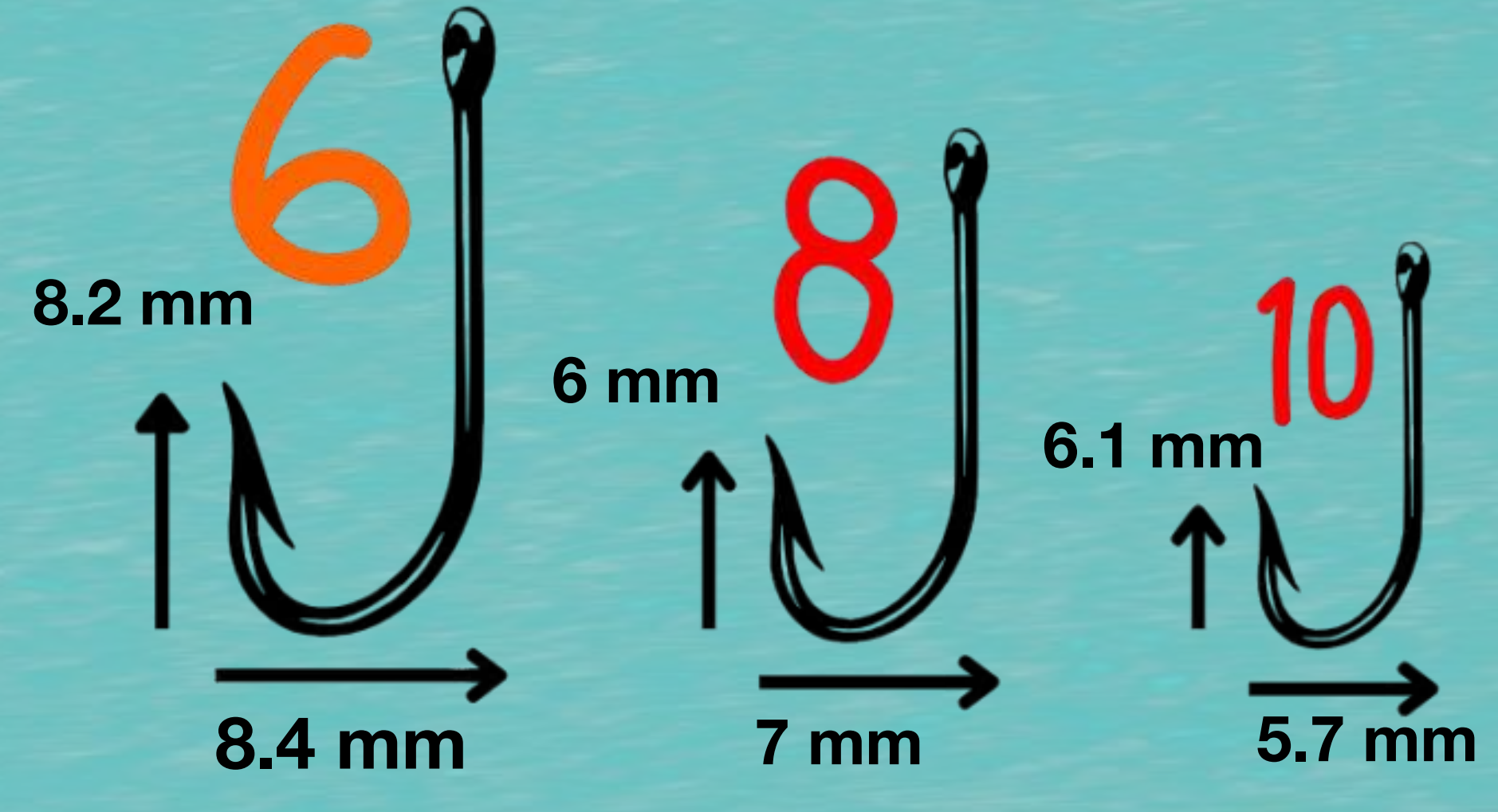


Fig. 1 – Types and dimensions of fishing hooks.

INTRODUCTION

Recreational fishing has a significant impact on biodiversity, particularly regarding the survival of fishes that are caught and released. This study focuses on assessing post-capture survival following the use of three different hook sizes (from the largest to the smallest: 6, 8, and 10).

MATERIALS AND METHODS

During rod fishing activities, three hooks of varying sizes were used, enabling the capture of different fish species. The vitality of the fish was assessed immediately after capture and monitored in a tank over the subsequent two weeks.

PRELIMINARY RESULTS

According with ICES protocols (Benoit, 2010), most of caught fishes showed excellent vitality (CODE 1), a smaller amount showed minor injuries (CODE 2), and an even smaller amount had more significant injuries (CODE 3).

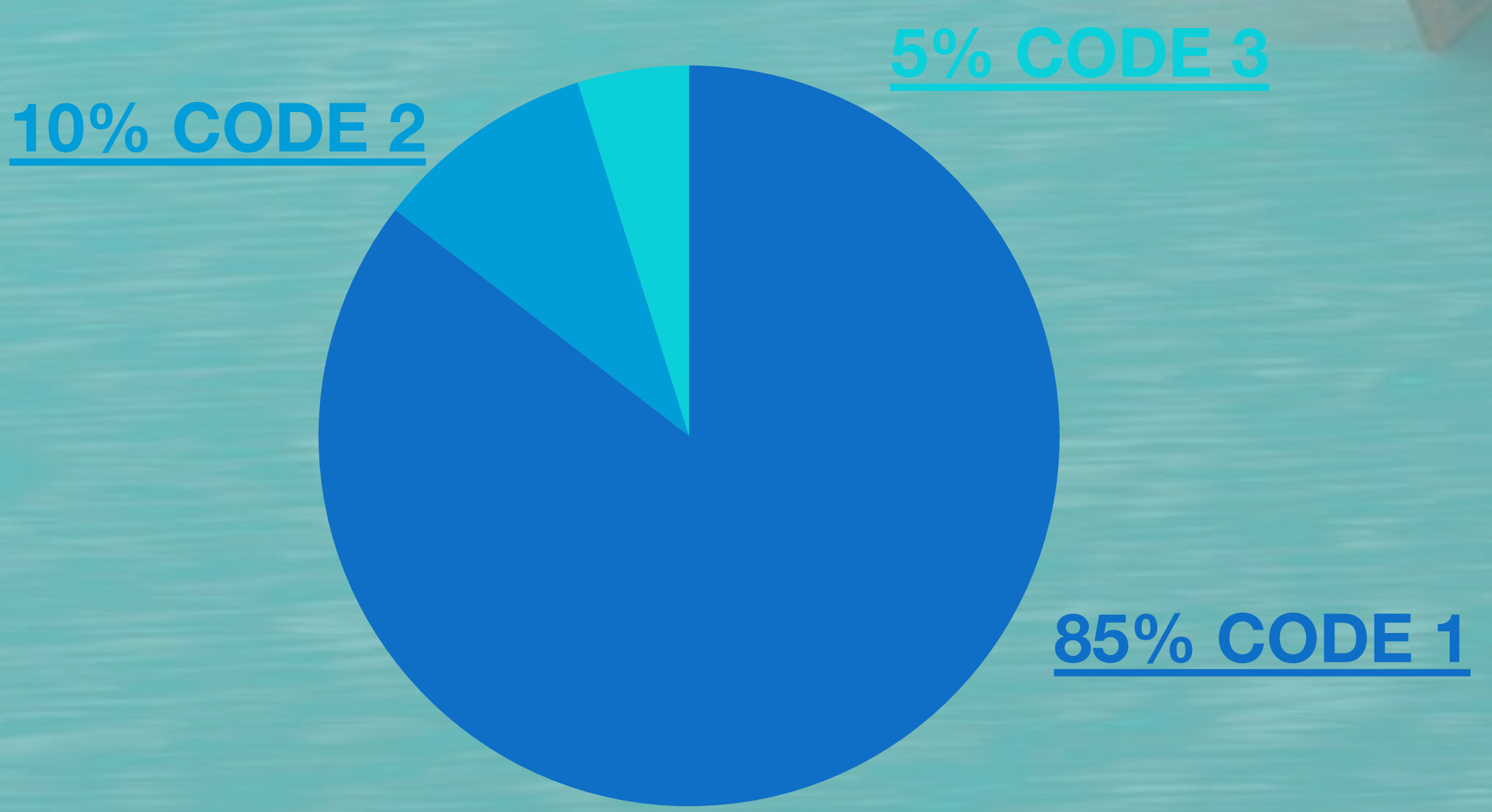


Fig. 2 - Fishes distribution across vitality stages.

Table 1 - Species caught, size range, and catch quantity by hook type.

	Size 6 hook captures	Size 8 hook captures	Size 10 hook captures	Fishes' length range (cm)
<i>B. boops</i>	2	11	6	11 - 16
<i>D. annularis</i>	2	9	12	9.5 - 20.5
<i>D. vulgaris</i>		2		14 - 15
<i>P. acarne</i>	5	11	15	11.5 - 14.5
<i>S. hepatus</i>		2	3	6 - 10
<i>S. aurata</i>		2		22 - 22.5
<i>S. flexuosa</i>	1	1	1	15 - 16.5
<i>T. mediterraneus</i>	2	9	8	13.5 - 27.5

Smaller hooks can cause greater damage as they can reach the throat more easily compared to larger hooks.

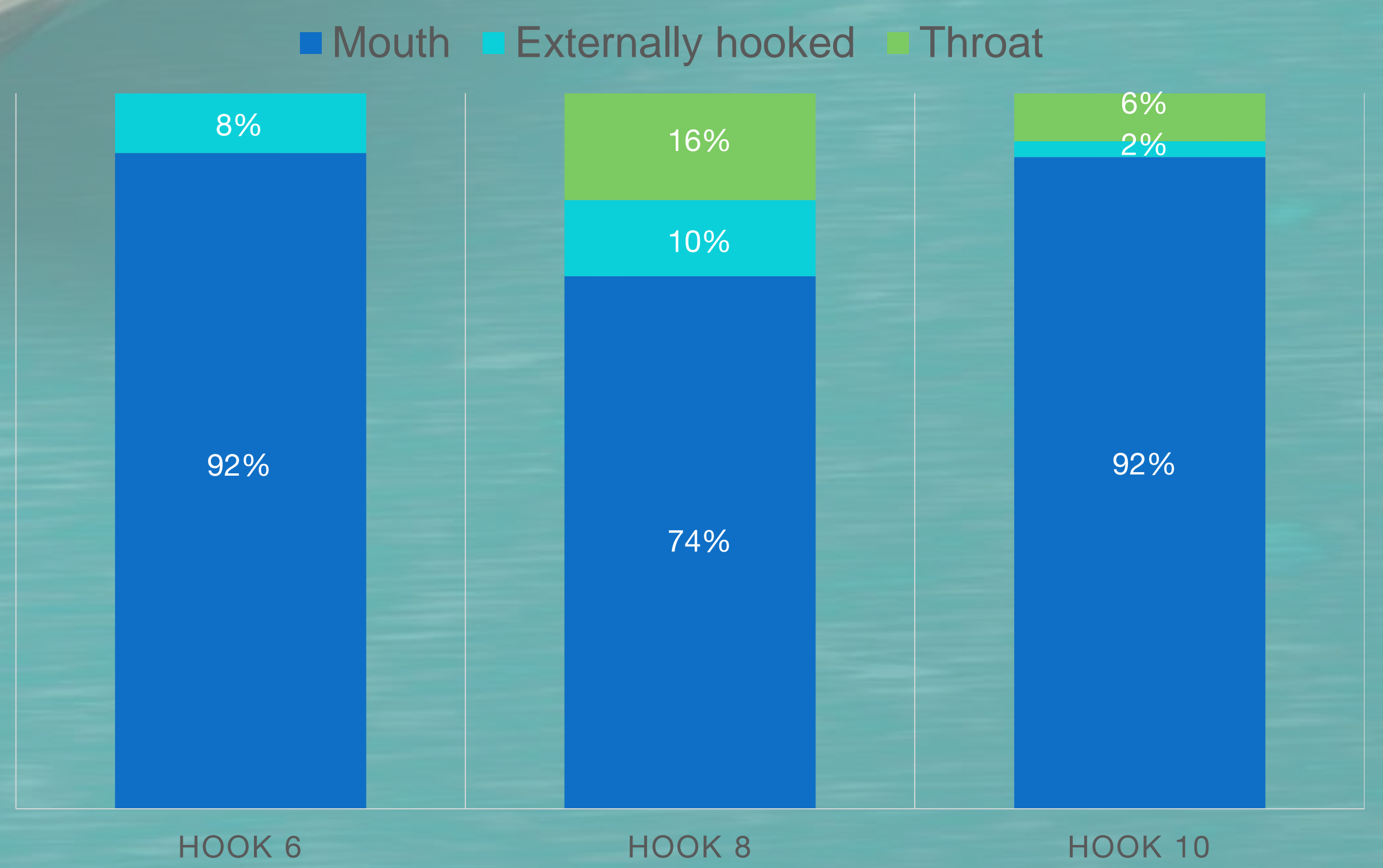


Fig. 3 - Ingestion location percentages (mouth, throat, external) by hook type.

CONCLUSION

These results suggest that the vitality of fish caught in recreational fishing can be high, thus promoting catch & release practices. Also, adopting larger hooks could be an effective strategy to mitigate the impact of recreational fishing, contributing to more sustainable management of fish stocks and the conservation of marine biodiversity.

REFERENCE
 Benoit, H. P., Hurlbut, T., & Chassé, J. (2010). Assessing the factors influencing discard mortality of demersal fishes using a semi-quantitative indicator of survival potential. *Fisheries Research*, 106(3), 436-447.

