



Chichester Harbour Small Fish Surveys

2016 - Summary

Introduction

- Sussex IFCA conducted a biannual small fish survey in Chichester Harbour between 2010 and 2014. It was paused in 2015 due to a lack of time and resources. It took place in 2016 with support funding from the Natural Environment Group.
- The surveys were conducted in partnership with Chichester Harbour Conservancy, with their vessels and staff used to access the survey sites. In addition, in 2016, 19 people from 9 organisations supported the surveys.
- It is important to survey fish populations to monitor juveniles of commercially important species and to further understanding of the ecosystem health, particularly within Marine Protected Areas.



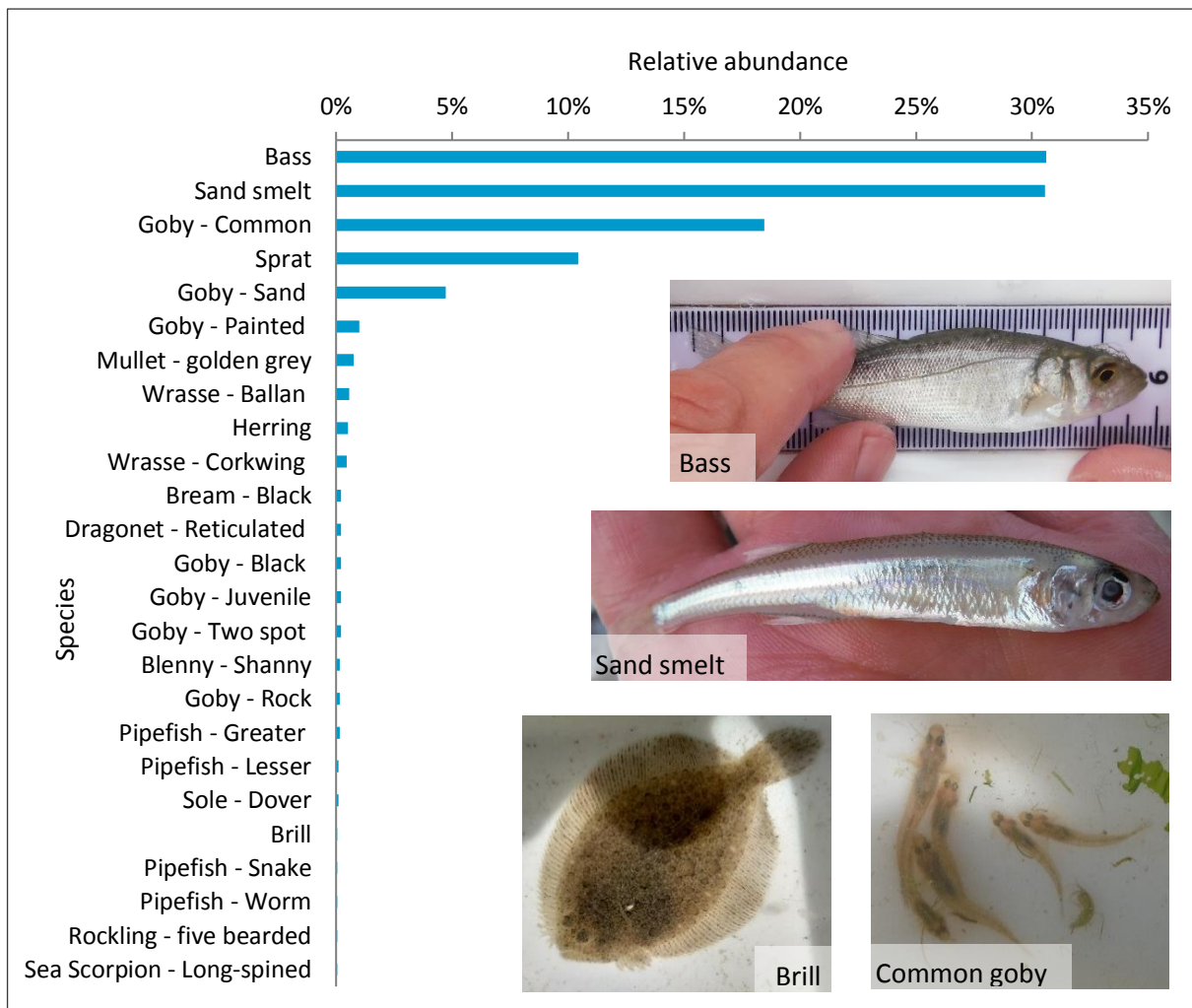
Methods

- Three sites (Pilsney, Copperas, Winner)
- Twice a year (June/July and September)
- 43m long seine net and 2m beam trawl
- All fish identified to species level
- 50 of each species in each sample measured
- Then returned alive to the sea
- Conspicuous non-fish species recorded



Results

- In total, there were 1983 fish of 25 species.
- Bass and sand smelt were jointly the most abundant (30.6% n=607), followed by common goby (18.5%) and sprat (10.4%). These four species made up 90% of the total abundance.
- The average Simpson's Index of Diversity was 0.715, higher than in 2013 or 2014. The index is a scale of 0 to 1, where 0 represents no diversity and 1 indicates infinite diversity.



- In June/July, there were 497 fish of 17 species. In September, there was much greater abundance (1486) and more species (20).
- Pilsley had the most number of species (22) and Winner had the least (11). Winner also had the lowest abundance (113) and Copperas had the highest (1034).
- There were three species found this year that have not been previously found on this survey: brill, worm pipefish and five bearded rockling.
- This year, there was lower abundance; 2/3 of the average abundance 2010-2014.

Acknowledgments

Sussex IFCA would like to sincerely thank the Natural Environment Group for their support. We are grateful for their contribution to the continuation of this important survey which furthers understanding of the fish populations in this sensitive area.

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