

## Juvenile Fish Survey Christchurch Harbour June 2022

## <u>Purpose</u>

Estuaries and sheltered coastal ecosystems provide a range of ecosystem services and are known for their high productivity and biodiversity. They offer suitable habitats for juvenile fish using the regions as nursery areas as well as species that live there full lifecycle in these areas.

As part of the Southern IFCA's Fish Monitoring Programme, survey at a range of site are carried out in order to understand the use of these essential fish habitats by commercial and recreational fish species. As more data is collected over time, it will be used to understand changes in fish communities, ecosystem health and to mark key nursery areas within the district. This valuable work contributes to more effective and sustainable fisheries management.

## <u>Method</u>

- 1. A 43 meter seine net was used to sample fish.
- 2. The net was shot in a wide arc adjacent to the shoreline from a shallow draft vessel provided by Yarmouth Harbour.
- 3. The net was hauled into the shore and all fish placed into buckets.
- 4. Fish were measured nose to tail and carefully returned to the sea as quickly as possible.
- 5. The net was shot and hauled twice at both Mudeford Spit and Wick Hams.

		Mean Count	
Species	Scientific Name	Mudeford Spit	Wick Hams
Thin Lipped Mullet	Chelon Ramada	0	45
Thick Lipped Mullet	Chelon labrosus	1	0
Bass	Mugilidae spp.	1	9
Herring	Clupea harengus	6	68
Goby spp.	Pomatoschistus spp.	1	134
Sand Smelt	Atherina presbyter	0	3
Flounder	Platichthys	2	0
Unidentifiable Small Fish	n/a	0	9

## <u>Results</u>

- The most abundant species at Mudeford Spit was Herring with a mean relative abundance of 35% and mean length of 35 mm across both nets.
- Flounder and Thick Lipped Grey Mullets were found only at Mudeford Spit whereas Thin Lipped Grey Mullet and Sand Smelt were found only at Wick Hams.
- The most abundant species at Wick Hams was Goby spp. The Goby spp. had a mean relative abundance of 39% and mean length of 43mm across both nets.
- Very few Gobys were able to be identified to species level, however the remaining were most likely **Sand or Common Goby.**



