Juvenile Fish Survey - Data Summary to Autumn 2025

Purpose

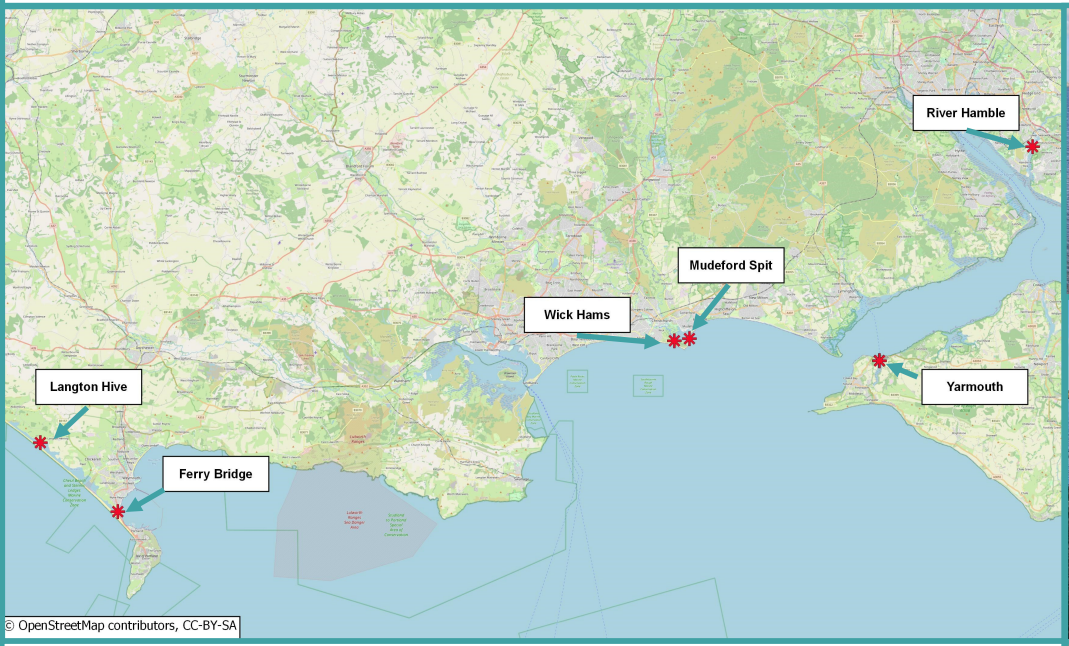
Estuaries and sheltered coastal habitats provide a range of ecosystem services and are known for their high productivity and biodiversity. They offer suitable habitats for juvenile fish as nursery areas as well as species throughout their lifecycle for feeding, spawning and refuge.

As part of the Southern IFCA Inshore Netting Review, Southern IFCA is determined to enhance the environmental, socio-economic and sustainability of fisheries within the District by supporting the use of harbours and estuaries by fish populations for these purposes, collectively referring to the areas as **Essential Fish Habitats (EFH)**.

As part of the Southern IFCA's Fish Monitoring Programme, surveys are carried out at a range of sites across the District in order to understand the use of these EFH by commercial and recreational fish species. Building a time-series dataset will allow any changes in fish communities to be observed to help understanding of EFH, contributing to a database that can be used for reviewing fisheries management. The dataset also aims to contribute to the Fisheries Management Plan (FMP) implementation process for relevant FMPs, to help support the collation and collection of evidence to address evidence gaps and support considerations of management.

Method

1. Southern IFCA carry out Juvenile Fish Surveys in Spring and Autumn each year.
2. A 43 meter seine net is used to sample fish, deployed either by hand or using a vessel depending on location.
3. The net is set in a semi-circle from the shore and is recovered to the shore with any fish retained placed in aerated buckets.
4. The length of the first 50 fish of each species are measured (head-to-tail, total length) and carefully returned to the sea as quickly as possible.
5. Any remaining fish of each species are counted and returned to the sea.
6. The net is shot and hauled twice at each survey site.



Statistical Analysis:

→ Data was used to calculate the total species abundance (n), relative species abundance, species richness (S), and species diversity (Shannon Diversity Index, H).

→ Diversity (H) considers both the abundance of each species and the balance of abundance between all species, also known as the species evenness. A larger H represents a more diverse community.

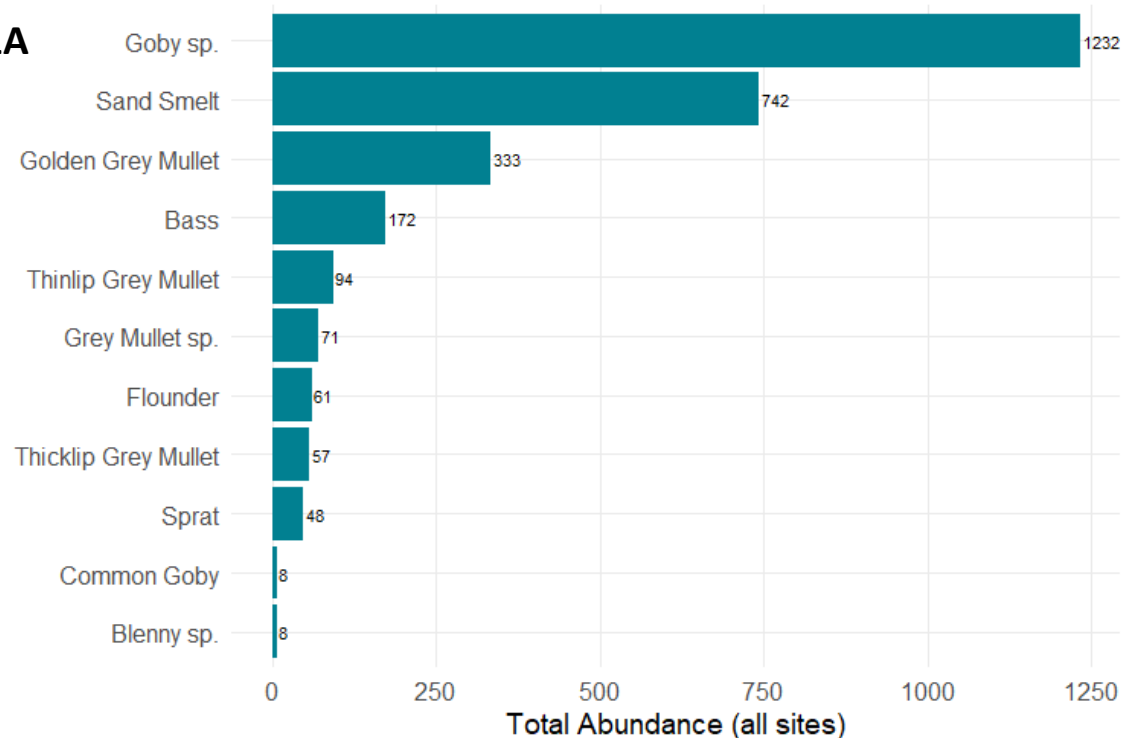
→ Due to multiple hauls being conducted at each survey site, mean values were used for descriptive purposes. However, statistical significance between surveys was assessed using the raw haul-level data to retain within-site variability.

Partnership Working

Southern IFCA's juvenile fish surveys would not be possible without the help, permissions, resources and knowledge of multiple organisations. Thank you to the representatives of the following organisations for their help with the 2025 surveys.

2025 Juvenile Fish Surveys - *dominant species of 2025*

1A



Survey Site	Total Count
Langton Hive	588
Ferry Bridge	428
Wick Hams	1218
Mudeford Spit	288
Donkey Place	46 *
Yarmouth Harbour	283

B

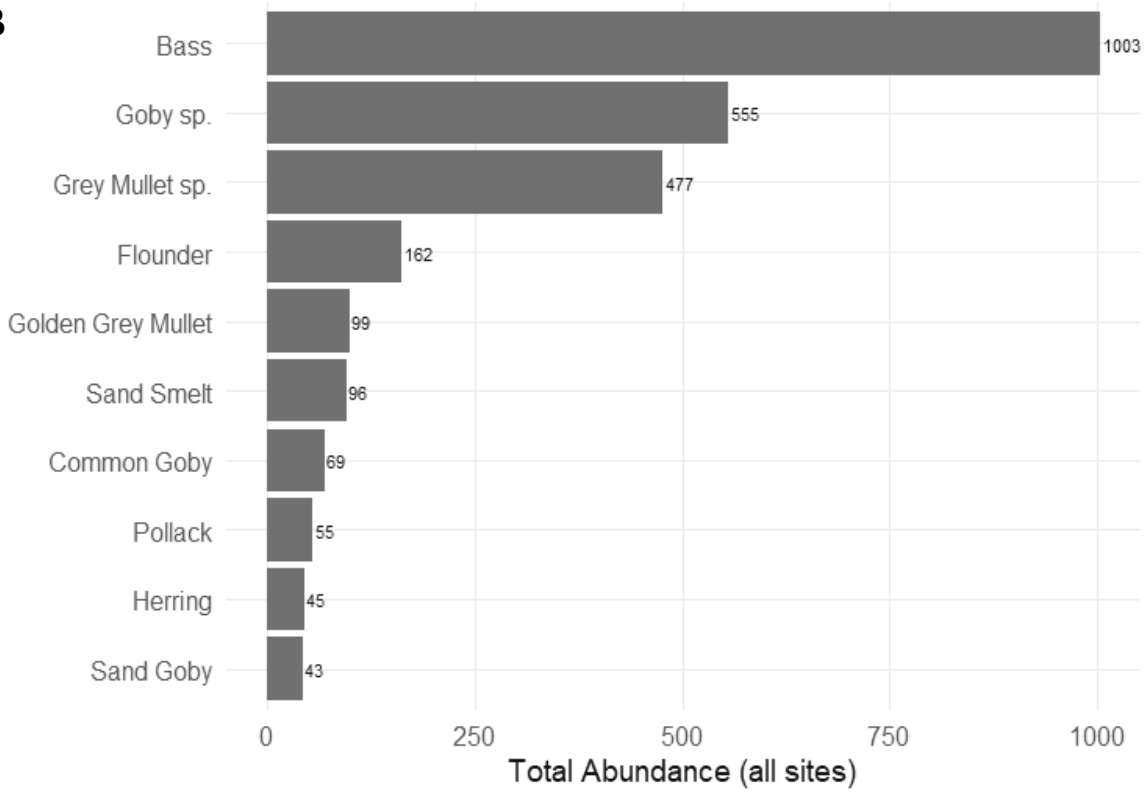


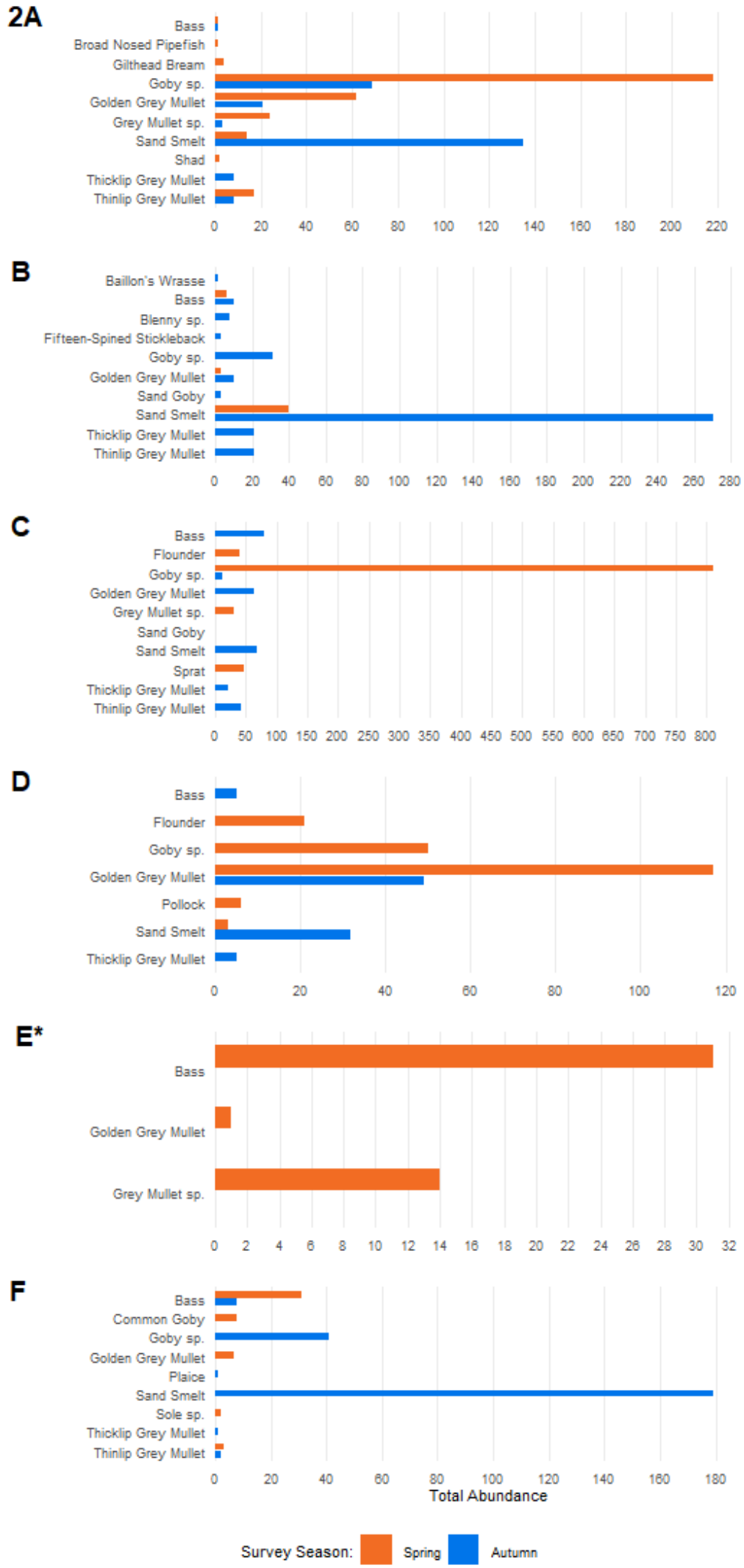
Figure 1A shows the ten most dominant species recorded across all surveys 2025 conducted, combining total counts from all six sites for both Spring and Autumn. The three most abundant species in 2025 were Goby species, Sand Smelt and Golden Grey Mullet. In comparison, Figure 1B shows the ten most dominant species for the 2024 surveys. The three most abundant species were Bass, Goby species and Grey Mullet species.

The decrease in Grey Mullet abundance from 2024 (n = 477) to 2025 (n = 71) is likely due to improvements in survey officer identification to species level. Variations in Sand Smelt and Goby species abundance may reflect changes in distribution, natural population fluctuations, or environmental factors. This dominance is particularly evident at Langton Hive, Ferry Bridge, Wick Hams, and Yarmouth Harbour (Figures 2A-C, F).

Using a negative binomial test, Bass total abundance per year was analysed across the entire time series (2016-2025). It was determined that the change from most dominant species (2024) to 4th most dominant (2025) is due to the populations natural fluctuations since there was no significant change throughout the years ($p > 0.05$).

**Donkey Place was only surveyed in Spring due to environmental conditions preventing surveying in Autumn (weather conditions, tides, and daylight availability).*

2025 Juvenile Fish Surveys - *distribution of species across sites*



Figures 2A-F display the total species catch at each location for the 2025 Spring (orange) and Autumn (blue) surveys: A) Langton Hive, B) Ferry Bridge, C) Wick Hams, D) Mudeford Spit, E) Donkey Place, F) Yarmouth Harbour.

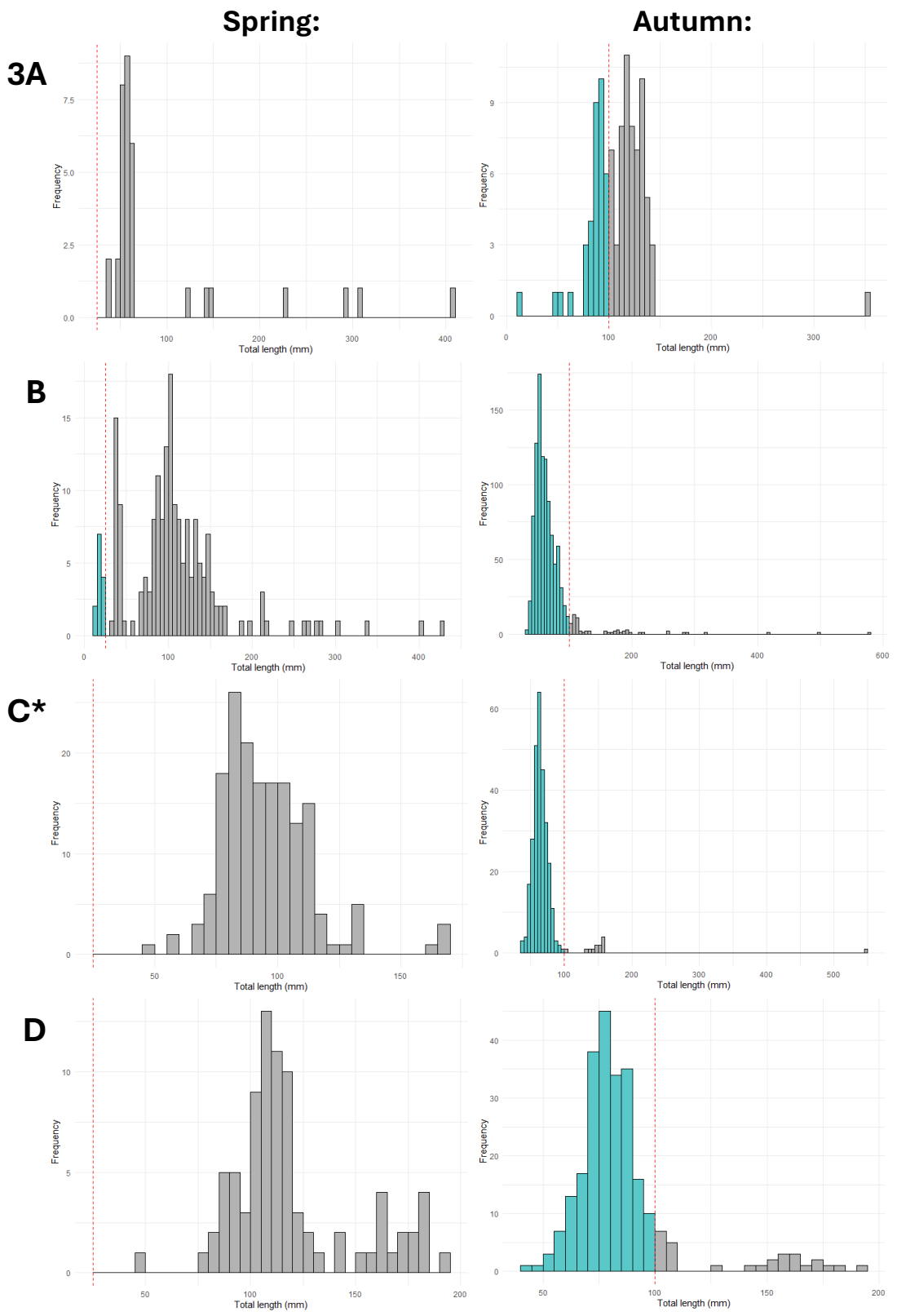
Of the top three dominant species for all 2025 surveys (Figure 1: Goby species, n = 1232; Sand Smelt, n = 742; Golden Grey Mullet, n = 333), only Golden Grey Mullet occurred at all six sample sites, while Goby spp. and Sand Smelt were absent from Donkey Place in Spring (n = 0). Goby were abundant at most Essential Fish Habitats (EFH), likely due to inshore shelter and feeding, with a Spring peak during spawning. Sand Smelt were generally less abundant in Spring, possibly due to mature individuals migrating to rivers, and congregated in Autumn in inshore habitats for overwintering or pre-spawning.

Commercially important species were present at all six sample sites, including Bass and Grey Mullet species (Golden, Thicklip and Thinlip). Flounder were only found at Christchurch (Mudeford Spit and Wick Hams, n = 21 and 40, respectively) in Spring.

Both The Fleet (Langton Hive and Ferry Bridge) and the River Hamble (Donkey Place) are Essential Fish Habitats that are also designated Bass Nursery Areas. From these surveys, Bass have been consistently dominant at the River Hamble (relative abundance, Figure 17), and present across the two Fleet sites (relative abundance, Figures 5 and 8) since sampling began there in 2017. For 2025 Bass have also been found across all six sites, although they were only recorded in Autumn at Christchurch.

**Donkey Place (River Hamble) was only surveyed in Spring due to environmental complications in the Autumn (weather, tides, and daylight availability).*

2025 Juvenile Fish Surveys - *Bass age groups across sites*



The age groups of Bass were defined using **season-specific total length thresholds** to reflect expected growth between Spring and Autumn surveys.

Individuals classified as 0-stage (young-of-the-year) were defined as those ≤25 mm total length in Spring surveys, corresponding to recently settled post-larvae and early juveniles, and ≤100 mm total length in Autumn surveys, following growth over the first summer. Larger individuals were classified into subsequent life stages using fixed length ranges.

	Spring	Autumn
0-stage	≤25 mm	≤100 mm
1-stage	>25 - 100 mm	>100 - 170 mm
2-stage	>100 - 180 mm	>170 - 250 mm
(3+)-stage	> 180 mm	> 250 mm

These thresholds were selected to minimise overlap between cohorts while providing a conservative and consistent proxy for age where direct ageing was not available.

In Figure 3 (A-D), the shaded bars are individuals at 0-stage, grey bars are individuals larger than 0-stage, the red line indicates length threshold for 0-stage.

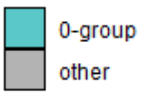


Figure 3 (A–D) presents length–frequency histograms for Bass (*Dicentrarchus labrax*) at four survey areas: (A) The Fleet (Langton Hive and Ferry Bridge), (B) Christchurch (Wick Hams and Mudeford Spit), (C) the River Hamble, and (D) Yarmouth.

The continued presence of 0-stage Bass across multiple sites suggests site fidelity. Individuals of this age class were recorded at the Fleet (Ferry Bridge, n = 3), Christchurch (Mudeford Spit and Wick Hams, n = 1 and 58 respectively), and Yarmouth (n = 1). The occurrence of multiple age classes (0–3 years), indicative of ongoing stock recruitment, was observed at the Fleet (Ferry Bridge, n = 17), Christchurch (Mudeford Spit, n = 12), and Yarmouth (n = 39). The River Hamble site (Donkey Place, n = 31) also supported Bass from 1- and 2-stage age classes. Bass aged 3+ years, suggesting habitat use beyond early life stages, were recorded at the Fleet (Ferry Bridge, n = 4) and Yarmouth (n = 2). The presence of multiple life stages at both the Fleet and the River Hamble is particularly noteworthy given their designation as Bass Nursery Areas.

**Donkey Place (River Hamble) was only surveyed in Spring due to environmental complications in the Autumn (weather, tides, and daylight availability).*

Langton Hive

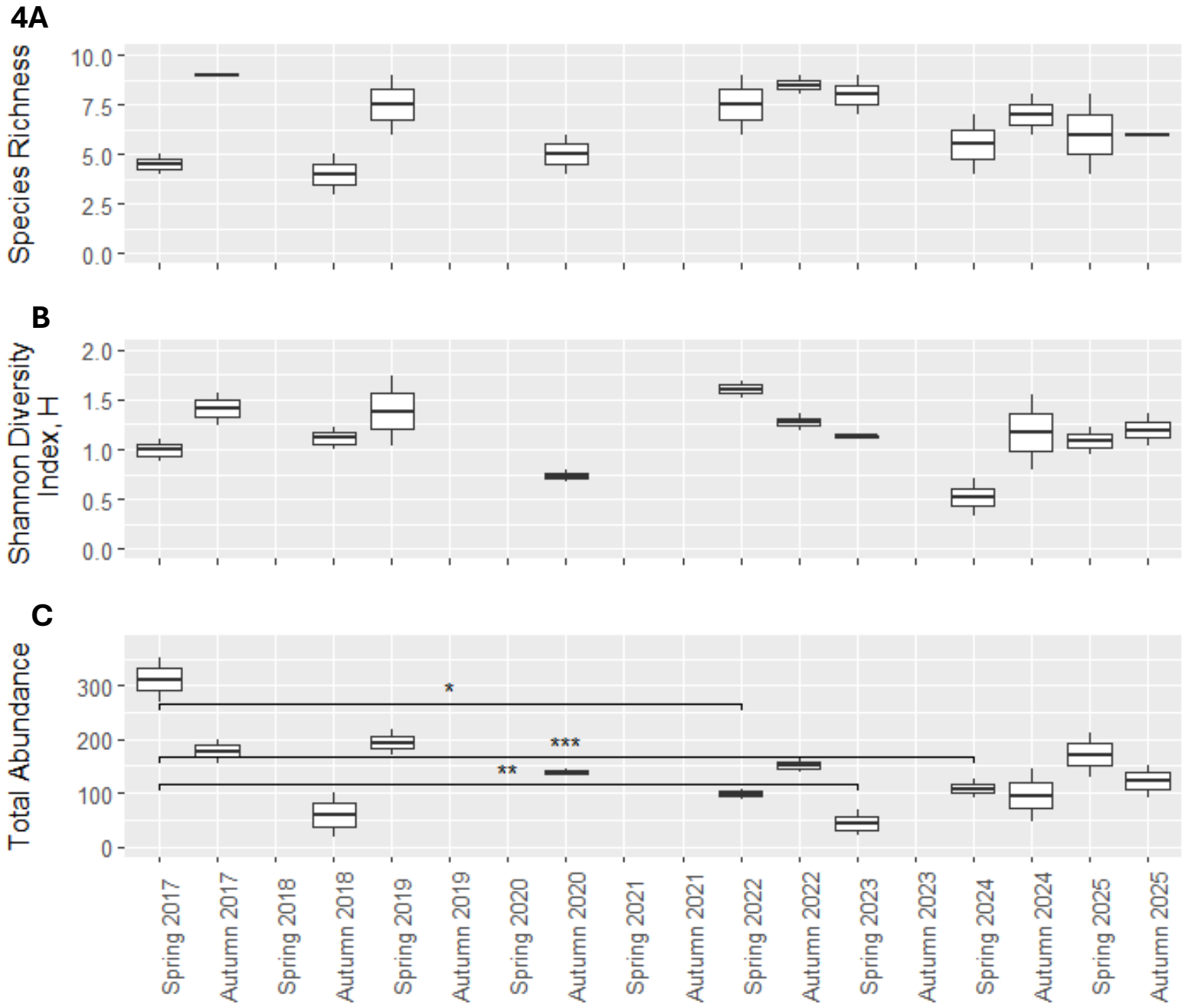


Figure 4 (A-C) displays the Species Richness, Shannon Diversity Index (H), and Total Abundance in each survey carried out from Spring 2017 to Autumn 2025.

Mean **Species richness** was highest in Autumn 2017 (S = 9) and lowest in Autumn 2018 (S = 4). Of the Spring surveys, mean species richness was highest in 2023 (S = 8) and lowest in 2017 (S = 4.5). No significant differences in species richness were detected between Spring surveys or between Autumn surveys ($p > 0.05$).

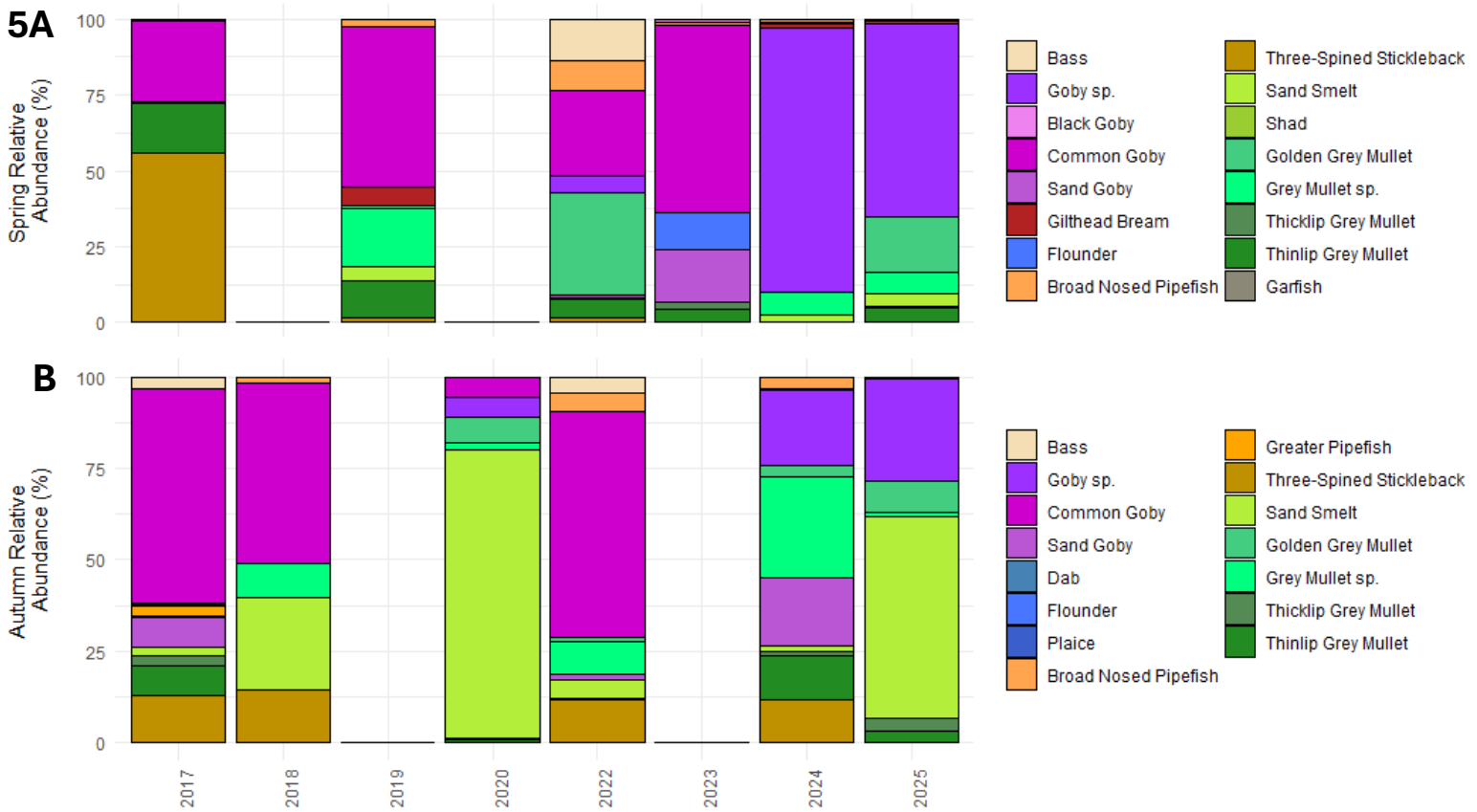
Spring 2025 (H = 1.09) had a slightly lower mean **Shannon Diversity Index** than the Autumn 2025 survey (H = 1.20). This lower evenness was due to the dominance of Goby species (64%, Figure 5A) in the Spring survey. No survey differed significantly from another in terms of species diversity (H; $p > 0.05$).

Of the Spring surveys, 2017 had the highest mean **total abundance** of fish (n = 311) and 2023 the lowest (n = 44). Of the Autumn surveys, 2017 had the highest total abundance of fish (n = 178) and 2018 the lowest (n = 59). There is no significant difference in total abundance between Autumn surveys ($p > 0.05$). There was a significant difference between Spring surveys: 2017 was significantly different to 2022, 2023, and 2024 (* ** ***, $p < 0.05$). Aside from this outlier-driven effect in Spring 2017, there was no evidence of statistically significant variation among the remaining survey years.

There were no statistically significant differences in species richness, Shannon Diversity Index (H) or total abundance between Spring surveys or between Autumn surveys (table to the right).

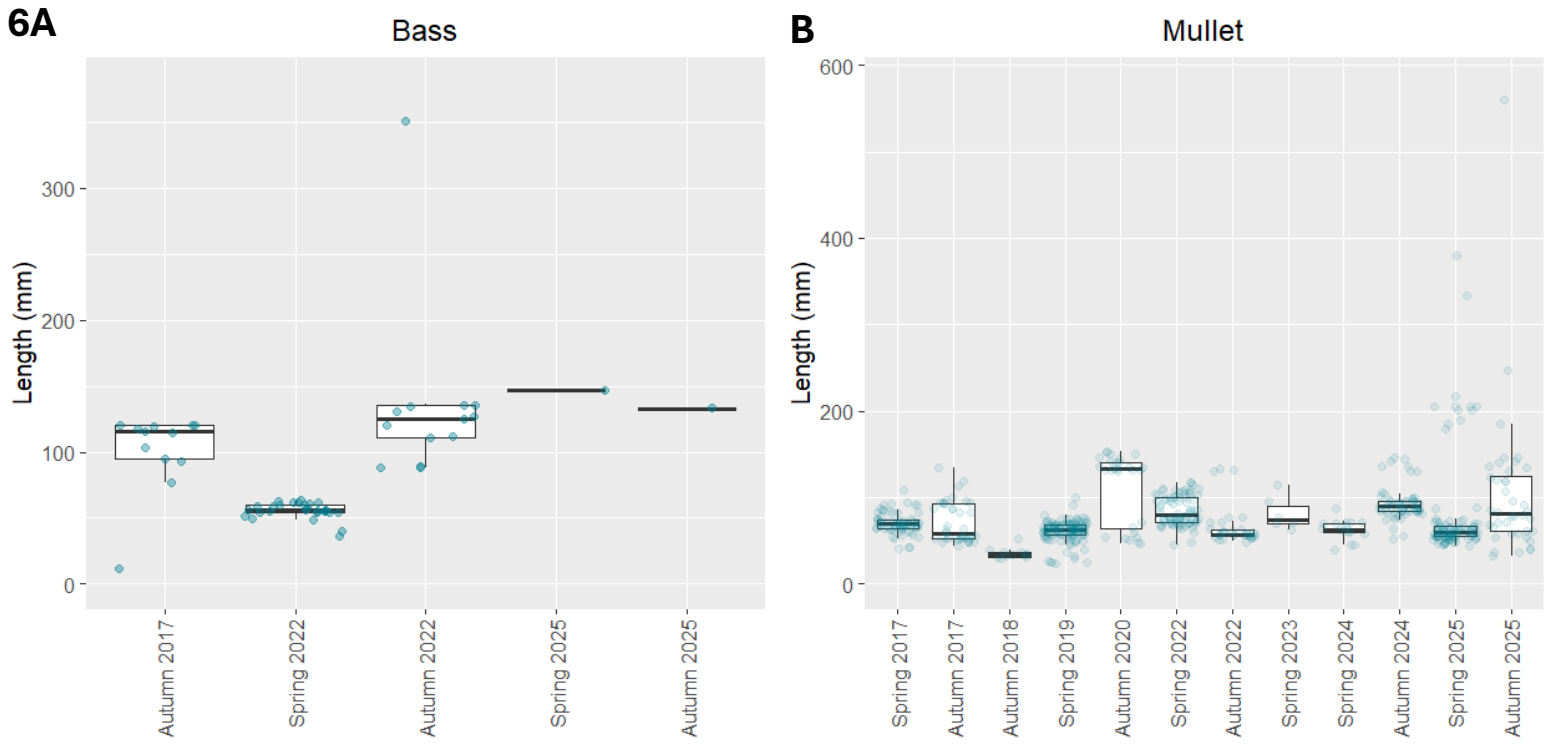
Surveys 2017 - 2025	All Spring surveys	All Autumn surveys	P<0.05
Mean Species Richness	6.50	6.58	No
Mean Shannon Diversity Index (H)	1.12	1.15	No
Mean Total Abundance	154	124	No

Langton Hive



Figures 5A (Spring) and B (Autumn) display the percentage **relative abundance** of each species during each survey.

In Spring 2025 Goby species were the most abundant species (64%) followed by Golden Grey Mullet (18%). Whereas in Autumn 2025, Sand Smelt were the most abundant species (55%) followed by Goby species (28%).



Figures 6A and 6B display the measured length of Bass and all Mullet species; only these taxa are shown due to their commercial importance within the Southern IFCA district. All Grey Mullet species were combined for Figure 6B due to difficulties in species-level identification at the juvenile stage.

No 0-stage Bass individuals were recorded in either the Spring or Autumn 2025 surveys. The length thresholds for 0-stage were set based on available literature (60-140 mm) and informed by the complete dataset. Conservative thresholds of 25 mm (Spring) and 100 mm (Autumn) total length were applied to minimise overlap with 1-stage individuals and to account for variability in spawning time, larval settlement, and growth rates.

Ferry Bridge

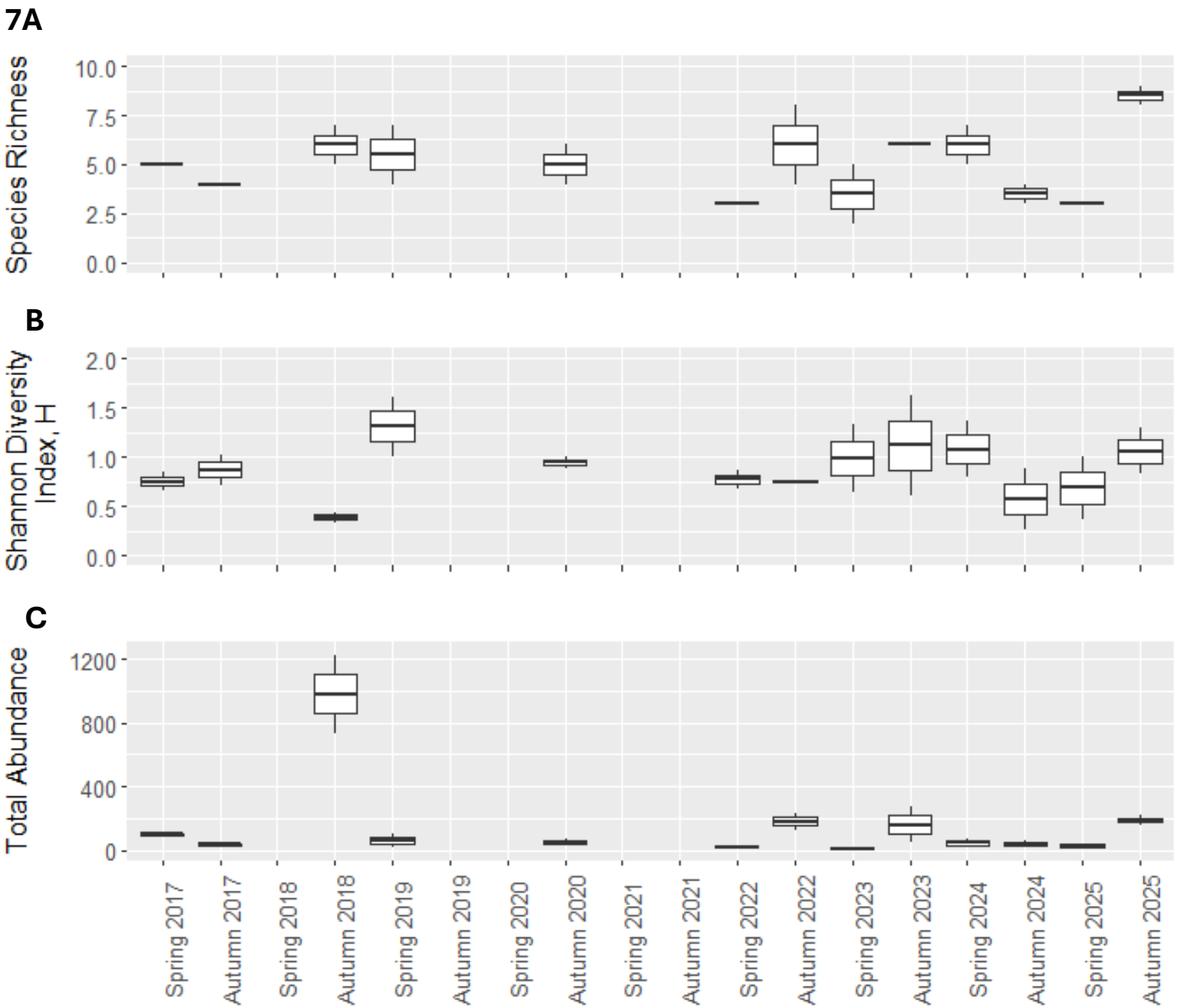


Figure 7 (A-C) displays the Species Richness, Shannon Diversity Index (H) and Total Abundance in each survey carried out from Spring 2017 to Autumn 2025.

Mean **Species richness** was highest in Autumn 2025 (S = 9), and lowest in Autumn 2024 (S = 3.5). Of the Spring surveys, mean Species Richness was highest in Spring 2024 (S = 6), and lowest in Spring 2022 and 2025 (S = 3). No significant differences in species richness were detected between Spring surveys or between Autumn surveys ($p > 0.05$).

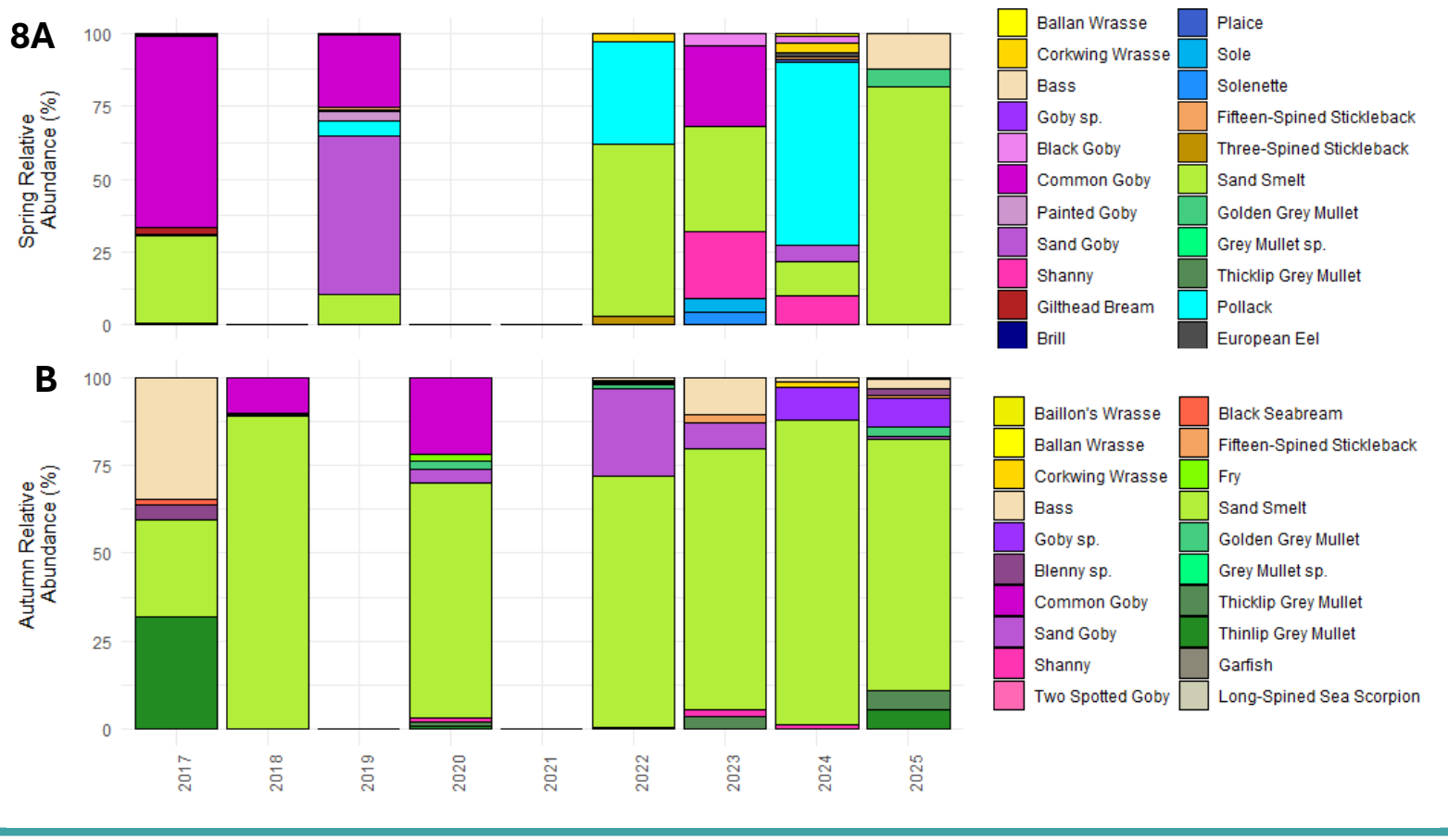
Spring 2025 (H = 0.69) had a lower mean **Shannon Diversity Index** than the Autumn 2025 survey (H = 1.06). This was due to the high dominance of Sand Smelt (82%, Figure 8A) in the Spring survey. No survey differed significantly from another in terms of species diversity (H; $p > 0.05$).

Of the Spring surveys, 2017 had the highest mean **total abundance** of fish (n = 98) and 2023 the lowest (n = 11). Of the Autumn surveys, 2018 had the highest mean total abundance of fish (n = 980) and 2024 the lowest (n = 37). No significant differences in total abundance were found between surveys ($p > 0.05$).

There were no statistically significant differences in species richness, Shannon Diversity Index (H) or total abundance between Spring surveys or between Autumn surveys (table to the right).

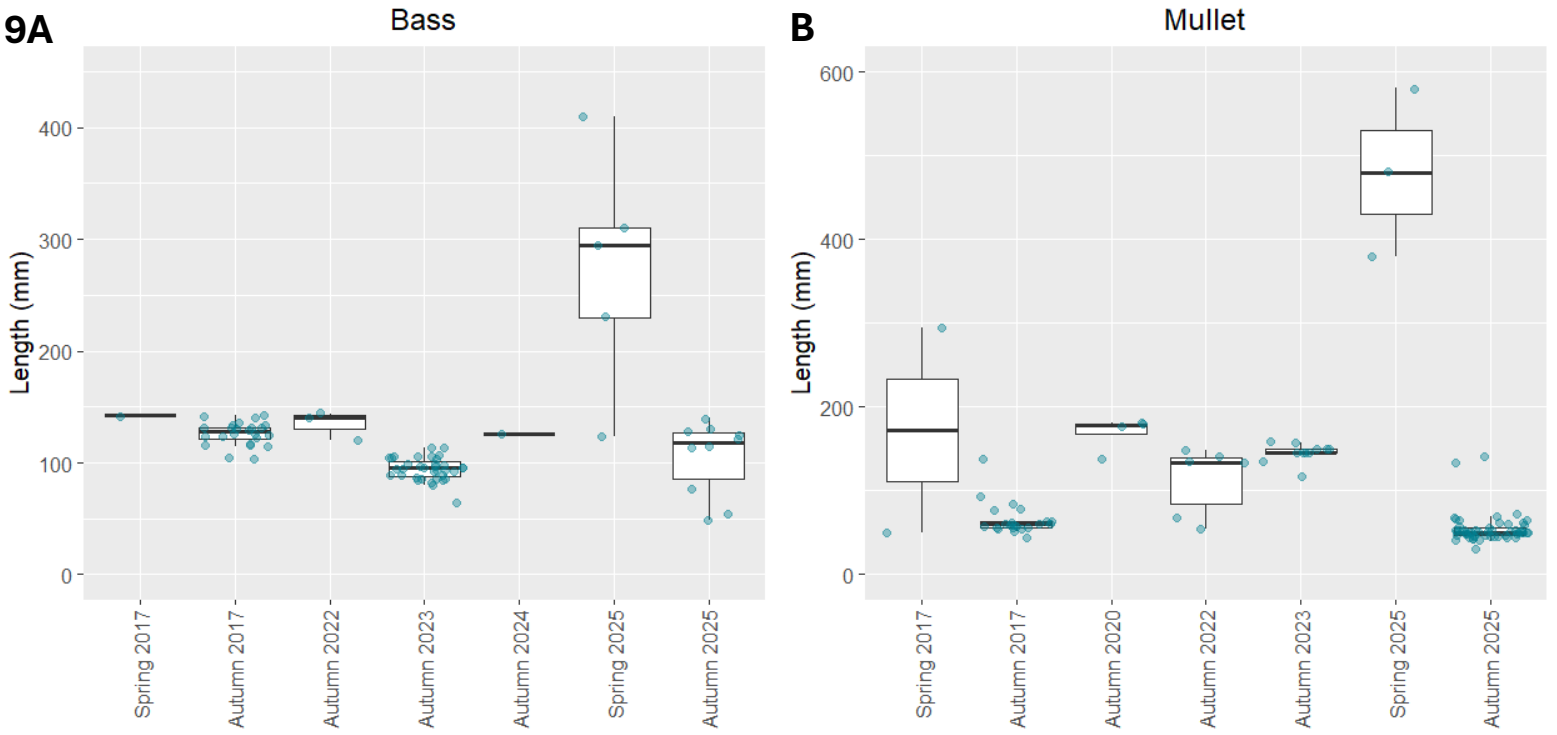
Surveys 2017 - 2025	All Spring surveys	All Autumn surveys	P<0.05
Mean Species Richness	4.33	5.57	No
Mean Shannon Diversity Index (H)	0.93	0.81	No
Mean Total Abundance	43	233	No

Ferry Bridge



Figures 8A (Spring) and B (Autumn) display the percentage **relative abundance** of each species during each survey.

In Spring 2025 Sand Smelt were the most abundant species (82%) followed by Bass (12%). In Autumn 2025 Sand Smelt were again the most abundant species (71%), followed by Goby species (8%).



Figures 9A and 9B display the measured length of Bass and all Mullet species; only these taxa are shown due to their commercial importance within the Southern IFCA district. All Grey Mullet species were combined for Figure 9B due to difficulties in species-level identification at the juvenile stage.

The total count of Bass individuals at 0-stage for Spring and Autumn 2025 surveys were 0 and 3 respectively. The length thresholds for 0-stage were set based on available literature (60-140 mm) and informed by the complete dataset. Conservative thresholds of 25 mm (Spring) and 100 mm (Autumn) total length were applied to minimise overlap with 1-stage individuals and to account for variability in spawning time, larval settlement, and growth rates.

Wick Hams

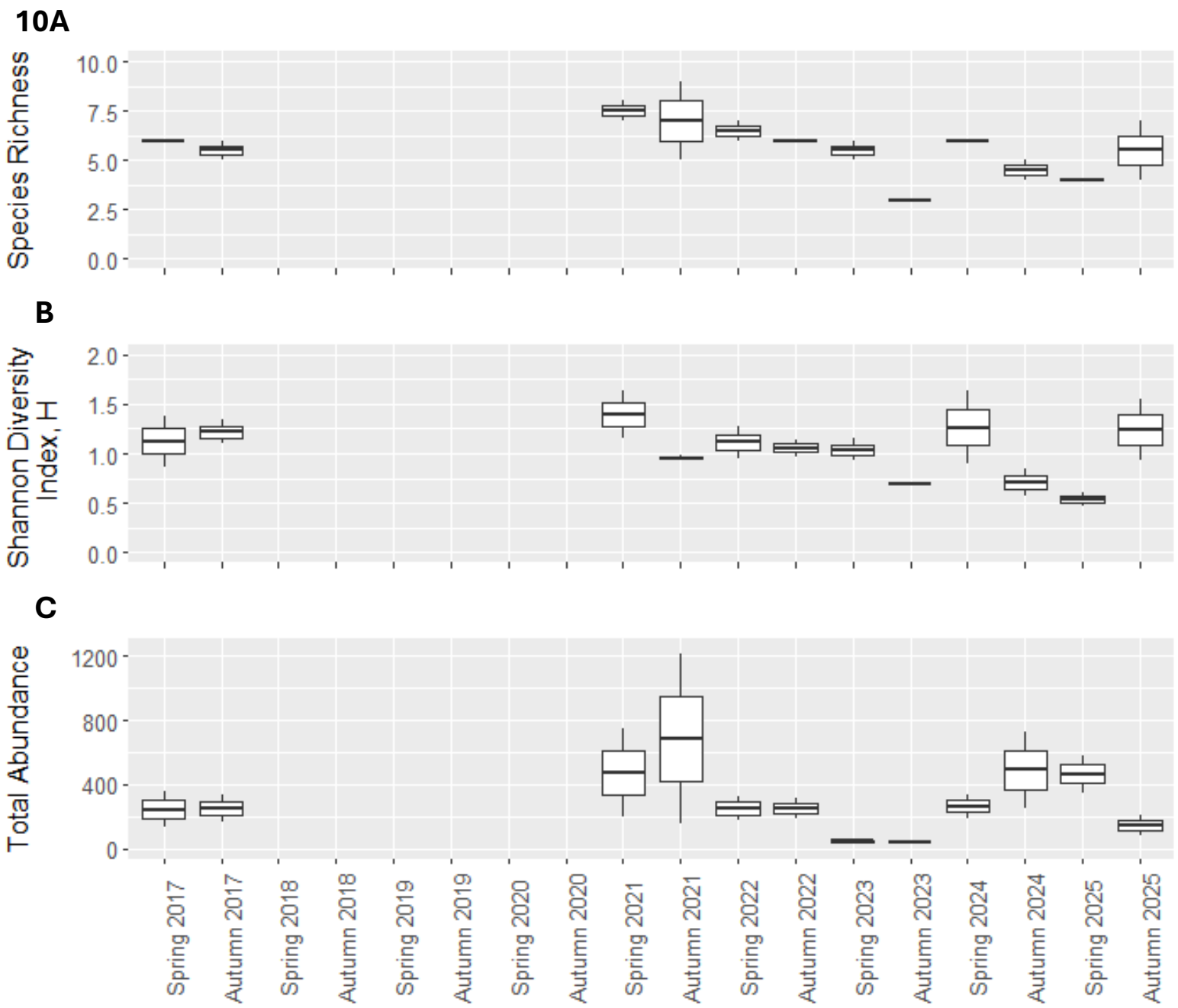


Figure 10 (A-C) displays the Species Richness, Shannon Diversity Index (H), and Total Abundance in each survey carried out from Spring 2017 to Autumn 2025.

Mean **Species richness** was highest in Autumn 2021 (S = 7) and lowest in Autumn 2023 (S = 3). For the Spring surveys, species richness was highest in 2021 (S = 7.5) and lowest in 2025 (S = 4). No significant differences in species richness were detected between Spring surveys or between Autumn surveys ($p > 0.05$).

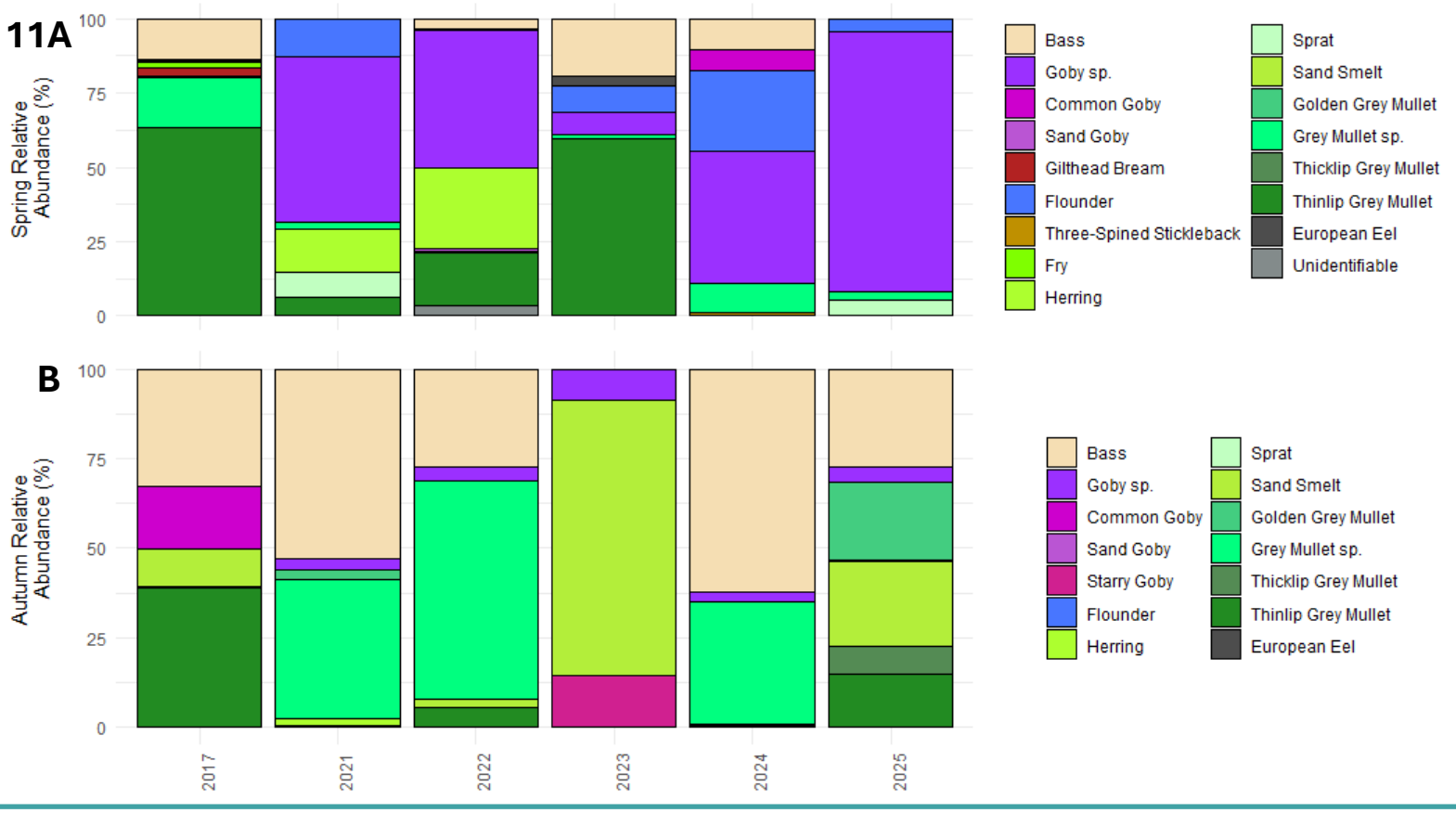
Spring 2025 (H = 0.53) had a lower mean **Shannon Diversity Index** than Autumn 2025 (H = 1.24). This is due to the high dominance of Goby species (87%, Figure 11A) in the Spring survey. Additionally, Spring 2025 (H = 0.53) was the lowest species diversity for all Spring surveys, and Autumn 2025 (H = 1.24) was the highest species diversity for all Autumn surveys. No survey differed significantly from another in terms of species diversity (H; $p > 0.05$).

Of the Spring surveys, 2021 had the highest mean **total abundance** of fish (n = 476) and 2023 the lowest (n = 46). This was similar for the Autumn surveys, 2021 had the highest mean total abundance of fish (n = 687) and 2023 the lowest (n = 35). No significant differences in total abundance were found between surveys ($p > 0.05$).

There were no statistically significant differences in species richness, Shannon Diversity Index (H) or total abundance between Spring surveys or between Autumn surveys (table to the right).

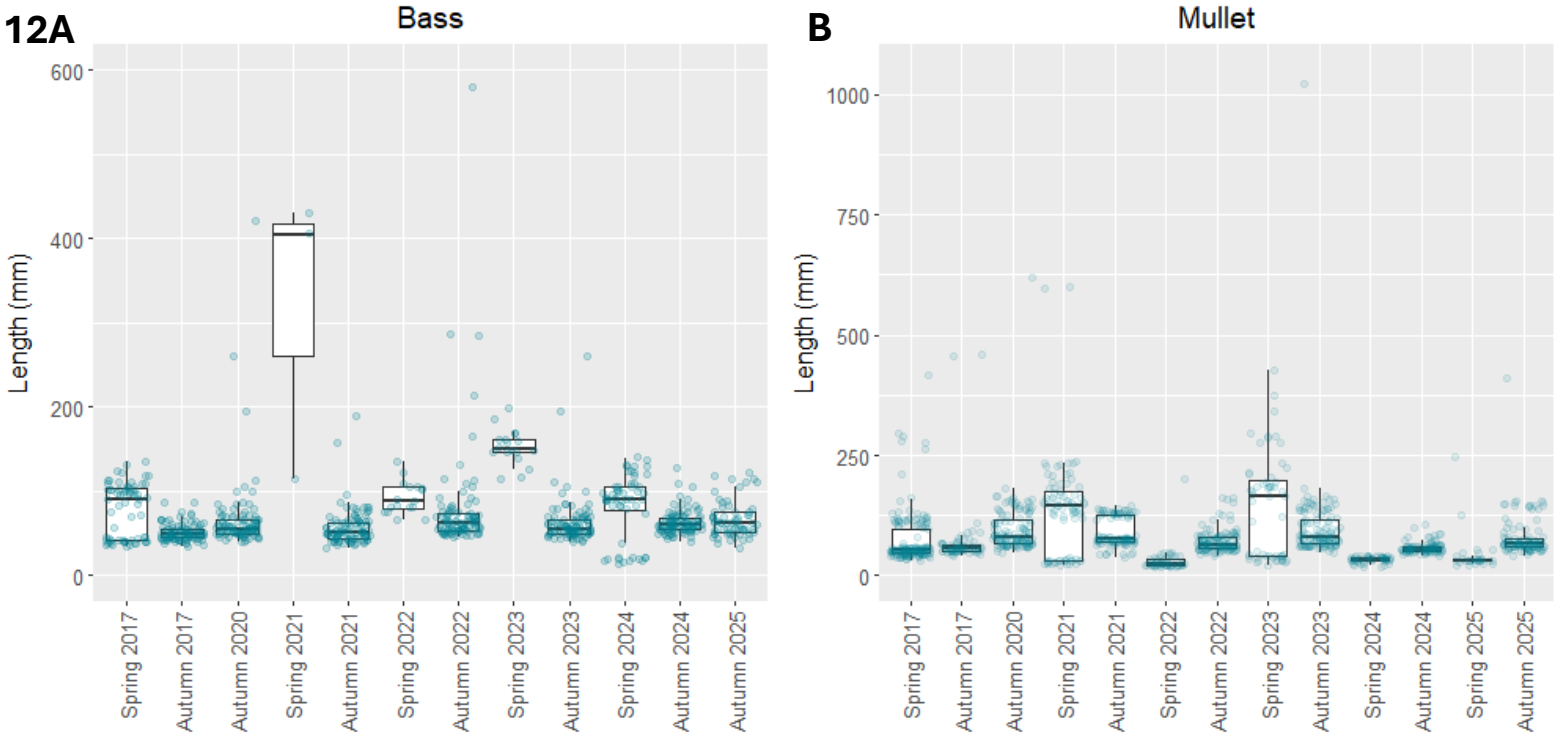
Surveys 2017 - 2025	All Spring surveys	All Autumn surveys	P<0.05
Mean Species Richness	5.92	5.45	No
Mean Shannon Diversity Index (H)	1.08	1.01	No
Mean Total Abundance	291	334	No

Wick Hams



Figures 11A (Spring) and B (Autumn) display the percentage **relative abundance** of each species during each survey.

In Spring 2025 Goby species were the most abundant species (87%) followed by Sprat (5%). Whereas in Autumn 2025, Bass were the most abundant species (27%) followed by Sand Smelt (24%).



Figures 12A and 12B display the measured length of Bass and all Mullet species; only these taxa are shown due to their commercial importance within the Southern IFCA district. All Grey Mullet species were combined for Figure 12B due to difficulties in species-level identification at the juvenile stage.

The total count of Bass individuals at 0-stage for the Autumn 2025 survey was 58 fish. There were no Bass present in the Spring 2025 survey. The length thresholds for 0-stage were set based on available literature (60-140 mm) and informed by the complete dataset. Conservative thresholds of 25 mm (Spring) and 100 mm (Autumn) total length were applied to minimise overlap with 1-stage individuals and to account for variability in spawning time, larval settlement, and growth rates.

Mudeford Spit

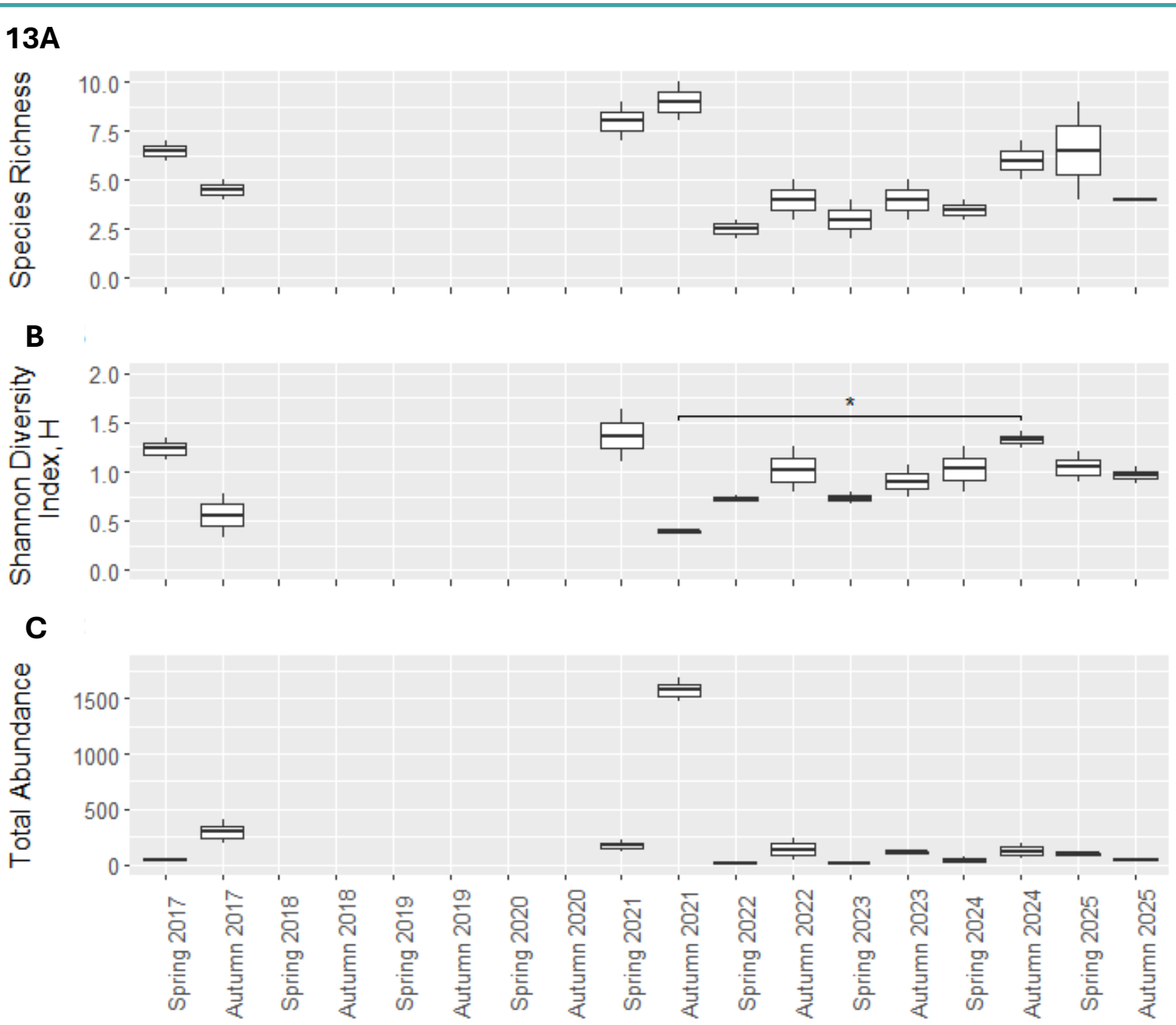


Figure 13 (A-C) displays the Species Richness, Shannon Diversity Index (H) and Total Abundance in each survey carried out from Spring 2017 to Autumn 2025.

Mean **Species richness** was highest in the 2021 surveys (Autumn: S = 9; Spring: S = 8), and lowest in Spring 2022 (S = 2.5) and Autumn 2022, 2023 and 2025 (S = 4). No significant differences in species richness were detected between Spring surveys or between Autumn surveys ($p > 0.05$).

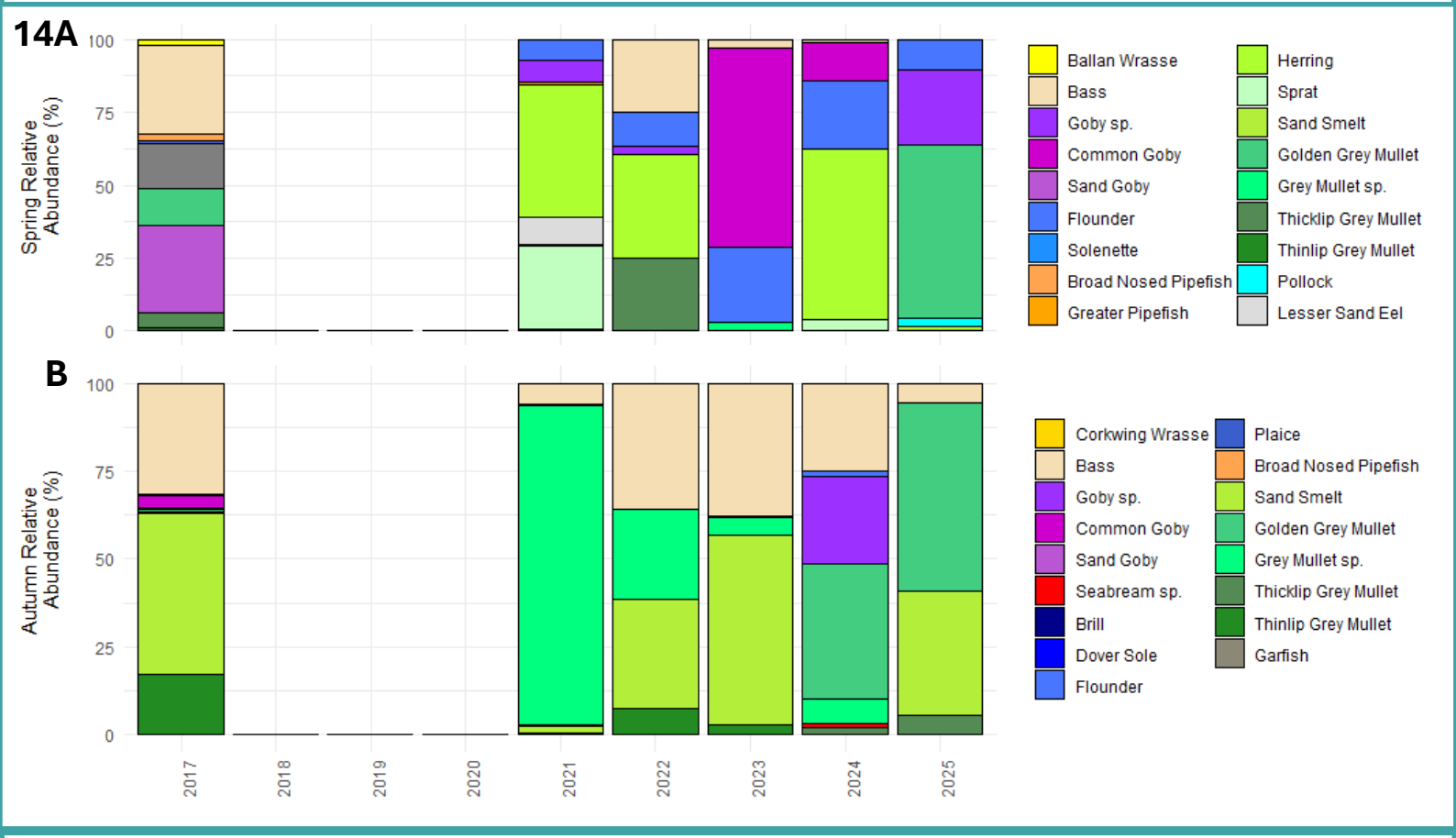
Spring 2025 (H = 1.05) had a higher mean **Shannon Diversity Index** than the Autumn 2025 survey (H = 0.97). This was due to the dominance of Golden Grey Mullet (54%, Figure 14B) in the Autumn survey. A significant difference in species diversity was detected among Autumn surveys, with the lowest mean diversity in 2021 (H = 0.40) and the highest in 2024 (H = 1.33; $p = 0.04$).

Of the Spring surveys, 2021 had the highest mean **total abundance** of fish (n = 173) and 2022 the lowest (n = 11). Of the Autumn surveys, 2021 had the highest mean total abundance of fish (n = 1575) and 2025 the lowest (n = 46). No significant differences in total abundance were found between surveys ($p > 0.05$).

There were no statistically significant differences in species richness or total abundance, but there was a significant difference in species diversity (H) between Autumn surveys (table to the right).

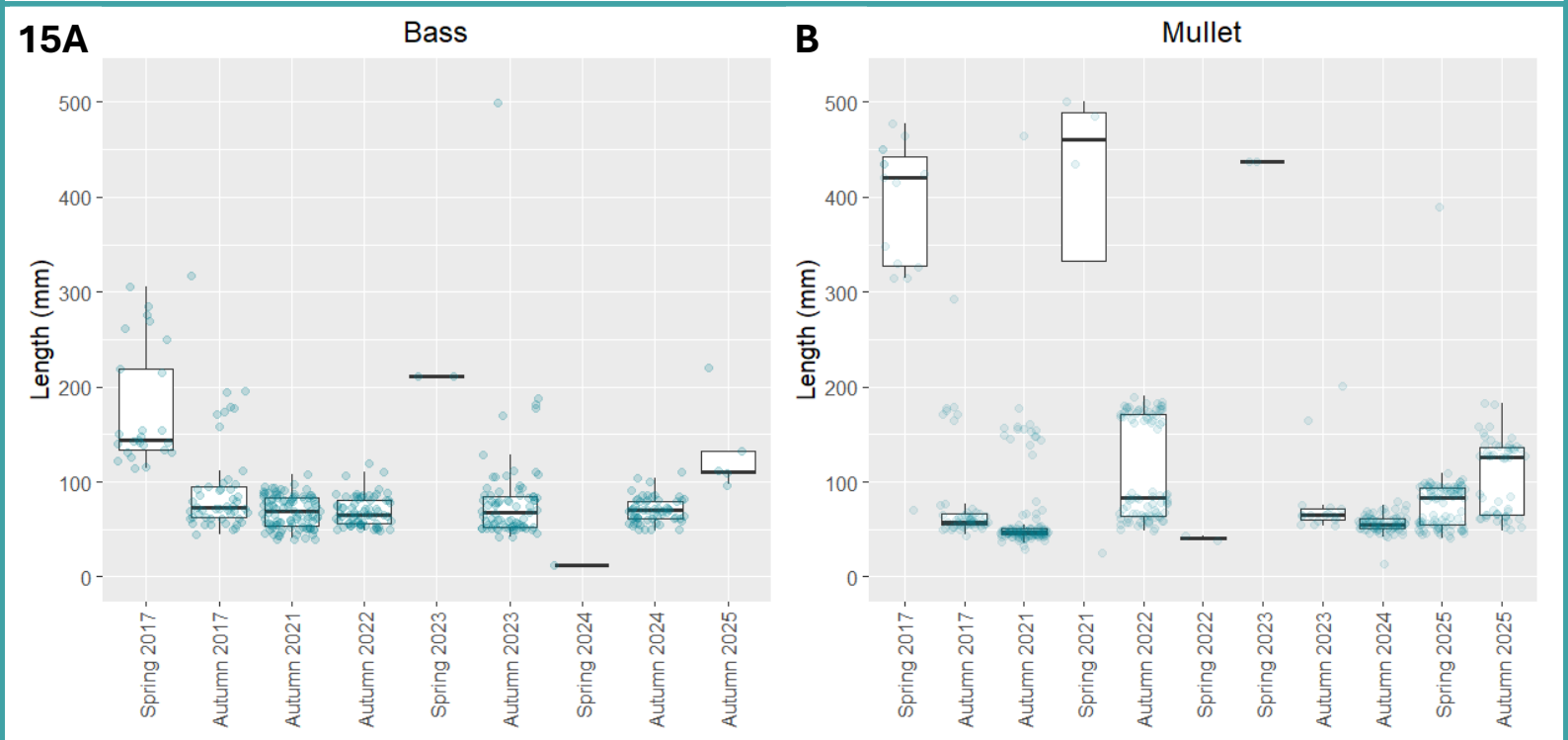
Surveys 2017 - 2025	All Spring surveys	All Autumn surveys	P<0.05
Mean Species Richness	5.00	5.25	No
Mean Shannon Diversity Index (H)	1.02	0.86	**Yes**
Mean Total Abundance	63	381	No

Mudeford Spit



Figures 14A (Spring) and B (Autumn) display the percentage **relative abundance** of each species during each survey.

In Spring 2025 Golden Grey Mullet were the most abundant species (59%) followed by Goby species (25%). In Autumn 2025 Golden Grey Mullet were again the most abundant species (54%), followed by Sand Smelt (35%).



Figures 15A and 15B display the measured length of Bass and all Mullet species; only these taxa are shown due to their commercial importance within the Southern IFCA district. All Grey Mullet species were combined for Figure 15B due to difficulties in species-level identification at the juvenile stage.

The total count of Bass individuals at 0-stage for the Autumn survey was 1 fish. There were no Bass present in the Spring 2025 survey. The length thresholds for 0-stage were set based on available literature (60-140 mm) and informed by the complete dataset. Conservative thresholds of 25 mm (Spring) and 100 mm (Autumn) total length were applied to minimise overlap with 1-stage individuals and to account for variability in spawning time, larval settlement, and growth rates.

River Hamble

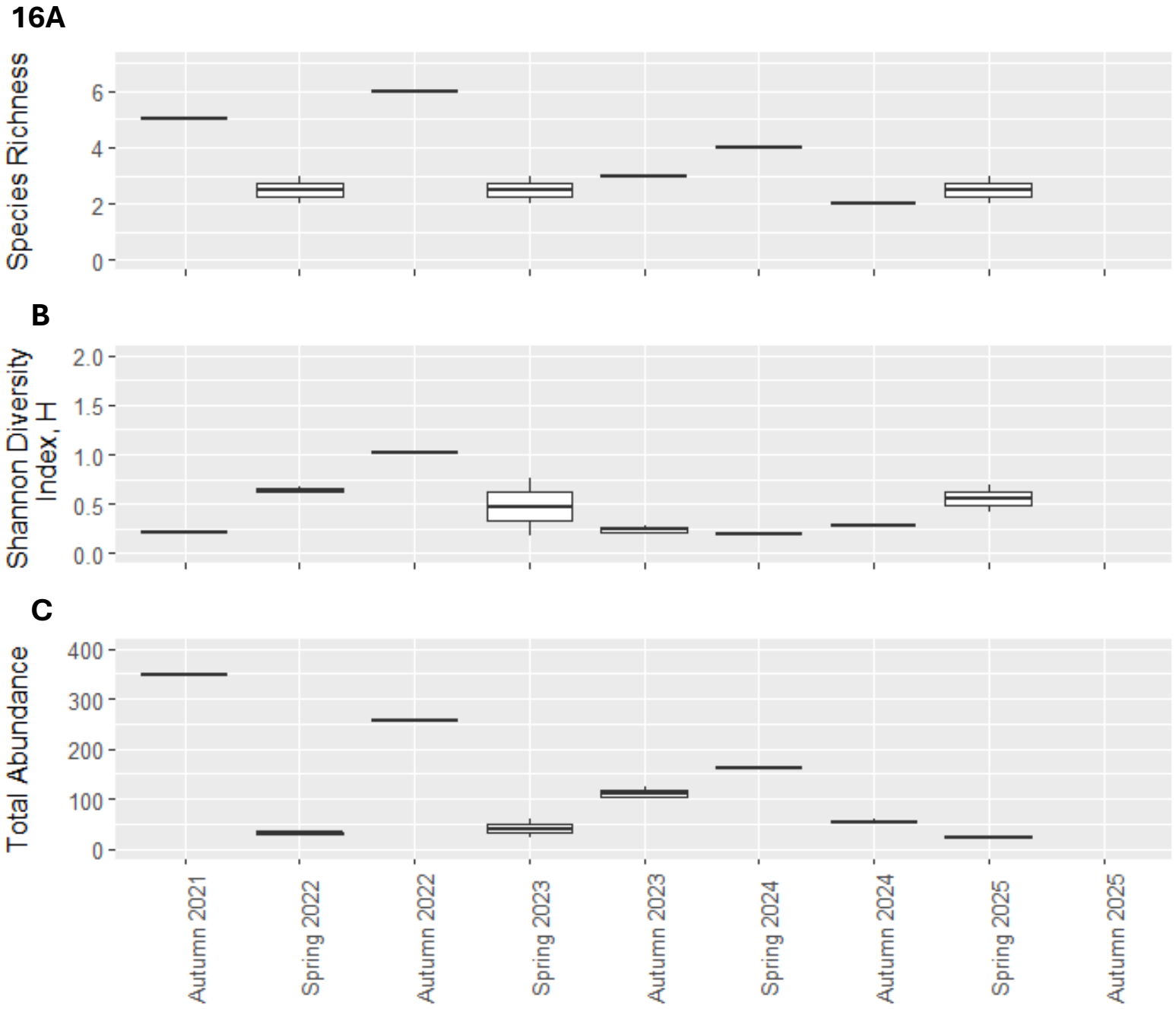


Figure 16 (A-C) displays the Species Richness, Shannon Diversity Index (H) and Total Abundance in each survey carried out from Autumn 2021 to Spring 2025. This site was only surveyed in Spring in 2025 due to environmental complications in the Autumn (weather conditions, tides, and daylight availability).

Mean **Species richness** was highest in Autumn 2022 (S = 6) and lowest in Autumn 2024 (S = 2). Of the Spring surveys mean species richness was highest in 2024 (S = 4) whereas the rest of the Spring surveys (2022, 2023, 2025) had equal species richness (S = 2.5). No significant differences in species richness were detected between Spring surveys or between Autumn surveys ($p > 0.05$).

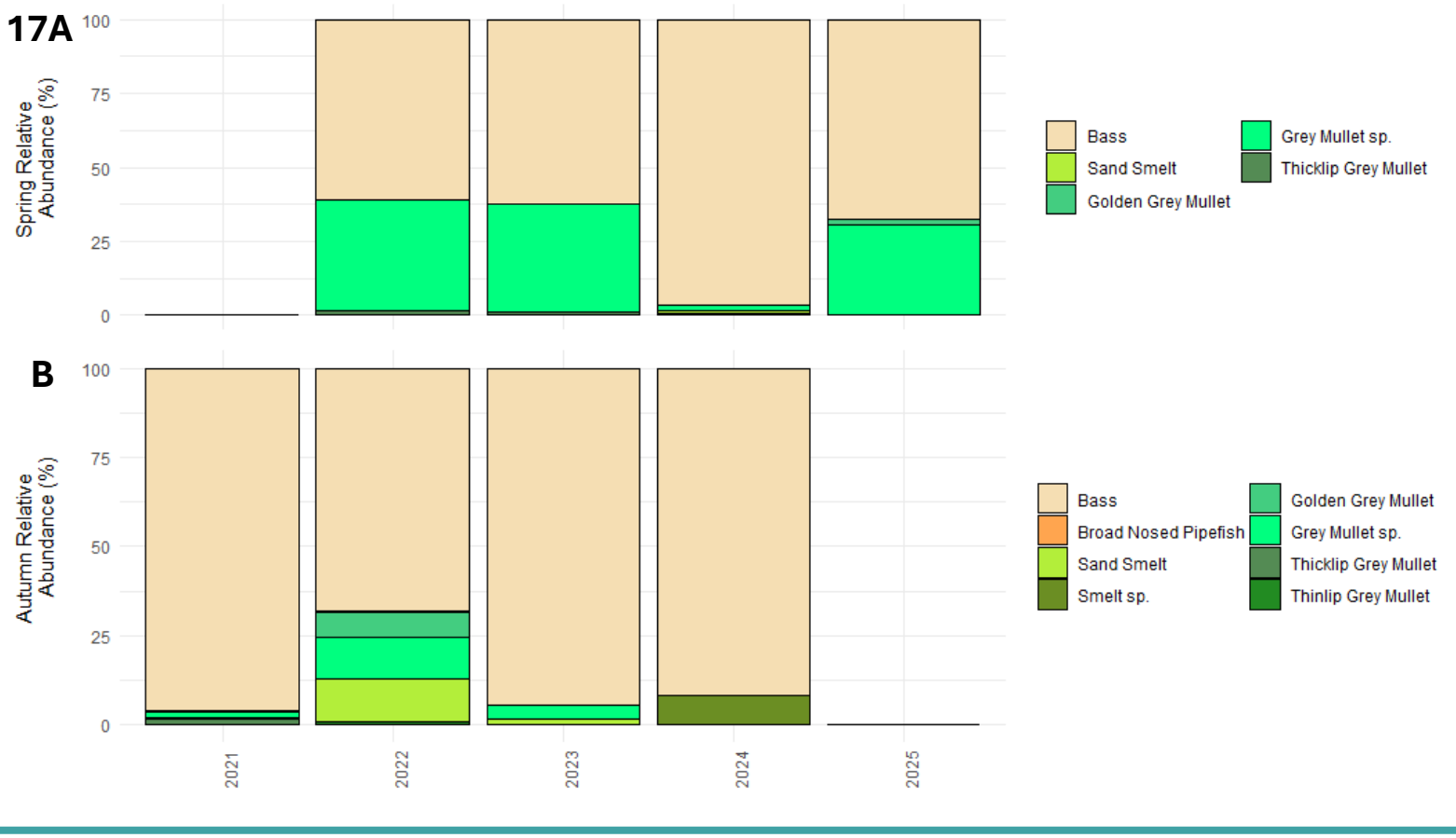
Spring 2025 had a mean **Shannon Diversity Index (H)** of 0.55. The reason for this low evenness of species was due to the dominance of Bass (67%, Figure 17A) in the survey. Spring 2024 (H = 0.20) and Autumn 2021 (H = 0.22) had the lowest mean species diversity, and Spring 2022 (H = 0.64) and Autumn 2022 (H = 1.01) had the highest. No survey differed significantly from another in terms of species diversity (H; $p > 0.05$).

Of the Spring surveys, 2024 had the highest mean **total abundance** of fish (n = 162) and 2025 the lowest (n = 23). Of the Autumn surveys, 2021 had the highest mean total abundance of fish (n = 349) and 2024 the lowest (n = 55). No significant differences in total abundance were found between surveys ($p > 0.05$).

There were no statistically significant differences in species richness, Shannon Diversity Index (H) or total abundance between Spring surveys or between Autumn surveys (table to the right).

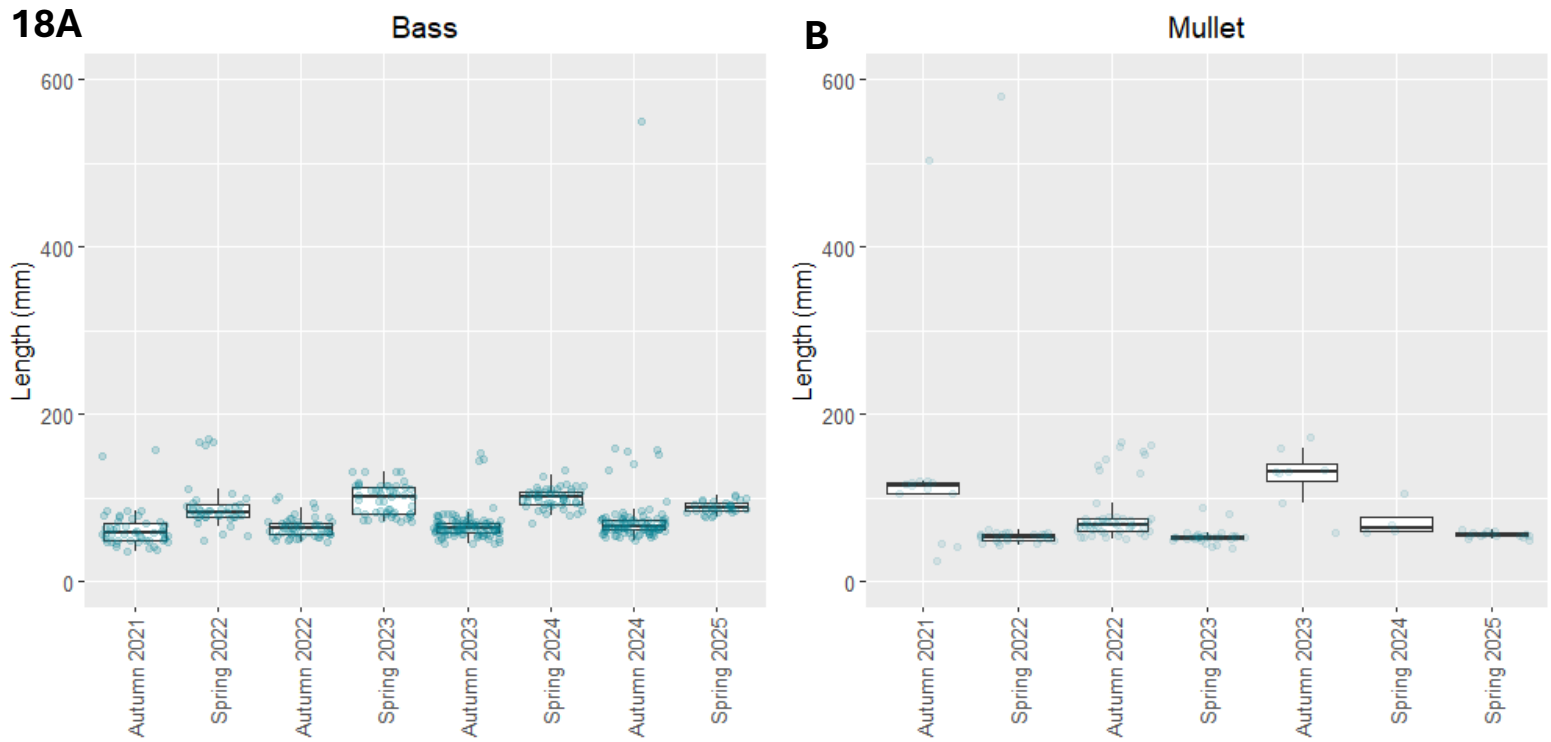
Surveys 2021 - 2025	All Spring surveys	All Autumn surveys	P<0.05
Mean Species Richness	2.71	3.50	No
Mean Shannon Diversity Index (H)	0.55	0.38	No
Mean Total Abundance	23	157	No

River Hamble



Figures 17A (Spring) and B (Autumn) display the percentage **relative abundance** of each species during each survey.

In Spring 2025 Bass were the most abundant species (67%) followed by Grey Mullet species (30%). No survey was able to be conducted in Autumn due to environmental complications.



Figures 18A and 18B display the measured length of Bass and all Mullet species; only these taxa are shown due to their commercial importance within the Southern IFCA district. All Grey Mullet species were combined for Figure 18B due to difficulties in species-level identification at the juvenile stage.

The total count of Bass individuals at 0-stage for the Spring 2025 survey was 0 fish. The length thresholds for 0-stage were set based on available literature (60-140 mm) and informed by the complete dataset. Conservative thresholds of 25 mm (Spring) and 100 mm (Autumn) total length were applied to minimise overlap with 1-stage individuals and to account for variability in spawning time, larval settlement, and growth rates.

Yarmouth

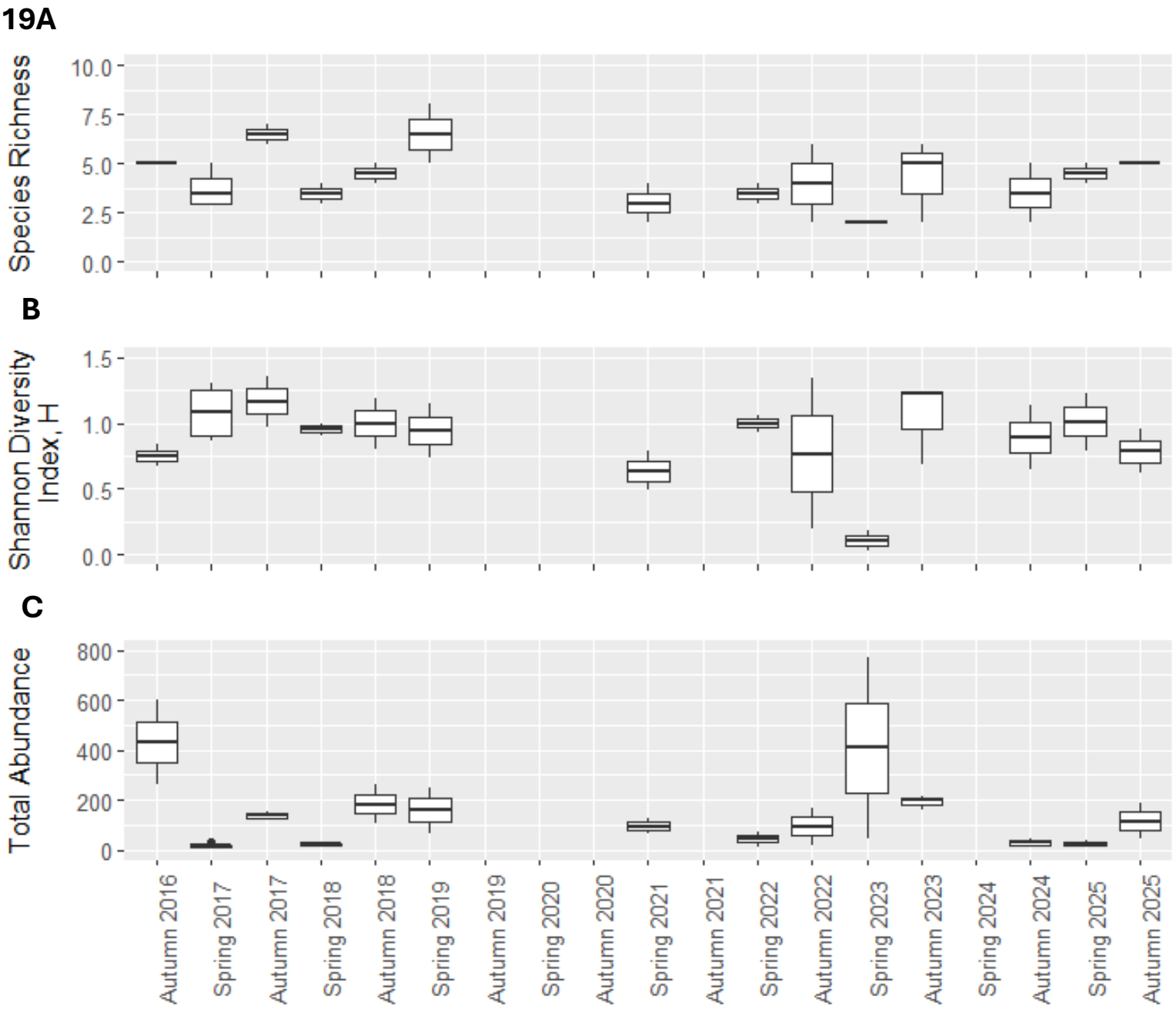


Figure 19 (A-C) displays the Species Richness, Shannon Diversity Index (H), and Total Abundance in each survey carried out from Autumn 2016 to Autumn 2025.

Mean **Species richness** was highest in Autumn 2017 (S = 6.5) and lowest in Autumn 2024 (S = 3.5). Of the Spring surveys mean species richness was highest in 2019 (S = 6.5) and lowest in 2023 (S = 2). No significant differences in species richness were detected between Spring surveys or between Autumn surveys ($p > 0.05$).

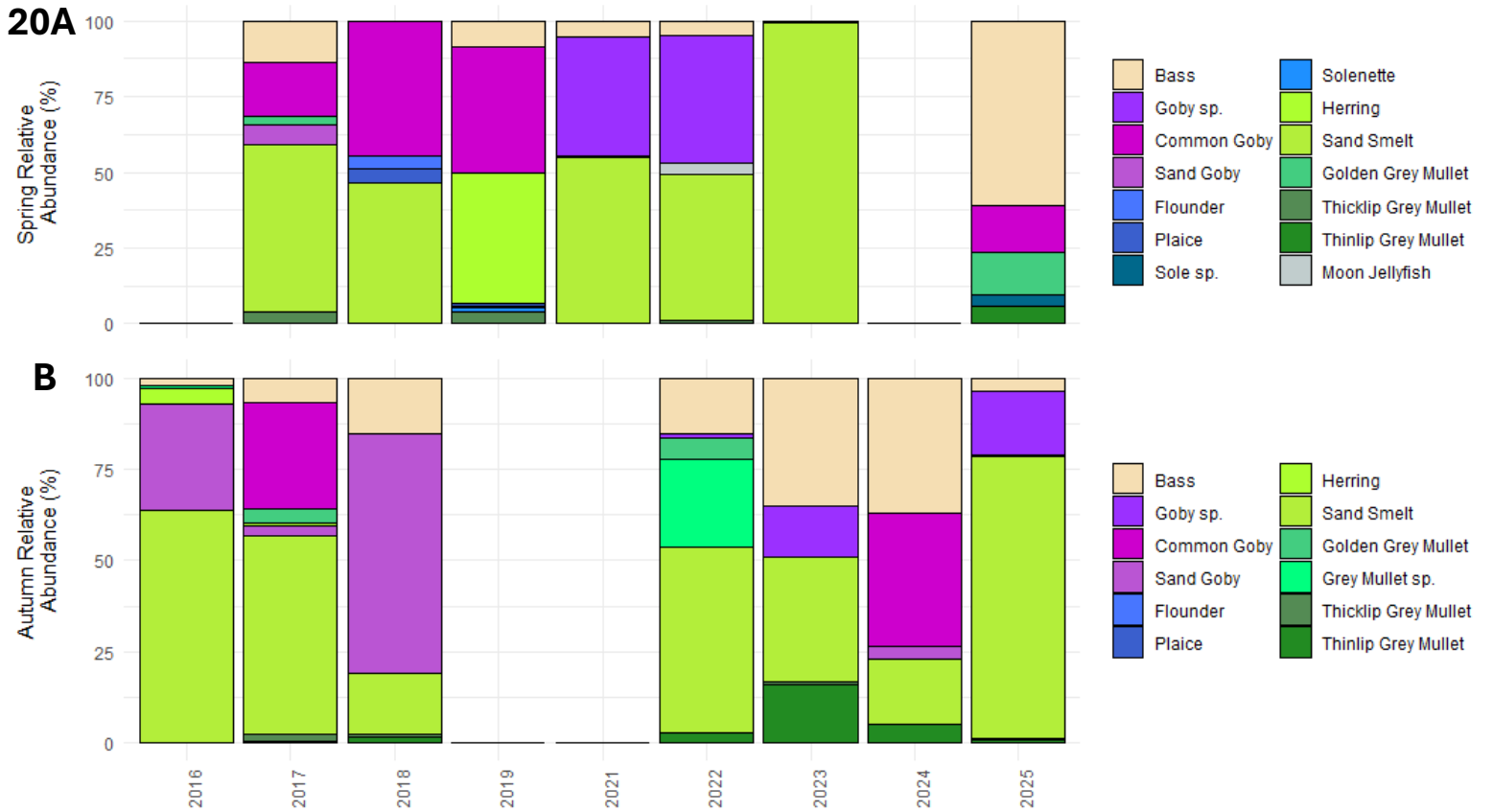
Spring 2025 (H = 1.01) had a higher mean **Shannon Diversity Index** than the Autumn 2025 survey (H = 0.79). This was due to the dominance of Sand Smelt (77%, Figure 20B) in the Autumn survey. No survey differed significantly from another in terms of species diversity (H; $p > 0.05$).

Of the Spring surveys, 2023 had the highest mean **total abundance** of fish (n = 408) with 2017 and 2018 the lowest (n = 23). Of the Autumn surveys, 2016 had the highest mean total abundance of fish (n = 432) and 2024 the lowest (n = 29). No significant differences in total abundance were found between surveys ($p > 0.05$).

There were no statistically significant differences in species richness, Shannon Diversity Index (H) or total abundance between Spring surveys or between Autumn surveys (table to the right).

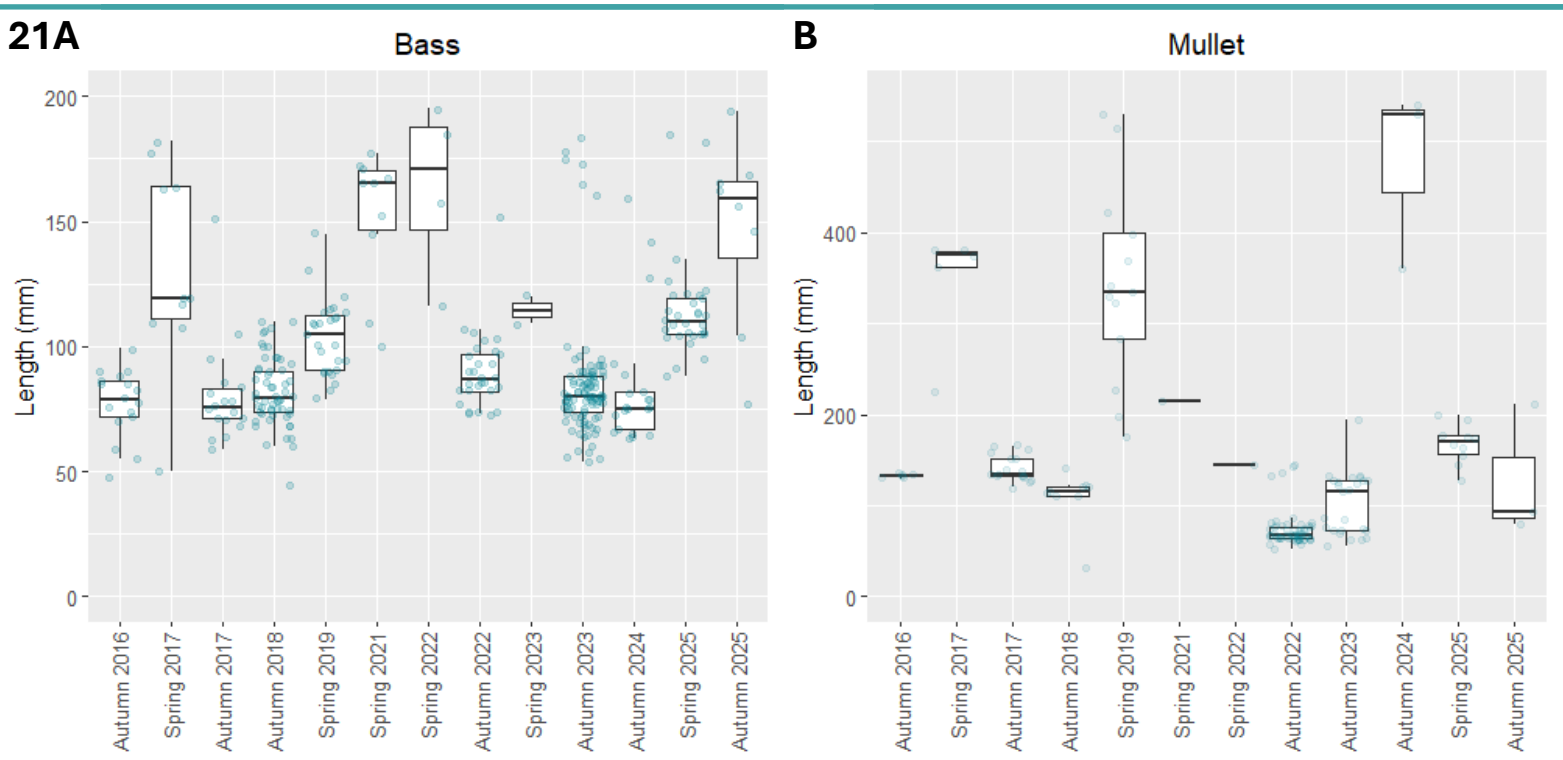
Surveys 2016 - 2025	All Spring surveys	All Autumn surveys	P<0.05
Mean Species Richness	3.81	4.67	No
Mean Shannon Diversity Index (H)	0.85	0.93	No
Mean Total Abundance	99	171	No

Yarmouth



Figures 20A (Spring) and B (Autumn) display the percentage **relative abundance** of each species during each survey.

In Spring 2025 Bass were the most abundant species (61%) followed by Common Goby (16%). Whereas in Autumn 2025, Sand Smelt were the most abundant species (77%) followed by Goby species (18%).



Figures 21A and 21B display the measured length of Bass and all Mullet species; only these taxa are shown due to their commercial importance within the Southern IFCA district. All Grey Mullet species were combined for Figure 21B due to difficulties in species-level identification at the juvenile stage.

The total count of Bass individuals at 0-stage for Spring and Autumn 2025 surveys were 0 and 1 respectively. The length thresholds for 0-stage were set based on available literature (60-140 mm) and informed by the complete dataset. Conservative thresholds of 25 mm (Spring) and 100 mm (Autumn) total length were applied to minimise overlap with 1-stage individuals and to account for variability in spawning time, larval settlement, and growth rates.

Juvenile Fish Survey - Data Summary to Autumn 2025

Summary

Based on the evidence presented in this report, the Essential Fish Habitats surveyed continue to function as nursery areas for a range of juvenile fish species. These include several commercially and recreationally important species, including Bass, Bream spp., Flounder, Grey Mullet spp., Plaice, Pollack, Sole spp., and Wrasse spp.

No statistically significant differences were identified among the 2025 surveys; however, a significant difference in species diversity was observed between the Mudeford Spit Autumn surveys conducted in 2021 and 2024. The 2021 survey recorded the lowest species diversity despite the highest total abundance (>1,500 individuals), largely due to the dominance of Grey Mullet that were not consistently identified to species level at the time. Improvements in species-level identification since this survey mean that a similar apparent dominance is unlikely to occur in future monitoring.

Bass (*Dicentrarchus labrax*), a key commercial and recreational species within the Southern IFCA district, were again recorded as 0-group individuals at The Fleet, Christchurch, and Yarmouth during the Autumn 2025 surveys. This repeated juvenile presence is consistent with continued use of these sites as nursery habitat and is of particular significance for The Fleet, given its designation as a Bass Nursery Area. The additional presence of older Bass (≥3 years) at The Fleet and Yarmouth also indicates habitat use beyond early life stages. Taken together, the occurrence of juvenile Bass (0–2 years) across these sites is indicative of ongoing stock recruitment.

These surveys, as well as contributing to Southern IFCA understanding of juvenile fish species within EFH in the District, also provide data which can be used to help inform the development and implementation of relevant FMPs (Bream and Wrasse). Although the data are limited in spatial and temporal coverage and cannot, in isolation, address all evidence needs, the Juvenile Fish Survey provides a consistent and valuable evidence base that complements wider regional and national datasets. Continued delivery of this survey is therefore important in supporting FMP development, particularly the Bass FMP, by improving understanding of key life-history processes such as the distribution and relative importance of nursery grounds and potential regional variation in spawning periods.