

Fish distribution map based on hydro acoustic survey data from the River Yare, Norfolk; October 2019.

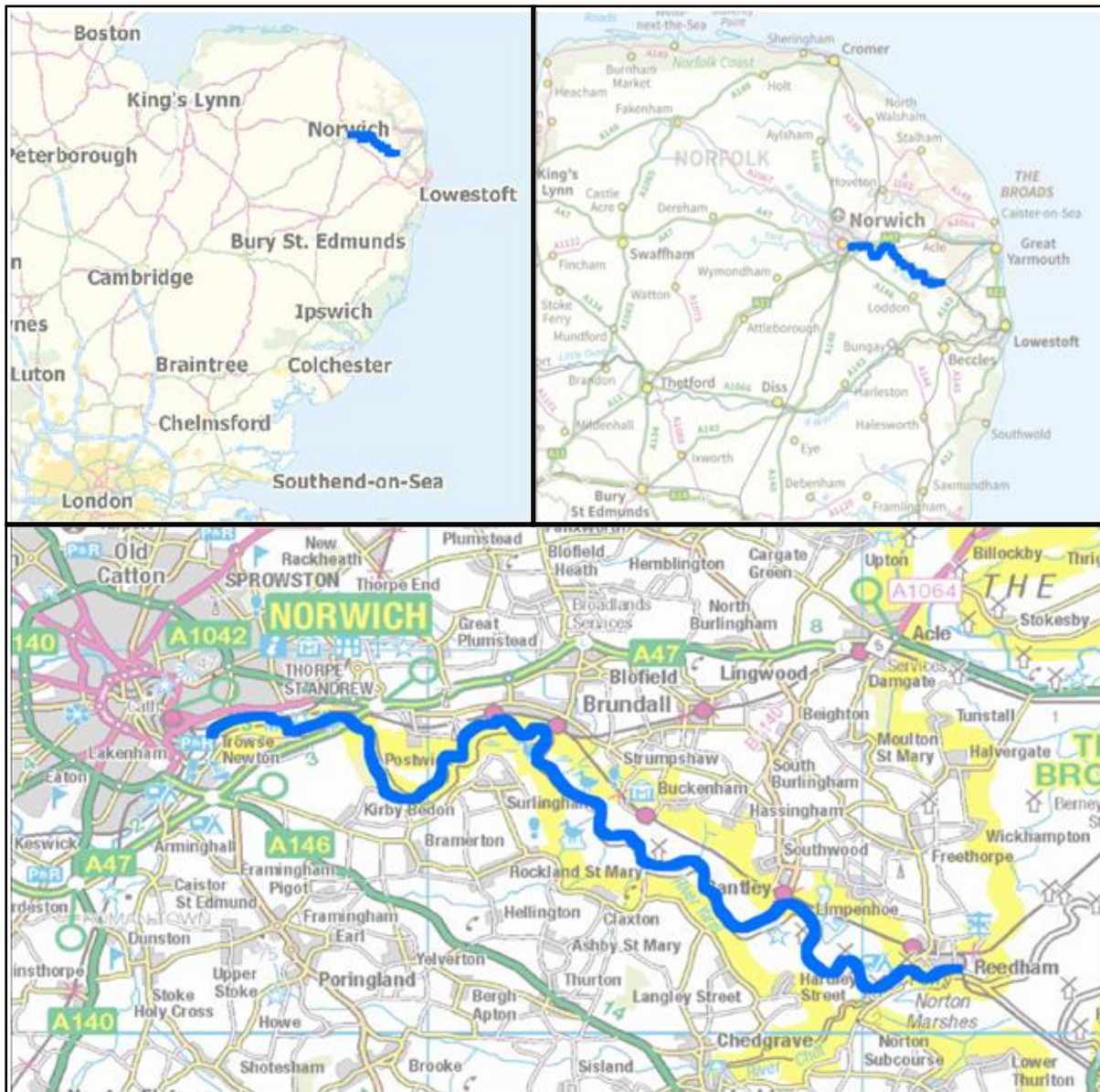


Figure 1: National, regional and area location of the River Yare survey transect; 2019.

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Sign-off date	11/11/2020

The River

The maps on the frontispiece show the location of the River Yare within Southeast England, East Anglia and Norfolk. The river flows for 89 km from its source to Great Yarmouth, where it discharges to the sea. The survey covers 28 km of the lower river between Trowse Eye and Reedham. For the most part the river is wide and deep. Daily fluctuations in level and flow result from the tidal connection to the sea. Salinity concentration increases towards the river mouth. In addition, periodic tidal surges advance saline concentration far up river. The extent of saline incursion depends on the size of the tide driving it. The upstream margins exhibit sand and gravel sediment when exposed at low tide. Submerged macrophyte is apparent upstream of Bramerton; cover increases towards Trowse Eye. Norfolk reed (*Phragmites*) flourish in the marginal sediment deposits present in the lower sections of the river.

Aim

To provide an indication of freshwater fish distribution in 2019 for the lower reaches of the River Yare.

Summary

Figure 2 provides an overview of the fish distribution along the River Yare based on hydro acoustic data obtained overnight 2nd ~ 3rd October 2019. Data were collected on an upstream run starting at Reedham and ending at Trowse (Crown Point). Each circle represents fish density / 1000 m³ along the survey transect. The colour of the circle relates to the fish density / 1000 m³ recorded.

Boatyards, surveyed in early 2019, provide a species assembly present in the river, (hydro acoustic methods are unable to differentiate species directly). Boatyards are chosen as most species overwinter in them taking advantage of the cover, and their slightly warmer water, rarely venturing out of the shelter they offer throughout winter.

During summer and autumn, boatyards and off river refuges offer respite from predation and the turmoil evident during daylight on the main river. Most fish venture into the main river at dusk returning at dawn. This is the main reason why Hydro acoustic surveys are conducted during the hours of darkness in autumn and accounts for the higher densities recorded near to such features at the time of survey.

Not all fish use off river refuges. Fish that are less prone to predation or able to cope with higher flows stay in the river throughout the year. Additionally smaller species are not effectively sampled using electric fishing methods. To counter these aspects Angling match-catch results are vital to establish which other species are present in the river and provide a guide to the current size of the more mature individuals in the population.

- Roach and bream are the predominate species of fish recorded from the validation surveys.
- In 2019, 10 species of fish are present in the river. Validation surveys account for 6 of the 10 species (bream, dace, perch, pike, roach & rudd). Angling results identify the remaining 4 species (chub, eel, gudgeon & ruffe) along with the average size of both bream and roach.
- Angling results indicate high numbers of bream weighing 2 kg or thereabouts inhabit the river, while the even greater numbers of roach average between 0.12 ~ 0.25 kg
- Uneven fish distribution is evident along the survey route. The majority of fish (greatest number of higher density circles) inhabit the upper portion of the river.
- In keeping with previous survey results (2014, 2015, & 2016) the highest fish densities tend to occur near to boatyards, Broad entrances and dykes; features most often found in the upper section of the river (See above).
- Hotspots (fish density greater than 250 fish 1000 m⁻³; blue and black coloured circles) are evident upstream of Postwick.
- Infrequent but high fish density (between 50 and 100 fish per 1000 m³; green coloured circles) are evident downstream between Postwick and Rockland.

If you would like to discuss the information presented in this report, please contact:

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If you would like to discuss future management of this fishery, please contact:

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Before you go fishing don't forget:

- You must have a valid [Environment Agency rod licence](#) and permission from the fishery owner;
- You must comply with the [fisheries byelaws](#);
- The coarse fish close season (15th March to 15th June inclusive) applies to all rivers, streams and drains in England and Wales but not most stillwaters. Stillwater fishery owners can still have their own close season and rules, so please check with them before setting out.

Report illegal fishing:

If you see any fishing, netting or trapping you think may be illegal, please do not tackle it yourself. Call us immediately on 0800 80 70 60 and tell us:

- Exactly where the alleged offence is taking place;
- What is happening;
- How many people are involved and their descriptions;
- The registration numbers of any vehicles involved.

If you prefer to remain report an environmental crime anonymously call Crimestoppers on 0800 555 111 or <https://crimestoppers-uk.org/give-information/give-information-online/>.