

Fish population survey report

River Lugg 2017

This report provides a summary of results from recent fish population surveys on the River Lugg between Leominster and its confluence with River Wye. The surveys were carried out to assess the health of the river and enable successful management of our principal fisheries.



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Sign-off date	May 2018

Summary

- Three sites on the River Lugg were surveyed by micromesh seine netting during September 2017;
- Eight species of fish were recorded and a total of 1085 fish were captured;
- Stoneloach were the most widespread species, being recorded at all three sites;
- An average total density estimate of 488.2 fish per 100m² and biomass estimate of 148.9 grams per 100m² were recorded across all sites;
- Minnows were the most numerous species, whilst grayling had the highest biomass.

Site locations

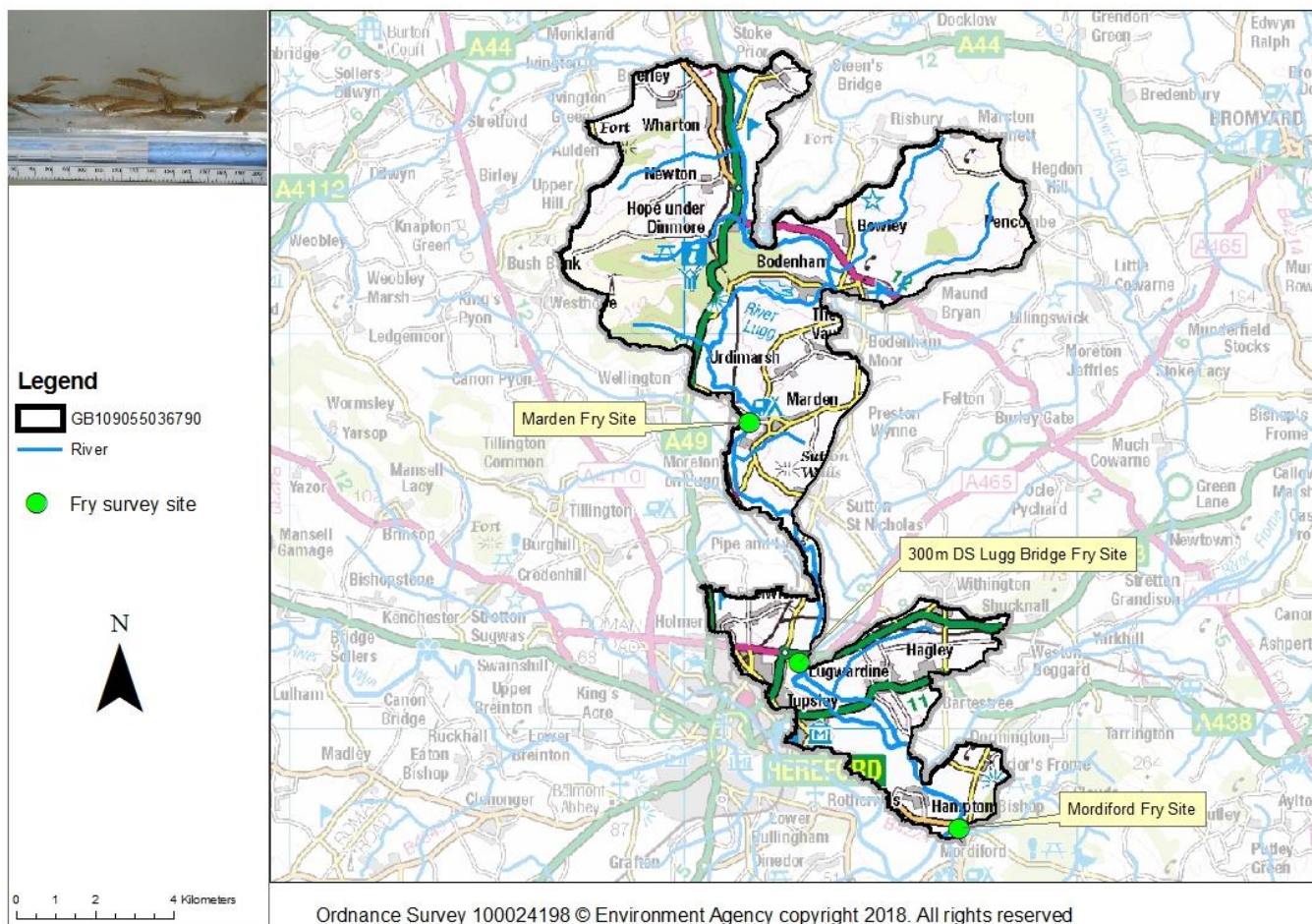


Figure 1 Locations of fry surveys undertaken on the River Lugg in 2017

The River Lugg flows into the River Wye just downstream of the city of Hereford with its source over the border in Wales in the Radnor Forest. It is only the most downstream waterbody GB109055036790 Lugg conf R Arrow to conf R Wye which is fished for coarse fish. Further up the catchment salmonids dominate.

Survey results

All the 2017 fry surveys were undertaken using the same methodology. Twenty five metre long micromesh seine nets were used to catch fry in shallow sections of the river. Due to the irregular nature of the river bank it was impossible to have a standard area that was sampled at each site, hence in the results section numbers of fish caught are recorded and not densities. Due to changes in river structure and fencing the Marden fry site was moved by approximately 50m in 2017. Results from fry surveys can vary considerably depending on weather conditions on day of survey, flow and water temperature.

customer service line
03708 506 506

incident hotline
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floodline
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Table 1 Number of fish caught and size range (min – max, mm) recorded during the survey for key species.

		Marden Fry Site	300m DS Lugg Bridge Fry Site	Mordiford Fry Site
Atlantic salmon	Number	4	0	0
	Size range	92 - 100	-	-
Barbel	Number	0	0	1
	Size range	-	-	25
Dace	Number	0	0	3
	Size range	-	-	44 - 53
Grayling	Number	18	1	0
	Size range	70 - 120	88	-
Three spined stickleback	Number	0	23	2
	Size range	-	23 - 36	26 - 30
Bullhead	Number	0	2	1
	Size range	-	32 - 42	30
Minnow	Number	0	714	306
	Size range	-	16 - 31	21 - 41
Stoneloach	Number	2	4	4
	Size range	27 - 43	28 - 40	35 - 49

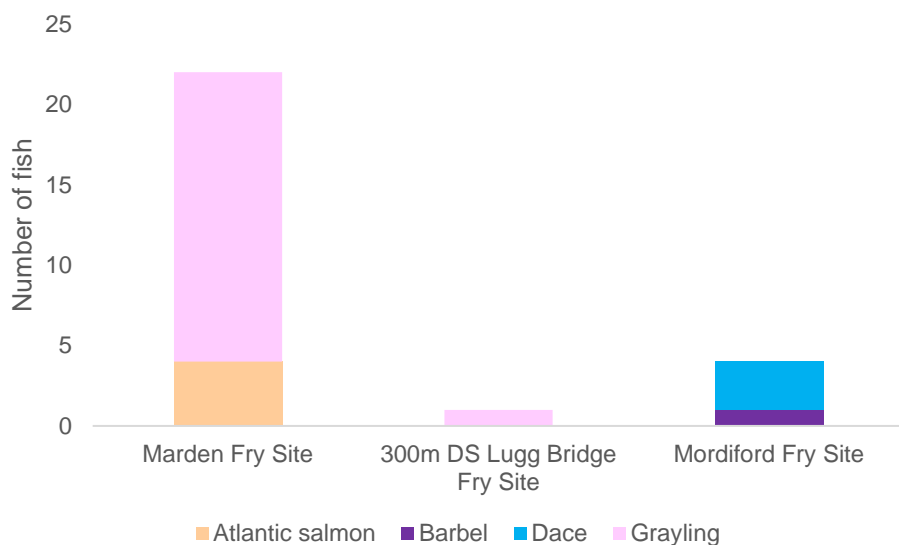


Figure 2 Numbers of fish of angler interest caught across all fry survey sites on the River Lugg

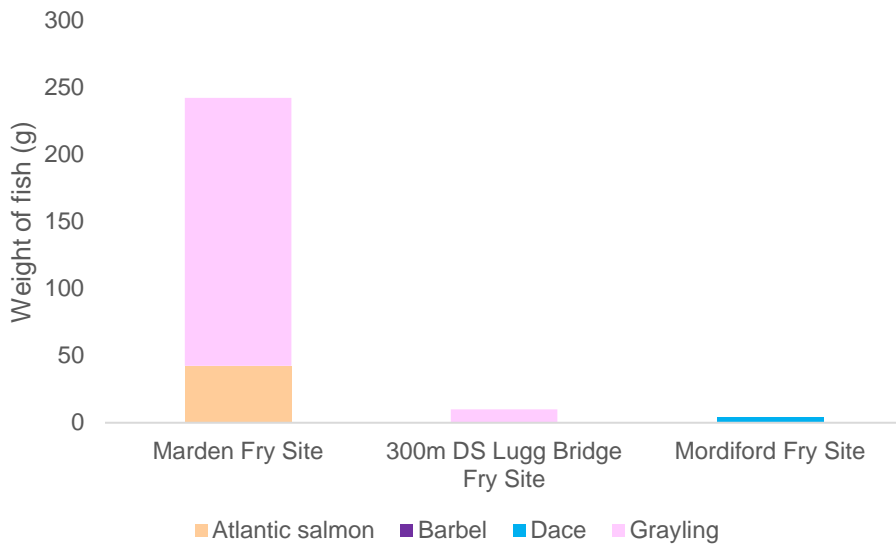


Figure 3 Weight of fish of angler interest caught (g) across all fry surveys site on the River Lugg

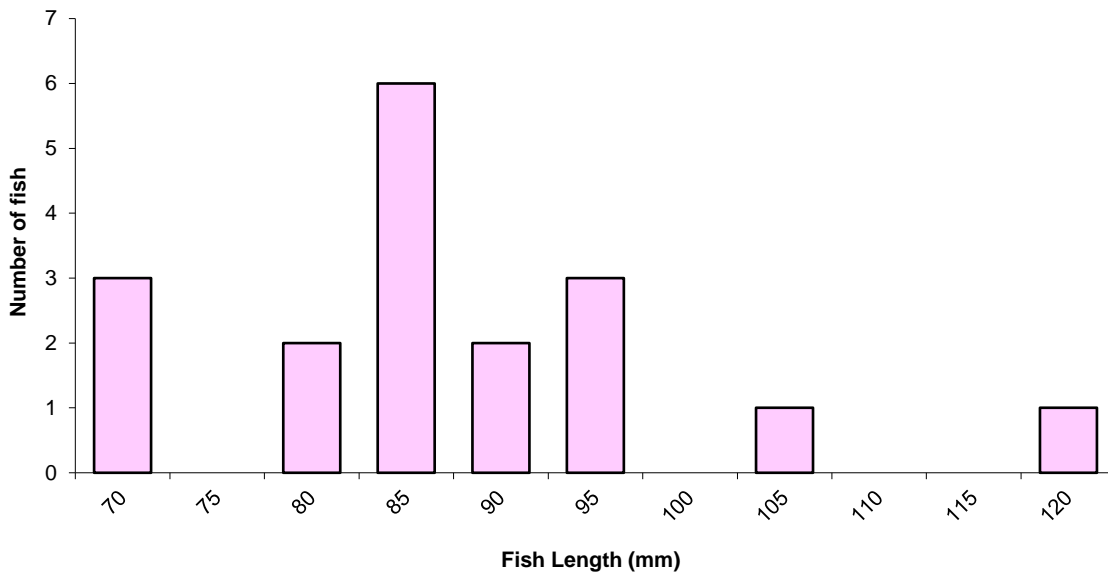


Figure 4 Length frequency distribution for grayling caught at Marden Fry Site in 2017

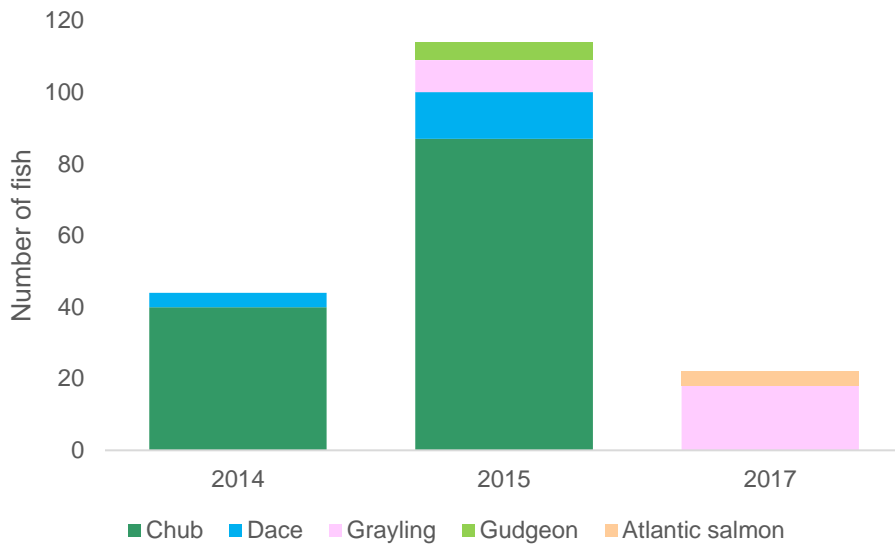


Figure 5 Numbers of fish of angler interest caught at Marden fry site

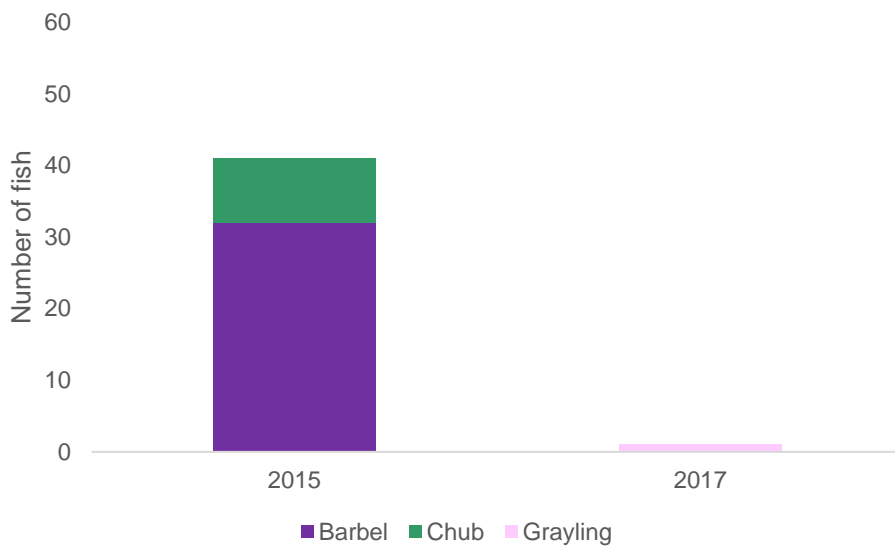


Figure 6 Numbers of fish of angler interest caught at 300m DS Lugg Bridge fry site

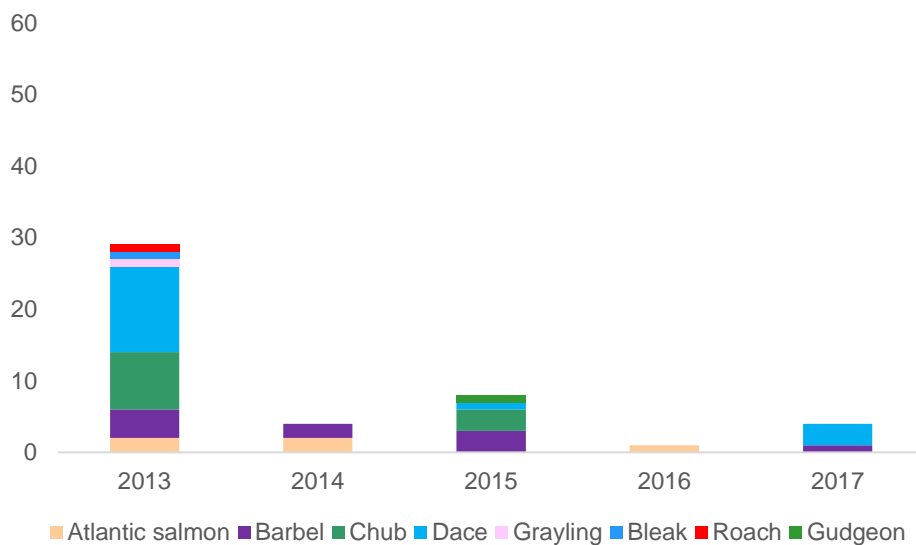


Figure 7 Numbers of fish of angler interest caught at Mordiford Bridge fry site

WFD Classification

Due to the size and depth of the River Lugg in this waterbody it is not possible to adhere to WFD methodologies for fish surveys, therefore there is no fish classification. Macroinvertebrates are High status and physico-chemical quality is Good. This waterbody is classified as Moderate due to macrophytes. The most likely reason for failure is due to diffuse sources of nutrients.

Table 2 WFD classification for Lugg – conf R Arrow to conf R Wye

Water body ID	Sites in water body	Fish status	Macrophytes	Overall status
GB109055036790	Not applicable	None	Moderate	Moderate

Health of fish population

- All three fry sites surveyed in 2017 had low numbers of coarse fish
- The change in site at Marden favoured salmonid species rather than coarse fish species. For 2018 survey location might have to be altered.
- No chub were caught on the 2017 surveys, while only low numbers of dace and barbel were identified
- Rain in surrounding catchments had made fry surveys impossible on the River Wye, but levels appeared to be good on the Lugg. Other than the slight change in sampling site at Marden there are no obvious reasons for 2017 being such a poor year.

Planned actions

- There is continuing work in the catchment with land owners and to remove barriers to fish migration

Next survey

The fry surveys will be repeated in autumn 2018. A new electric fishing site is needed to get some adult fish data somewhere within this waterbody.

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

- Martin Fenn - SEMO, Assessment and Reporting, Shrewsbury
- 03708 506 506
- enquiries@environment-agency.gov.uk

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

- Ed Noyes – Fisheries Officer, Fisheries, Biodiversity and Geomorphology, Location]
- 03708 506 506
- enquiries@environment-agency.gov.uk

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/>.