

LODDON RIVERS WEEK 2022 - Fish sampling

Charvil Backwater Sampling

The site of the backwater dug in 2020 was visited in order to assess the current situation. The whole area is settling down with a diverse plantlife becoming established on the banks, unfortunately accompanied by significant numbers of the non-native Himalayan Balsam.



The backwater with the Loddon in the background

The backwater itself had near 100% coverage of what appeared to be Great Duckweed (*Lemna polyrhiza*) the UK's largest species. It is probable that this coverage was the result of the lengthy period of low flows and the higher temperatures that we have experienced during the summer. The recent flood waters should have change this situation.

Despite the weed coverage a sweep of a small fine meshed seine net through part of the backwater produced a reasonable and diverse catch of small fish:

Chub	10	Dace	5	Minnow	19
Roach	39	Tench	2	Perch	7
Rudd	2	Bleak	2	Stickleback	7

This showed that the backwater is being used by juvenile fish which may be surviving and growing faster in the warmer condtions that the shallow water depth provides during the summer. It is hoped that the backwater will in addition provide a refuge for other fish during flood conditions.

In addition, a brief electrofishing survey was carried out in the River Loddon adjacent to the mouth of the backwater. This part of the river has a good diversity of habitat - shallow water, deeper pools, plenty of tree cover and instream woody material, with some weed beds. The fish catch however was disappointing, and whilst it was admittedly only a short section surveyed, a significantly greater fish presence would have been expected.

On the plus side we caught probably the smallest barbel that we have seen in the Loddon to date. It must be 'home' produced given that it was far too small to be a stocked fish.



This was accompanied by 2 chub one of which, 175mm long, was estimated (from a scale taken) to be just over 2 years old, with the larger fish, 508mm, estimated at over 11 years.

Swallowfield Backwater Sampling

A single sweep was carried out in this backwater dug around 12 months ago. This sweep was through at least 75% of the backwater and was probably fairly efficient in the conditions. The catch included 940 fish of 9 species, mainly fish under 5-6cm.

Chub	275	Dace	6	Pike	1
Roach	53	Minnow	277	Perch	3
Gudgeon	150	Bleak	4	Stickleback	172

As at Charvil it is hoped that the shallow water is providing warm conditions to enhance fry growth, with less predation from larger fish species

Emmbrook Fish Surveys

3 sites were surveyed. An approximate 100 metre long section at each site was electrofished through twice to obtain a 'catch depletion' of the larger species. An estimate of each of the 'minor' species (minnows, bullheads, stone loach and sticklebacks) was also made during the work.

Meadow Walk 9 species including 22 fish of the larger species
Chub 13 Dace 3 Roach 1
Tench 1 Perch 4
plus minnows, bullheads, stone loach and sticklebacks

(Last time May 2017, 5 species including 7 Roach)

There were more of the larger species than had been encountered in the past. The fish population appears to be changing. The reason for this is unclear but it could be a recovery from a wash out of fish during the 2007 summer flood event.

Rotherfield Drive 11 species including 84 fish of the larger species
Chub 21 Dace 4 Roach 18
Rudd 2 Gudgeon 2 Bream 2
Perch 35
plus minnows, bullheads, stone loach and sticklebacks

(Last time January 2018, 8 species including 71 fish of larger species)

This site is just downstream of the small weir beside Woosehill. Results suggested little change in fish density, but it was evident that the fish were favouring those parts of the survey section that had more complex habitat available provided by submerged branches with flow and depth fluctuations.



Electrofishing the EmmBrook at the Rotherfield Drive Site

Old Forest Road

11 species including 172 fish of the larger species
Chub 69 Dace 4 Roach 32
Rudd 1 Gudgeon 5 Bream 5
Perch 55 Pike 1
plus minnows, bullheads, and sticklebacks

(Last time May 2019, 9 species including 98 fish of the larger species)

A surprisingly high fish count in a section that had a fairly uniform depth and width with the most notable cover being afforded by the bankside vegetation. Whether this level of fish density would have continued outside the survey section would require further work, but given previous survey results in this area it could, at least, be deduced that the fish population is stable if not improving.



Fish recovering from electrofishing