

Press release: New information on rare River Severn fish population

Monitoring work during the spring and summer of 2017 which used some of the latest technology, found that around 15,000 shad can make it above Upper Lode weir on the River Severn, near Tewkesbury before being halted by Diglis Weir in Worcester. These monitoring results are significant because they indicate the current levels of twaite shad in the river which once supported millions of this species.

Research part of a major project on the River Severn

The research was conducted by the Severn Rivers Trust, Environment Agency and Canal & River Trust as part of the multi-million pound Unlocking the Severn project, which is supported by the Heritage Lottery Fund and EU Life. The information gathered will be vital for the project which aims to restore the shad's access to 155 miles of the River Severn, north of Worcester, by providing fish passage solutions at a series of weirs that currently the fish cannot swim over or around.

Environment Agency Fisheries Monitoring Specialist, Charles Crundwell said:

We had no idea how many shad we'd find – we thought a few thousand, but in fact results suggest we could have as many as 15,000 in the lower reaches of the river. This shows great promise that by unlocking the river there's scope for a really thriving population.

Plus the work to help the shad will open up the river for all fish species, so helping the shad will help everything else for the benefit of wildlife, residents, tourists and anglers.

Using different techniques to monitor the twaite shad

In order to learn more about the remaining small population of shad, particularly the conditions they need to prosper, volunteers and staff from the Severn Rivers Trust, Environment Agency and Canal & River Trust spent many hours watching and counting twaite shad swimming over Upper Lode weir during April, May and June.

In addition, a suite of remote monitoring techniques enabled monitoring all day, every day. This included cameras, counter plates triggered when a shad passed upstream and even the use of an acoustic beam giving an image similar to the ultrasound you get of a baby in the womb.

As well as the count of the shad, the monitoring team and its contractors made the first known underwater film of shad on the Severn as they migrated

upstream and the first images of the shad's spectacular spawning behaviour, which is like a whirling dancing with rigorous splashing seen just before dark.

Acoustic tracking tags fixed to 25 shad (another first for the UK, under licence from the Home Office) showed how they migrate up the river, what habitats they use, and how barriers delay them. This is all crucial information in understanding how to create the best access routes for the fish.

An suite of underwater camera equipment was installed at the spawning sites to understand this behaviour.

The allis shad

In addition to the twaite shad, the monitoring also recorded the rarer allis shad.

Charles explained:

Historically the allis shad were even more prized as a food fish and would certainly have been an important component of the catch prior to the navigation weirs being built. This is the first photographic proof that a tiny run of these fish still hold on in the Severn, which is really exciting and means that the natural restoration of this species is also likely to occur if we are able to provide fish passage solutions at the weirs further up the river.

More information about the Unlocking the Severn project is available [online](#). You can also follow the project on [twitter](#).