

Ilminster canal Fishery/habitat proposal. Feb 2023.

Thank you for your time walking me along the Ilminster canal. Being in a town centre it is susceptible to litter, unwanted stockings, shopping trolleys and more! However these facilities are important to maintain and manage for the use of locals. With the cost of living crisis it is important to have local and affordable angling for young and old. This canal is ideally suited for this purpose but needs work to improve safety, water quality and habitat.

Thin marginal paths can lead to further erosion and undercut banks, which only get worse over time, leading to unsafe angling, potential leaks and weaker margins.

Many of the leaning trees need removing as will become potentially dangerous and create damage to the already weakened bank in places.

Water movement is key for all life to thrive. It improves water quality and when corners and banks are left static, they often fill with invasive plants and weeds, fallen trees and then end up being magnets for fishing tackle and increased rotting vegetation.

Naïve anglers will believe the fish need to hide in these areas.

I have hundreds of examples and case studies relating to all of our methods, but as a quick example local to you, we removed hundreds of dead and fallen trees from the main areas of Horseshoe lake in Lechlade. The anglers moaned in all their wisdom as they do. But the reasons were sound. I don't want the stock held up in a few areas of the lake. We need them moving. For reasons discussed later. Two weeks removing snags from a 60 acre lake resulted in the following 12 months catch report showing double the amount of fish caught from around the lake. No additional fish stocked.

This happens wherever we go and get the important work done. Stocking fish is the last resort. Allowing anglers to safely fish for and land the existing stock should be a club's priority.

Removing such snags also improves water quality in those areas when combined with habitat improvements. Planting suitable vegetation and replacing invasive species with sympathetic plants is always wise and has multiple benefits.

Everything I suggest is to help anglers catch more fish in the long term. Improving habitat, water quality and food availability are the key factors to work on.

Cormorants and otters are apex predators and very adaptable when it comes to catching fish. However, our research into how to best manage a fishery with regard this and other factors, may differ from an angler's perspective. Since the early Nineties, I have worked at thousands of waters all over the U.K and Europe. Surveying fish populations and building, developing and managing fisheries and waterways for hundreds of clients. What we see daily, directly affects the advice I pass on to clients, and after thirty years of first-hand experience at so many waters, we understand the realities facing modern fishery management.

Removing the snags/fallen trees/dying trees/bramble/ has many benefits.

1. Firstly it will improve the air circulation and light penetration to the neglected parts of the lake.

2. By removing the problematic trees you are reducing the leaf fall each year, which is the biggest contributor to siltation.

3. Removing tree roots and snags improves habitat by replacing those areas with useful marginal plants.

4. By removing snags you encourage the fish to keep on the move. Which has lots of benefits in itself.

A) active fish use more energy, therefore require more food. Feeding fish are useful for anglers!

B) active fish are harder targets for predators, which themselves need the effort to be worth the reward, so they will look for easier meals elsewhere. (of course, you never stop the odd one!)

C) Stressed fish that hide in large shoals in the snags are mostly not feeding, so no use for anglers. They also have increased susceptibility to increased parasite loading as argulus and other parasites need a host so the more fish in a stressed state the easier the parasites can spread, damaging fish.

It is important to combine the removal of all the debris with marginal repairs to stabilise the banks. Erosion occurs from wind and fish activity on bare banks. We always advise removing undercuts with a digger wherever possible, clearing the margin and moulding a new angled bankside which is then perfect for planting.

The benefits of suitable marginal planting are many.

- 1. Flag iris, Carex Riparia, Glyceria maxima and similar varieties are my favoured marginals. They offer excellent coverage without over encroachment. Such plants provide enough useful cover for juvenile fish to hide, but also safe to fish alongside.
- 2. Such plants utilise Phosphorous and Nitrogen, which algae also feed on, therefore the more plants you cover the margins with, the less aggressive many algae blooms will be.

- 3. Correct application of these plants on prepared margins can totally eradicate future erosion. Making it the cheapest and by far the most useful way to stop future problems.
- 4. Aesthetically you will notice huge improvements in the long term. Far more green, less dull brown. More vibrant plants, less bramble and rotting leaf!

If you look at the canal as it is today. The trees that are now in the water did not start there. They used to be part of the margin. Always eroding further, making the banks unsafe and a waste of potential. In places the margin is very slim, and it needs attention to be made safe for anglers in future.

Rectifying such issues has a direct influence on anglers catches. You would be creating a more diverse, safer environment creating easier angling, less snagged fish, better water quality and stopping the erosion! All without the need to restock! Margins lined with useful plants are not only protecting from further erosion when done properly, they are providing improved habitat and water quality as discussed.

Now at this point, most anglers will have already disagreed with much of this. Usually stating that the fish need the "sanctuary" and that if you remove the snags, all the fish will get eaten. This does not work in reality. The fish will always have sanctuary, all we are doing is improving their direct environment (the water quality) and habitat (marginal plants) to increase productivity, improve recruitment which reduces the need to buy more fish.

- 1. Remove as much encroaching Typha and Phragmites reed as you can. These species are very invasive and need to be managed each year. It is fine when left as a marginal feature, but anglers lose too many fish in them, and they prevent airflow and encourage increased siltation if left. (I would use my capstan winch and weed rake).
- 2. Plant exposed margin with plants as discussed. 1000 bare root marginals will cover approximately 100 metres. We plant every 10 inches to get instant growth. In warmer months the roots only need a couple of weeks to connect and start new growth. In this time you must keep wildfowl from pulling them up. You plant in the bank at water level, not under the water.
- 3. Carry out a stock survey so you can see the true potential in the stock.
- 4. Consider a supplementary feeding programme. (Club waters get much less angler traffic than day ticket waters, therefore much less food for the fish). Once an accurate assessment has been carried out, we can work out a sensible plan moving forward, which improves catches (anglers believe the contrary!)

It would also be worth applying 500kg of Calcium Carbonate (chalk) each year after the work is done. This has many benefits and can slowly reduce siltation over many years.

Both the club and landowner would benefit from such works.

The short-term environmental impact is far outweighed by the long term gains for all water users. Improved habitat for birdlife, increased invertebrate life, encouraging increased diversity of wildfowl and other creatures. As well as the many improvements for the underwater inhabitants as previously discussed! I can supply as many references as you may need to be convinced that these methods work to improve the water in a multitude of ways. The club can of course carry out the works themselves. If you need help with any or all of this, we are happy to assist.

As a rough guide, if you wanted us to carry out the works discussed here, it would cost approximately £7500 plus vat. This includes supply of plants, 500kg calcium carbonate applied, labour, tools and plant hire, fuel and take approximately 3 days.

There are grants available from the Angling Trust and national lottery for fishery improvements. Building fishing stages for disabled access, pond dipping, educational courses and angling coaching can all be of huge benefit to such urban waterways and should always be encouraged.

For more information and to have free access to hundreds of films and clips of us working and explaining various fishery management topics, click links from the website. <u>www.aefisheries.co.uk</u>

We can help whenever you need us. We are fully insured.

Regards

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