

Fenn Park Report.

Fenn Park Lake clearly offers great benefits to the local community, and therefore the EA strongly support its continuing use as an angling facility. The benefits of angling from a wellbeing point of view are clear as it allows people to interact, and enjoy the environment that they live within. The angling facility also allows youngsters to enjoy fishing, meeting people with similar interests, whilst also learning about the environment.

As Fenn Park Lake offers so many benefits to the local community, it is of overriding importance that the facility is cared for, and managed in the correct way.

This report is intended to outline a management framework that highlights the roles of both Lowestoft Council, and Friends of Fenn Park, in the management of Fenn Park Lake, to ensure that the angling facility continues to benefit to community for the foreseeable future.

It is of critical importance that Lowestoft Council support Friends of Fenn Park with the management of the lake to ensure the ecosystem, and fish populations within remain in good health.

Water Quality Management

The management of water quality within a fishery is very important for the health of all live organisms within the waterbody. Although many water quality factors can cause health problems for fish, dissolved oxygen should be considered the most critical factor for Fenn Park Lake. Dissolved Oxygen levels nearing 40% could be lethal to fish, and therefore the levels must be retained above this limit at all times.

In order for the dissolved oxygen levels to be retained about 40%, firstly the Friends of Fenn Park must take a lead role in monitoring the levels on a daily basis. Friends of Fenn Park will require a DO meter to monitor the levels, and although the EA have loaned a DO meter for this purpose to date, Lowestoft Council should provide Friends of Fenn Park a meter to use from now on.

With Friends of Fenn Park monitoring the DO levels daily, any reduced DO levels can be identified, and responded to accordingly to prevent fish kills. Lowestoft Council should take the lead role in offering support to Friends of Fenn Park if low DO levels are identified by supplying, and installing aeration equipment. Lowestoft Council must be responsible for the health of the fish, and therefore any communications from Friends of Fenn Park reporting low DO must be investigated and acted on accordingly.

Lowestoft Council should consider two options for aerating the lake. The first option would be to install an aerator permanently within the lake, which could be operated

when required. The second option is to have a set of aerators that can be delivered and installed into the lake on a temporary basis when required.

In terms of what might cause low DO levels within the lake, the sewage treatment works carries the biggest risk. If untreated discharge enters the lake then the impact could be catastrophic, and therefore any report of sewage entering the lake should be taken very seriously and responded to immediately. Another prevalent risk to DO levels within the lake is the amount of waste entering the lake, which could come from general rubbish, and also the feeding of ducks. It is therefore recommended that the lake is regularly litter picked, with all rubbish being removed, and that the feeding of duck is prohibited. Any waste entering the lake with reduces the DO levels will not only impact the fish population, but the whole ecology of the lake will be significantly harmed.

Please note whilst we have listed some examples of aeration and water quality monitoring equipment below, this is not exhaustive and other suitable equipment and suppliers on the market should be able to fulfil the necessary requirements. The Environment Agency cannot recommend any specific make, model or supplier of goods or services.

Examples of aerators –

<https://www.fishkit.co.uk/floating-pond-fountains.html>

http://www.aquacultureequipment.co.uk/index.php/products?page=shop.product_details&flypage=flypage.tpl&product_id=1&category_id=20

Examples of DO meters –

<https://www.hannainstruments.co.uk/dissolved-oxygen-meter-with-galvanic-probe-for-fish-farming.html>

Habitat Management

In general Fenn Park Lake offers a good range of habitats to fish, however this must be managed correctly to improve the productivity of the lake.

The reed beds within the lake offer shelter to fish and must be retained so that predation does not significantly reduce the number of fish. However the reed beds should be managed so that encroachment into the lake does not occur. It is therefore advised that areas of thick reeds near marginal areas are left undisturbed, but areas of reeds that are growing out into the lake and restricting angling access are managed by being cut back twice a year (early March, early September). It is important that overwintering areas like the reed filled bay are retained to offer shelter to fish, otherwise predation will become a significant problem.

The islands also offer shelter to the fish and should be managed to encourage marginal plants, and small trees to grow out into the lake. Larger trees such as the

Willows are also great habitat and therefore should be retained within the environment. However the lake clearly suffers from a significant amount of leave litter being deposited during autumn which could reduce the DO levels. It is therefore advised that the trees around the lake, and on the islands are sensitively cut back once a year (February / early March) to reduce the amount of leaves entering the water.

Aquatic weed grow was observed to be good within the lake. This would be further improved if the habitat management techniques above are applied, and the water quality within the lake was retained to a high standard. However if some areas of the lake become overgrown with weed during the summer months, it would be advisable to manually remove some of the weed with rakes. Removing weed from the lake should be avoided during spring and early summer as it could impact fish breeding.

The majority of the work completed from the bank i.e. weed removal, reed cutting, tree cutting, could be completed by Friends of Fenn Park. However Lowestoft council should supply the group the required tools to complete the work. Larger scale works such as tree felling on the island should be completed by Lowestoft council due to the potential risk of the work. The council should also take responsibility for keeping access to the lake and fishing platforms clear for the public to utilise all year round.

As mentioned previously litter within the lake is having a significant impact on the overall health of the habitat, and thus the ecology of the lake. Lowestoft Council should therefore take responsibility of keeping the lake clear of litter, including fishing line left by anglers. This action would dramatically improve the habitat within the ecosystem, not just for fish but for all animals that live in and around the lake.

Current Fish Stocks and Management

From the fish population survey results it was evident that a number of fish species populate the lake with Roach, Rudd, Perch and Bream being captured. Although the overall biomass of fish within the lake seemed quite low, the fish are clearly reproducing to some extent.

If the habitat and water quality within the lake was managed as stated above, the fish population would soon increase and become abundant. The fish species identified are very suitable for the lake, with the habitat being suitable of supporting the fish community.

Currently there is no need to restock the lake, however if the current fish population is to remain health and therefore thrive, both Friends of Fenn Park and Lowestoft Council must manage the lake correctly, with the council taking overall ownership for the health of the fish stocks.

Conclusion

This draft framework management plan should indicate to all parties their responsibilities towards the management of Fenn Park Lake. The EA are in full support of Friends of Fenn Park, and praise their determination to create a better angling facility for the local community to enjoy. However it is strongly advised that Lowestoft Council develop a support strategy to help Friends of Fenn Park as outline within this report. The EA will continue to offer guidance and support to the Friends of Fenn Park, however the council must take a lead role in responding incidences that may lead to fish kills.