

## A better place to live

1

Local Environmental Newsletter for **East Area, Midlands Region Issue 1** Spring 2007

# A sustainable make-over for Winthorpe Lake

Winthorpe Lake near Newark is a popular location for anglers in the area. Works have recently been completed to improve the safety of the site as well as to renew the vehicular access to the lake and increase the security around the anglers' car park. The aim is to hire out the newly refurbished lake to an angling club this spring. It is hoped that the improvement works to the lake and the input from an angling club will help to rejuvenate the lake and help to ensure that its popularity as a fishing venue continues.

Where possible a sustainable approach has been taken to the works at the lake, which will reduce future expenditure on the site. New fencing has been installed around the anglers' car park and the area around the fencing has been planted with hawthorn saplings to create a sustainable hedgrerow.

The works at the Winthorpe Lake are a good example of how the Environment Agency is working with landowners and recreational users to help improve the local environment.

#### **Foreword**

Welcome to the latest issue of the Focus newsletter. As you may be aware, we have been re-structuring our operation in the Midlands Region to become more efficient and deliver a better service for our customers. From Sunday 1 April 2007, I will lead East Area in the Midlands Region. In addition to the previous Lower Trent catchment, the East Area will include Derbyshire, Leicestershire and Nottinghamshire.

The problem of climate change is constantly featuring in the media and I know we can all feel overwhelmed by the enormity of the problem.

However, we cannot shy away from the issue – the climate is changing and this will have an impact on us all.

So it is all the more important that we do our best to protect and manage our resources to limit and adapt to the threat of climate change. You will see in this edition a few of the ways we are working to play our part in this.

I strongly believe that sharing expertise and resources through partnership working is crucial to maximise our efforts to address the consequences of climate change. Partnerships play an ever more



important role in the way we work to achieve sustained environmental improvement locally.

I am passionate about the challenges that face us and look forward to working with you all over the coming years. If you have any comments, or views on any environmental issue do not hesitate to contact me, I would be delighted to hear from you.

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Toby Willison
Area Manager
East Area, Midlands Region
Environment Agency

### Tackling Floating Pennywort on the River Soar

A highly invasive aquatic plant, Floating Pennywort, was first spotted on the River Soar in Leicester during summer 2004. It is a native of North America and was brought into Britain in the 1980s by the aquatic nursery trade. It probably found its way into the Soar via fly-tipping in the city centre and has now spread downstream as far as Loughborough.

Floating Pennywort can form thick mats of vegetation on the surface of the water, preventing the growth of native plant species. It can also interfere with navigation and increase the risk of flooding. If members of the public mistake its lush green carpet for solid ground it may be a risk to human health.



#### This issue

- 1. Foreword: A sustainable make-over for Winthorpe Lake
- 2. Environment Agency leads partnership to tackle Pennywort on the River Soar
- 3. Fish return to the River Sence: Protecting our bacon and eggs
- 4. Alkborough Flats open for business
- 5. £65 million investment in Nottingham flood defences
- 6. A special BREW to combat fly-tipping: A dip in the River Ryton
- Focus on phosphate levels at Cropston Reservoir: New Technology improves river monitoring of the Soar and Derwent
- 8. Working in partnership: Who are we?



Floating Pennywort on the River Soar

It is incredibly fast growing and has been known to grow up to 15 metres from the bank in one growing season, and as much as 20 centimetres per day.

Ecological Appraisal Officer, Lesley Rippon said, 'This is a major ecological disaster for the River Soar and will undoubtedly have harmful effects on its ecology for some years to come unless effective control measures are put in place'.

The Ecological Appraisal Team have held discussions with Leicester City Council, Charnwood Borough Council, British Waterways and the Inland Waterways Association to find the best approach to dealing with the Floating Pennywort. A manual removal programme has been led by Leicester City Council in the city and on the navigable part of the river by British Waterways.

We now have a partnership agreement with Leicester City Council to provide funding for this important work in Leicester this year. And we hope that we will also be able to support British Waterways control efforts on the backwaters of the River Soar. But this problem will undoubtedly last for some years to come, so we will need a co-ordinated and persistent programme of removal to prevent further spread of this very unwelcome addition to the ecology of the River Soar.

### Fish return to the River Sence

Fifteen years ago the lower reaches of the River Sence, a tributary of the River Soar, were almost fishless.

Surveys carried out in 1991 showed a population in which only a few gudgeon and dace existed. Today, fish are again thriving in this important Leicestershire river.

A recent survey carried out by the Area's Ecological Appraisal Team revealed large numbers of chub and roach, along with dace, perch and gudgeon.

Jim Lyons, Area Ecological Appraisal Officer, said: 'This example



A Perch being released into the River Sence

demonstrates the natural ability
of many fish species to recolonise
previously occupied habitat following
the removal of man-made barriers
such as poor water quality and habitat

degradation'. In the River Sence, huge improvements in water quality have resulted from upgraded treatment at Wigston Sewage Treatment Works.

### Protecting our bacon and eggs

Local pig and poultry farmers were recently invited to free, one-to-one sessions to assist them in applying for Pollution Prevention and Control (PPC) permits at our Environment Agency offices in Nottingham and Gainsborough.

In the East Midlands there are five times more poultry than people, therefore we need to ensure that all these large scale farmers, who provide us with our bacon and eggs, manage their farms correctly and are aware of how their activities can impact on our environment. The activities of pig and poultry farmers are now regulated through PPC permits, which are issued by the Environment Agency.

Anyone operating a farm with capacity for more than 40,000 free range or intensive poultry, 2,000 finishing pigs or 750 sows must apply for a PPC permit. Under the new regulations, farmers were required to complete and register their application by Wednesday 31 January 2007. Anyone who has not done so will be operating illegally and run the risk of being prosecuted and incurring a fine of up to £50,000.

The new PPC regulations control the environmental effects of farming. Permits will cover waste, water, energy and noise minimisation, slurry and manure management, minimising the risk of pollution from livestock housing and 'on farm' accidents.

The Regulatory Specialist, John Dronfield, who ran the workshops said: 'Any new regulations, can be daunting and difficult to understand, but we were happy to work with farmers to complete their permit applications. If anyone has a query about their accident management plans, site plan, manure management plans or another individual question they should contact us.'

Many other industries already comply with these regulations, which implement the European Integrated Pollution Prevention and Control (IPPC) Directive regulations. These include food processing sites, chemical works, landfill sites and power stations.

The intensive livestock sector is the last sector to be permitted, which has given pig and poultry farmers extra time to prepare.

To report any pollution incidents, telephone 0800 807060.



An aerial view of the Alkborough Flats

Autumn 2006 saw the official opening of the Alkborough Flats Tidal Defence Scheme by Ian Pearson, Minister of State for Climate Change and the Environment. The scheme will reduce the risk of flooding for 300,000 people and become a haven for wildfowl and wading birds.

The purpose of the scheme is to lower tide levels by allowing water to run over Alkborough Flats in order to create a massive flood storage area. The capacity of the site is so great that the Environment Agency is predicting a 150 millimetres reduction in high tide levels over a large part of the estuary.

The scheme is the largest joint flood risk and habitat creation project in Europe, and is the result of extensive collaboration between the Environment Agency and a wide range of partner organisations. The scheme has received European funding to demonstrate new approaches to tackle the impacts of sea level rises.

Large numbers of waders and wildfowl have used the site since floodwater entered six months ago; these include Shelduck, Wigeon, Teal, Avocet and Redshank. Numbers have increased to the point where internationally significant flocks of some species are now using the site daily.

Two full-time site managers have recently been appointed and are working to design and co-ordinate education projects. They are also working to improve access and new footpaths have recently been laid as part of the programme.

# £65 million investment in Nottingham flood

defences

The Environment Agency is committed to managing flood risk in Nottingham. By 2011 we aim that Nottingham will be protected against a flood with a 1 in 100<sup>1</sup> chance of occurring in any year. This will reduce the risk of flooding to over 22,000 properties.

After the flooding in November 2000 we commissioned a study to investigate the risk of flooding from the River Trent. This strategy for the Trent led to a review of the existing flood defences that protect Nottingham. It became clear that although the defences had protected the city for over 50 years, they were nearing the end of their design life. The study also showed that in some areas the standard of flood protection was below that expected in such a highly populated area.

We looked at a series of different options and chose to raise the existing flood defences and construct new defences where required. This proved to be the best use of public funds and delivered an environmentally and socially acceptable solution.

The Right Bank (or South Bank) scheme is currently under construction and due to be completed in Autumn 2007. This covers the West Bridgford and Wilford Areas, including the Nottinghamshire County Council (pictured), and other local properties.

The Left Bank (or North Bank) scheme, covers 27 kilometres from the M1 at Sawley down to Colwick and crosses four Local Authority boundaries. The scheme is still in the design stage and will shortly be



Wall built as part of the Right Bank scheme

submitted to the four Local Authorities for planning approval. Subject to the outcome of the Planning Application we anticipate that construction work will start in Spring 2008 and be complete by 2011.

The combined Left and Right Bank schemes represent a £65 million investment in Nottingham. This will reduce the flood risk to 22,000 homes and businesses and will offer amenity, recreational and environmental benefits.

<sup>&</sup>lt;sup>1</sup> = A 1 in 100 year flood has only a one per cent chance of happening in any one year.

## A special BREW to combat fly-tipping

The Derby/South Derbyshire Waste Crime Campaign, led by the Environment Agency and funded by the Government's Business Resource Efficiency and Waste (BREW) Programme, is working to reduce the illegal disposal of waste in Derby and South Derbyshire.

Partnership is the key to the Campaign's success, with the Environment Agency, Derby City Council, South Derbyshire District Council, Derbyshire County Council, Derby and Derbyshire Community Safety Partnerships, ENCAMS, Derbyshire Constabulary and Derby Business Chamber working together to tackle waste crime. Almost a year into the Campaign this partnership approach is showing real dividends and leading to stronger and more effective working relationships.

Activities delivered so far include:

- High profile advertising campaigns highlighting the penalties for flytipping and for breaching waste duty of care. This has included coverage of BBC East Midlands TV's Inside Out Documentary Programme.
- Mailshot of Making Waste Your Business advice pack and DVD to



over 600 businesses in Derby and South Derbyshire and butty van business outreach events providing waste management advice to small businesses.

- Enforcement campaign targeting fly-tipping hotspots in Derby and South Derbyshire. To date
   91 investigations have been undertaken resulting in 44 formal warnings, three formal cautions and three convictions for fly-tipping and waste offences at court, including the first ever Anti Social Behaviour Order (ASBO) obtained by the Environment Agency against an individual for fly-tipping offences.
- Trials of new surveillance equipment and novel forensics

- science techniques to investigate waste crime.
- Running a designing out fly-tipping pilot initiative.
- Establishing a Derbyshire Fly-Tipping Forum.

Remember to always pass your waste on to your local authority or a registered waste carrier. To check your waste carrier is registered with us phone 08708 506 506 or go online at www.environmentagency.gov.uk/publicregister

If you would like more information on the BREW campaign, please contact Paul Slater, BREW Campaign Manager on 0121 711 5857.

### A dip in the River Ryton

An unusual partnership was recently formed between the Environment Agency, a team of North Sea divers and a 'rubber duck'!

Following local concerns about high silt levels in the River Ryton, we called on a team of specialist divers to help us survey the river under the Worksop Shopping Centre. The river under the shopping centre is a confined space and is difficult to access.

The survey went well until the divers came to a section under the Halifax

Bank and found a major blockage. Due to the size of the blockage and the high risk of flooding to the town centre, the diving team had to come back the following week to remove the blockage, which took a further two days to remove.

We assisted the divers by providing a mobile excavation unit, or as it's commonly known, a 'rubber duck'! A tractor and trailer were also used to remove the debris. In total, five tons of debris were removed, in addition to a half ton of steel. It even included stolen goods from a nearby shop.

Bassetlaw District Council provided the skips for the removal of the waste. This resulted in over £1,000 savings to the Environment Agency, and assisted in reducing mileage incurred by the project and improving working relations with the local authority.

All in all, a successful outcome for all parties concerned.

### Focus on phosphate levels at Cropston Reservoir

The Environment Agency has been a key partner in the work of Charnwood Transfer Group at Cropston Reservoir. The aim of this working group is to reduce the input of phosphates into the reservoir, therefore reducing the nutrient level of the water. Increased levels of nutrients can cause algae blooms. To address this problem a partnership was formed between Severn Trent, Natural England and the Environment Agency to form the Charnwood Transfer Group.

Cropston Reservoir was designated as a Site of Special Scientific Interest (SSSI) in 1956 due, in part, to the unusual marginal plant species, which still grow around the reservoir. The reservoir catchment has now been selected as an Environmental Change Network site on the basis that it is an important undisturbed clean catchment. It is mainly woodland and permanent pasture, with virtually no arable land. There is consent issued by Natural England to Severn Trent Water under the Wildlife and Countryside Act 1981, which specifies phosphate limits for Cropston.

In partnership with Charnwood Transfer Group we have worked to reduce the level of phosphate in the reservoir. Strategies used include:

- Managing water levels by holding the reservoir at 80 per cent capacity, this reduces the input from pumped transfer stations, therefore reducing the possibility of further increasing phosphate levels.
- Advising landowners on how to minimise diffuse pollution to reduce the concentration of phosphate into Bradgate Brook.
- Pumping of water direct from Swithland Reservoir to Cropston Water Treatment Works, rather than through the reservoir as was the previous procedure. This reduces the possibility of phosphate being transferred into the Cropston Reservoir.

A River Habitat Survey during 2006 demonstrated an excellent variety of habitats in Bradgate Brook. Our electric fishing survey found brook lampreys, bullheads and brown trout across a range of sizes, indicating that conditions should also favour the native crayfish found in this catchment. Similarly our routine surveys have

demonstrated a very diverse invertebrate community including stoneflies, mayflies and caddis, demonstrating clean, well-oxygenated water. Trout, like crayfish and invertebrates, are not affected directly by elevated phosphate concentrations.

The project has been awarded a
Severn Trent Corporate Responsibility
Gold Award for Conservation and
Biodiversity. This was assessed by
Quality and Environmental staff in
Severn Trent and awarded by their
Directors at an event with Sir Digby
Jones, Director-General of the CBI
as speaker. The award comes with
a £500 cheque to spend on
educational events.

We have stopped all known point sources of phosphate in the catchment, started pumping direct from Swithland, ensured better management of the reservoir and demonstrated there is no harm being caused to water quality, brown trout, crayfish and invertebrates. Whilst phosphate levels in the reservoir will decline initially as a result of our work, it will take many years for Cropston Reservoir to achieve 'favourable condition'.

### New technology improves river monitoring We still across

We have recently completed two projects in the Area, improving the measurement of river flows of the River Soar at Kegworth, and the River Derwent at Derby.

At both locations the existing flow gauges used equipment dating back to the 1980s to measure the speed and flow of the river. We needed to update both systems so that we could benefit from advances in technology.

We still use the technique of firing ultrasound pulses across the river but the new gauges will allow greater reliability and accuracy when recording flow data. This will be beneficial for Water Management purposes at these important sites.

The Field Monitoring and Data team, based at Trentside, were involved in specifying, arranging and assisting in the upgrading of the gauges. In future the team will be calibrating the sites by taking on site flow measurements.

### **Working in partnership**

We would be delighted to receive your feedback. For further details on any of the articles in this newsletter, to give us your views on the publication, or to get involved, please contact us in the following ways:

by telephone: 08708 506 506 (general enquiries)

through email: midseast@environment-agency.gov.uk

via letter: Environment Agency, East Area, Trentside Offices, Scarrington Road,

West Bridgford, Nottingham NG2 5FA

#### Who are we?

We are the Environment Agency. It's our job to look after your environment and make it a better place – for you, and for future generations.

Your environment is the air you breathe, the water you drink and the ground you walk on. Working with businesses, government and society as a whole, we are making your environment cleaner and healthier.

The Environment Agency – out there, making your environment a better place.

### Would you like to find out more about us, or about your environment?

Then call us on 08708 506 506

#### email

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or visit our website www.environment-agency.gov.uk

incident hotline 0800 80 70 60 (24hrs) floodline 0845 988 1188



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