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ENVIRONMENTAL ISSUES IN DERBY, MATLOCK, BUXTON, BAKEWELL, BELPER AND THE DERBYSHIRE DALES

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Brown trout

DNA 'fingerprinting'

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Partnership Working to combat fly-tipping ISSUE 1



Derby flood defences completed

In the Derbyshire Derwent LEAP, the Environment Agency identified that there was a risk of flooding where defences required enhancement. The Agency has just completed construction work on a £100,000 improvement to the Raynesway major floodbank on the River Derwent, in Derby City. This flood defence is designed for a 1 in 100 year flood* and protects the A52, an important route into the city as well as a large number of industrial properties in the area. These include British Car Auctions and the Ram Arena, the training ground of Derby County Football Club where the England team recently trained.

This project was carried out as part of continuing improvements following on from a major national capital works scheme in Derby. The last improvement work carried out to this section of the defences was undertaken in the mid 1970s. Over a period of time this floodbank had sunk below the required height, therefore this work was carried out to put the floodbank back to the required defence level.

The site is owned by Derby City
Council and forms part of their 'Project
River-life Scheme' for the City of Derby.
The site is also designated as a Site of
Interest for Nature Conservation so the
work had to be carefully planned to
cause minimal environmental impact
to the site. Kevin Coleman Improvements Officer, Flood Defence,

said, 'From the results of an ecological survey, we were able to ascertain how work could proceed without causing undue damage to this local habitat. This included delaying works until after the breeding season for birds'. The task was further complicated by the restricted width of the site and the need to consider the impacts to local businesses. Despite these complications, the work has been completed on time and within budget.

...work was carried out to put the floodbank back to the required defence level'.

continued on page



Foreword

Review of the LEAP for the Derbyshire Derwent catchinent. This newsletter style will, we hope introduce LEAPs to more people and allow o greater sense of partnership in local environmental issues.

Partnerships will play an ever more important role in the years to come if we are to achieve sustained environmental improvement locally. I hope that you will find this newsletter of interest. If you have any comments, or views, or you wish to become involved in addressing local environmental issues, we would be delighted to hear from you

Ander Word

Andrew Lower Trent Area Manager Environment Agency

Local Environment Agency Plan (LEAP) for the Derbyshire Derwent, Second Annual Review July 2001



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Derby flood defences completed

cont...

A particular feature of these improvement works has been the use of reclaimed and recycled materials from local sources wherever possible. For example, 3,000 tonnes of engineering clay was sourced from coal seam waste material from Ashby de la Zouch. This was used to back fill a trench dug along the centre of the entire flood bank. This measure will reduce the risk of the floodbank leaking. Elsewhere, crushed concrete beams reclaimed from the construction industry and railway ballast from Chaddeston Sidings in Derby City were used. This forms part of the Agency's strategy to use sustainable construction techniques and so save on natural resources. Once the floodbank was raised to the required height, a joint footpath/cycle path was replaced along the top. As a finishing touch, a special wild flower and low maintenance grass seed mixture was chosen for the reinstatement of the site.

For more information, please contact: Kevin Coleman in Flood Defence, Lower Trent Area.

*Floods are categorised by their size and the frequency with which they can be expected to occur. A 1 in 5 year flood is one that has a 20% chance of happening in any year, this is a relatively minor flood. A 1 in 100 year flood has only a 1% chance of happening in any year, but its effects can be enormous.



The Raynesway site prior to work commencing.



A drott being used to shape and compact the engineering clay of the flood bank



Engineering clay being transferred to a rear tip dumper fitted with low ground pressure tyres to prevent ruts being formed on the bank top.



The improved flood bank ends at Raynsway Road Bridge and includes a reinstated cycle path.

Sighted -Brook Lampreys

Recent survey work has located Brook Lampreys at four sites on the Upper Derwent. Lampreys are very susceptible to pollution and need a mix of silt and gravel habitats to be successful. Their recording is a good indication of the quality of the water and habitat at those sites. The vulnerable status of all three lamprey species (Brook, Sea and River) is reflected in their listing in Annex II of the EC Habitats Directive. This legislation seeks to maintain or restore favourable conservation status for these species and to designate Special Areas of Conservation (SACs) for this purpose. The Agency plays its role in this, ensuring water quality is maintained, that flood defences are sensitive to habitats in the area and works with partners to maintain the conservation status of these animals.



Adult brook lamprey in natural setting.
Source: 'Lampreys: a conservation message', Agency publication.

Checking up on Alders



With access to the Derwent floodplain opening up, a survey to determine the extent of diseased alders in the River Derwent and Amber corridors can be carried out. The work will be undertaken by our partners, Derbyshire Wildlife Trust. Alders suffer from a lethal disease caused by a fungus from the Phytophthora genus, whose name comes from the Greek meaning 'plant destroyer'. Diseased Alders are more easily identified in the growing season between May and September. They attract attention because the leaves of affected trees are abnormally small, yellow and sparse. Once identified, more will be known about the spread of the disease, although there is more to learn about its transmission.

The Agency publication, 'Phytophthora: disease of Alder' contains more information and is available from our Customer Contact Team, Trentside Office.

Riverside Alder showing thin yellow folioge typical of Phytophthora disease. Source: 'Phytophthora disease of alder', Agency publication

About the Derbyshire Derwent area

The Derbyshire Derwent area is defined by the area of land that drains to the River Derwent before its confluence with the River Trent. The extent of the area is shown on the map.

renowned for its beautiful and spectacular scenery as well as its charming villages, most of which fall within the Peak District National Park boundary. The National Park was designated in 1951 and was the first of 10 National Parks to be established in England and Wales, with a total area of 1,438 sq. kms. The National Park is situated in the centre of England; large towns and cities in the Northwest. Yorkshire, East Midlands and the West Midlands surround it. Approximately 17 million people live within 86 kilometres of the National Park boundary and there are some 22 million visits made to the Park each year.



Midland Railway Terrace



Newcastle Train

The area contains much of ecological importance. It can be divided into 7 Natural Areas as defined by English Nature as comprising unique combinations of wildlife, land use, The Upper Derwent area is a hilly area Natural Areas are the Dark and the geology and culture. The two largest White Peaks. The Dark Peak is named after the dark Millstone Grit of the area and is one of the most extensive areas of semi-natural habitats in the country, ranging from blanket bog and heather moorland, to the deep river valleys of KE the Noe and Ashop. The White Peak, a limestone plateau, offers diverse habitats for flora and fauna and has numerous Sites of Special Scientific Interest (SSSIs), including the River Lathkill which is one of only 27 River SSSIs in the country. The remaining areas of the plan are predominately pastoral with abundant grassland, semi-natural woodlands and some scattered remains of heathland.

> The principal urban area in the catchment is the City of Derby. Other towns include Buxton, Matlock, Bakewell and Castleton in the northern half of the area. South Normanton, Alfreton, Swanwick, and part of Ripley lie on the eastern side. Belper and Duffield follow the river valley north of Derby.

The LEAP area is important in terms of water resources. The Derwent, Howden and Ladybower Reservoirs are located in the upper Derwent Valley. In the north of the area the average annual rainfall is in excess of 1,451mm. In the lowland area around Derby annual rainfall levels are between 616mm and 705mm.



Derby Market



The local economy of the whole area is focused towards agriculture. Farming is an important activity both in terms of the local economy and the environment. Tourism and recreation is also important in the north. In the south, companies such as Rolls Royce and Acordis are significant in the local economy as well as the skyline of Derby. The Toyota factory is also important to the local economy despite being located just outside of the plan area. Within the City of Derby, such schemes as the Pride Park City Challenge have promoted development within the area.

Quarrying is a major activity, particularly in the north, in its militence upon the local economy plus of surface N ecological impact. There are extensive mineral deposits including limestone, coal, brickeray, sandstone and sand and gravel. The area is a net exporter of minerals and mineral related products and these are resential for meeting the local and regional community needs for such resources. Some of these quarries have many years of reserves left and are creating voids in the Derbyshire countryside. These will require coherent restoration concepts to be devised. However, due to the extremely high groundwater Vulnerability, there is an Agency policy of objecting to restoring limestone quarries using potentially pelluting wastes.

Native crayfish returned to the River Lathkill

The Agency is working with English Nature which is leading a reintroduction of native white clawed crayfish to parts of the River Lathkill. Progress to date has seen the creation of a breeding facility adjacent to the river in which it is hoped to raise the maximum number of juveniles from a minimal number of adults, as well as the release of 79 animals to a carefully selected site. A close eye will be kept on this site to monitor the success and survival of the released animals.

The white-clawed, or native crayfish, faces an uncertain future in this country where it is vulnerable to direct competition from introduced species such as the American signal crayfish. This aggressive alien species can carry a fungal disease, commonly known as crayfish plague, to which the native crayfish is highly susceptible. Outbreaks of this disease have wiped out entire populations of native crayfish, displacing them from many river catchments including, during the early 1990's, the River Lathkill.

The River Lathkill has been designated a Special Area of Conservation (SAC) under the European Habitats Directive and therefore falls within the remit of the 'Safeguarding Natura 2000 Rivers in the UK' LIFE Project. This EU-funded project is jointly managed by organisations including English Nature and the Agency. The project covers areas of work such as crayfish reintroduction, conservation of otters, freshwater pearl mussel, water courses with Ranunculus vegetation and production of conservation plans for SAC rivers.



White-Clawed Crayfish (Austropotamobius pallipes) are under threat from non-native species. Source: English Nature

The Agency and English Nature have funded a series of dedicated crayfish surveys intended to identify any remaining pockets of native crayfish, or the presence of non-native species such as signal crayfish in the Derbyshire Derwent catchment. It is illegal to introduce American signal crayfish to the wild, but the Agency is aware of established populations of this species in the East Midlands and with English Nature, is committed to controlling its spread, to avoid jeopardising future reintroduction schemes.

Crayfish sightings can be reported to Peter Sibley, Biologist, Lower Trent Area.

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...creation of a breeding facility adjacent to the river and the release of 79 animals...'

Action against eutrophication



Eutrophic vegetation on the River Wye at the confluence with Magpie Sough.

Following the successful designation of the Lower Derwent as a Sensitive Area (Eutrophic) (SA(E)) in 1999 under the Urban Wastewater Treatment Directive (UWWTD), the Agency has put together the case for the Upper Derwent above Derby including the Amber and Wye rivers to be designated. Designation can require a water company to install phosphorous stripping equipment on their sewage treatment works that serve populations greater than 10,000. Phosphorous is an important plant nutrient, but high levels can cause excess growth of aquatic vegetation. This can have a negative impact on the dissolved oxygen content of the water that in turn can affect fisheries in the area. The Agency hopes to have a decision on the designation in the near future.

Landfill squeeze

Like many areas of the UK, there is limited landfill space in Derbyshire. The Agency is working with local authorities to address this issue and has had input into the recently published Derbyshire Waste Management Strategy and Sub Area strategies. The intention is that the need for landfill sites in Derbyshire will be reduced by employing other waste management techniques such as waste minimisation, recycling schemes and incineration. In the government's 'waste hierarchy', landfill is the least desirable option, as no value is being recovered from the waste materials. Indeed, the government's national waste strategy proposes statutory targets for local authorities to reduce their use of landfill. Reducing the need for landfill removes the pressure to use increasingly marginal sites and preserves the environmental integrity of the landscape.

Correcting connections

The Agency has been successfully working in partnership with Derby City Council and Severn Trent Water to tackle the detrimental impact on water quality from wrong sewerage connections.

A wrong connection occurs when a washing machine, dishwasher, hand basin, toilet, bath or shower gets connected to the surface water sewer system rather than the foul sewer system. This allows water that should be treated at a sewerage works to be discharged untreated into a watercourse or soakaway. The result is unpleasant smells and in the worst cases, large amounts of untreated sewage creating a mat of grey 'sewage fungus' that can coat a stream bed, suffocating all the normal water life. Rectifying wrong connections can dramatically improve urban stream environments, improving their value as amenity sites for local residents as well as habitats for wildlife.

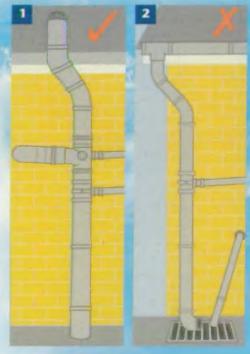
Severn Trent Water Ltd and Derby City Council have been busy tracing wrong connections in the Derby City area over the last three years. Where problems have been identified, these have been resolved using powers under the Public Health Act 1936, the Building Act 1984 and the Water Industries Act 1991. It is usually a simple job to reconnect to the foul sewer. One of the notable successes was Bramble Brook in the vicinity of Mickleover, where a number of wrong

connections have been identified and rectified. The trouble-shooting exercise also identified that the pollution was being made even worse by a cracked foul sewer serving a block of flats that had been leaking into the brook for some considerable time. A repair was undertaken and the water quality has already improved. To continue this good work, copies of the Agency's leaflet, 'Making the right connection' are handed out by City Council and Agency officers as a preventative measure.

If you suspect that you may have wrong sewerage connections at your property, the first step is to connect the Technical Service Department of your local authority. They will be able to tell you whether you house is drained on separate systems or a combined system. If your house is on a combined system, then there is no problem as all the water from your house is sent to a sewage plant for treatment. On a separate system, you will need to check that your waste pipes run to a toilet waste pipe (See Fig. 1). If they lead to a roof drainpipe or grating at the bottom of the drainpipe, then you have a wrong connection (See Fig. 2). Your local authority or a responsible plumber will be able to advise you on how to rectify the problem. Please do make the right connection and help to keep rivers and streams clean for us all to enjoy.

To obtain a copy of the Agency leaflet 'Making the right connection' please call the Customer Contact team. If you would like further information about this issue you can contact: Paul Chambers in Environment Protection, Lower Trent Area.

Figure 1 – correct connection of waste pipes Figure 2 – incorrect connection of waste pipes Source: 'Making the right connections', Agency publication



"...successfully working in partnership with Derby City Council and Severn Trent Water to tackle the detrimental impact on water quality...'

Final clean up for Derby

Pride Park

Re-development of Derby Pride Park is moving towards its latter stages. An application for a permit to create a second on-site waste repository to hold contaminated soil has been made to the Agency and this is currently being processed. If the application is successful, the remaining contaminated soil present at the site will be disposed of in this waste repository. This will allow the remaining plots of land to be redeveloped, completing the remediation of the site. Derby City Council and their consultants have decided to progress the situation at Pride Park by this method rather than using other methods such as bio-remediation or incineration. Under the new IPPC regulations, the Agency will be able to consider the proposal's potential impact in terms of resource and energy efficiency, vibration and noise creation in addition to pollution potential and affect on public health.



Derby Pride Park is the home of Derby County Football Club.

Sheep dip awareness campaign

Every year there are pollution incidents involving sheep dip. Although the numbers are small, they often cause serious damage. An incident six years ago on Peakshole Water, north Derbyshire wiped out aquatic life along part of its length. Sheep dips can be toxic to fish and invertebrate life and can also contaminate groundwater. In recent years there has been a shift from organophosphate dips to synthetic pyrethroid dips which are believed to be safer to humans. However, they are about 100 times more toxic to aquatic life.

Sheep dipping activities and the disposal of used sheep dip must therefore be carried out with great care. The Agency carries out long running campaigns to raise awareness of the problems associated with sheep dip through visits to individual farms and displays at agricultural shows and markets. Such provision of advice and direct contact with farmers has lead to the restoration of the biological quality on Peakshole Water.

In 1999 the Groundwater Regulations (GW Regs) were introduced, requiring that any disposal of dip onto, or into, land must have an authorisation from the Agency. These GW Regs have enabled the Agency to work with farmers to help protect rivers and groundwater. An information booklet on the GW Regs and Pollution Prevention Guide 12 which concerns sheep dipping are available from the Agency's Customer Contact Team.



Careless use of sheep dip poses a threat to aquatic life

The Agency will continue to raise the awareness of pollution risks from sheep dip and dipping practices and offers advice on safe dipping and disposal to avoid potential problems in the future. Indeed, new field staff have been appointed who will pay particular attention to this issue.

Agency publications can be obtained by calling the Customer Contact Team. For more information on safe sheep dip practice, please contact: Stuart King in Environment Protection, Lower Trent Area.

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... Agency to work with farmers to help protect rivers and groundwater.

Fighting giant hogweed

In July 1996, a large patch of Giant Hogweed was discovered growing in the old dry Lumford Mill pond upstream of Bakewell on the River Wye. Giant Hogweed is classed as an invasive alien plant under the Wildlife and Countryside Act 1981 and it is an offence to cause this plant to grow. It is a perennial plant that can grow up to 5m tall with leaves up to 1m across. It presents a potential danger to public health due to the poisonous sap which coats the small hairs on the stems and leaves of this plant. Even the slightest touch can cause painful blistering and severe irritation which can occur up to 48 hours after contact.

Immediate action was taken to prevent any further spread of this invasive poisonous plant. Working closely with the landowner, the Agency together with the Peak District National Park Authority and Bakewell Town Council, developed a programme of twice yearly spraying with glyphosate herbicide. Glyphosate becomes inert on contact with soil and water and is one of the few herbicides approved by the Agency for use near water. The programme of spraying is carried out by the Agency with funding provided by various bodies.

Spraying started in 1997 and is now in its fourth year. Before spraying started, the Giant Hogweed covered 40,000m². Now the extent of the hogweed has been greatly reduced and there are few seed carrying flowering plants left. Photo 1 shows the site before treatment commenced. Photo 2 shows the site as it is now. Valerie Holt, Conservation and Recreation Team Leader Upper Trent Area, commented, 'There has been a significant improvement since spraying started. However, as Giant Hogweed

seeds can lie dormant for up to 15 years, there is a need for continued vigilance'.

The Agency's publication, 'Guidance for the control of invasive plants near watercourses' describes the identification and methods of control and eradication of Giant Hogweed, as well as Japanese Knotweed and Himalayan Balsam which are also alien invasive plants. They occur widely along roads, riverbanks, in gardens and waste areas and are controlled by the Agency where possible, but to be successful control by other landowners, road managers and householders is also necessary. If you suspect that you have one of these plants on your property, then you should take action to eradicate it.

For more information please contact: Valerie Holt in Conservation and Recreation, Lower Trent Area.



Lumford Mill site before treatment commenced

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Immediate action was taken to prevent further spread of this invasive poisonous plant'



Site after treatment showing the dried dead stems of Giant Hogweed.

Calver Weir falls further

into disrepair

The Calver Weir is showing its age. An Agency sponsored structural survey has shown that the weir is unlikely to collapse suddenly, but will continue to slowly disintegrate. It is the Agency's understanding that this will not cause any significant detrimental effects to water quality or flood defences. In the past there has been external interest in preserving the weir, but this appears to have declined, perhaps due to the prohibitive costs of restoration. Therefore the removal of this issue from the Derwent LEAP is under consideration.



New water abstraction strategies

A new approach to water abstraction management is being launched by the Agency. These are Catchment Abstraction Management Strategies (CAMS) that will be introduced over the next few years. CAMS aim to provide a 'shared strategy for the sustainable management of water resources within a catchment'. The Government recommended production of these strategies in their document 'Taking Water Responsibly', published in March 1999, to enable the Agency to manage water resources effectively, consistently and through consultation.

Each strategy will set out the availability of water for abstraction in a single catchment and the resulting abstraction licensing policy. Where there is a water deficit, CAMS will determine a procedure for reclaiming water to protect the water environment. CAMS is a national initiative and will cover every catchment area in England and Wales.

The Agency has determined the regional CAMS areas, most of which follow the existing LEAP boundaries and has prioritised the production, as shown below. Each CAMS will operate on a six year review cycle and will take about two years to produce. Local CAMS will be:

Trent Corridor Spring 2003
Derwent Spring 2004
Soar Spring 2005
Idle and Torne Spring 2006
Trent & Erewash Spring 2007

The Agency has started working on the Trent Corridor CAMS this year with consultation leaflets sent out to over 700 stakeholders. The leaflet outlines the issues that need to be considered in preparing a strategy for the future use of water and invites people to express their interest and submit comments and suggestions. Craig Hatcher, CAMS Officer, Trentside, said, 'CAMS will help to improve our understanding of the availability of water in a catchment and plan for the future to ensure the water based environment is better protected'. At this time, we expect consultation on the Derwent CAMS to take place during 2002.

For more information or copies of the leaflet when published, please contact Craig Hatcher, CAMS Officer, Lower Trent Area.



'...enable the Agency to manage water resources effectively...'

Ladybower Reservoir showing overflow takeoff, Upper Derwent.

Looking for action on sand martins

The Agency is looking for partners to work with to investigate the creation of habitats on the river corridor, particularly on the Upper Derwent for sand martins. The smallest of Britains swallow family, sand martin's breed as colonies in dry, vertical sandy riverbanks, cliffs and gravel pits. Birds associated with water such as dippers, common sandpiper and sand martin are at risk through the disturbance or loss of habitat. They have a fluctuating population in the UK and are on the Conservation Concern list as well as being protected under The Wildlife and Countryside Act, 1981. The Agency works to protect these birds through regulation of works carried out on river corridors and often artificial nests are included in flood defences, but there is a need for more work to be done.



DNA 'fingerprinting' of brown trout

A new issue has been added to the Derwent LEAP that aims to protect wild brown trout populations in the Derwent catchment. Traditionally, the focus of biodiversity tends to have been on the conservation of a wide diversity of different species and habitats. However, the Convention on Biodiversity which the UK signed in Rio de Janeiro in 1992, established the goal of conserving diversity at all levels, from gene to ecosystem. Therefore the conservation of diversity within a species is equally important.

Protecting the genetic composition of wild brown trout in the Derwent is complicated. There are a number of brown trout fisheries in the Derwent catchment. These range from wild trout fisheries where catch-and-release is the usual practice, to sections of river where a large proportion of the catch is removed and the fishery is supported by stocking of farmed trout. Stocking with fertile trout from fish farm strains has been identified as a potential threat to native wild brown trout due to their differences in genetic makeup. The actions associated with this issue are intended to quantify this problem and eliminate the threat.

In order to do this, the Agency is seeking partners to help DNA finger-print wild brown trout populations and to study the effects of stocking with farmed trout on these populations using genetic markers. Tim Jacklin, Fisheries Team Leader, Lower Trent, said, 'This would be a very valuable project which would allow us to map the extent of introgression of farmed fish genes into the wild trout population. The information collected will be used to inform the Agency's policy on fish stocking in the catchment in order to protect unaffected wild populations as well as being invaluable for the protection of wild brown trout during other Agency activities'.



Native Brown Trout need their genetic make-up protecting.

The information collected in this project will also allow effective targeting of resources to promote the Agency's forthcoming Brown Trout and Grayling Strategy to angling interests. This strategy recognises that stocking is important to the economic success of many trout fisheries, particularly those where fish are removed for eating. Nonetheless, in some circumstances there is a risk of damage to wild stocks through stimulating an influx of predators, introduction of disease and changes to the genetic composition of the stock. To prevent this kind of damage occurring, the strategy proposes three classes of trout fisheries and the permitted stocking type for each. It is hoped that the Agency can agree the classification in relation to the Derwent catchment with angling and fish-farming interests.

For additional information please contact: Tim Jacklin in Fisheries, Lower Trent Area.

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...conservation of diversity within a species is equally important'.

IPPC gives regulations new bite

The Agency now has a new tool to enforce better protection for the environment. Integrated Pollution Prevention Control (IPPC) is being phased in to supersede Integrated Pollution Control (IPC). IPPC aims to achieve protection of the environment by the issuing of permits which regulate a whole installation. In addition to regulating emissions to air, land and water, IPPC will also take into account raw material efficiency, energy efficiency, accidents and minimisation of noise and vibrations. This all adds up to greater protection of the natural environment. The current period for IPPC applications, which expires on 31 August 2001, is for the Cement and Lime industry of which there are several installations in the Derwent Valley. The Agency looks forward to working with these industries to achieve better environmental protection through the use of best available techniques.



Blue Circle Gement Works, Hope Valley, Derbyshire is about to apply for an IPPC permit.

Partnership works to combat fly-tipping

After a spate of fly-tipping incidents in the area at the end of May 2001, the Agency is working hard to identify the culprits and enforce appropriate legislation. Working closely with committed partners, the Agency is acting to prevent fly-tipping occurring. This partnership working is particularly evident in tackling a known 'hot-spot' in Derbyshire, with the Agency working with the landowner, the local authority and other interested parties to restrict access to the hot-spot, increase surveillance and secure a long term solution to the problem in that area. However, fly-tipping continues to be an anti-social and illegal problem throughout the area. The Agency hopes its actions will contribute to a positive change in attitudes on the part of would be fly-tippers and help tackle this difficult to resolve issue.



Fly tipping outside a dissused quarry, Matlock.

Leachate management strategy developed



Following advice from the Agency, Derby County Council has installed an automated system for leachate removal from the Old Quarry Landfill, Roes Lane at Crich. The leachate is removed at a rate of 20,000 litres/day and taken by road tanker for off-site treatment. Removing the leachate reduces the likelihood of pollution escaping through the landfill's cell walls which could pose a threat to the quality of both groundwater and surface water. Agency monitoring of nearby watercourses has recently revealed that leachate leaks from the site via the Fritchley Sough may be occurring. The leachate removal is also allowing the operation of a generator powered by the methane rich landfill gas collected from the site. The generator supplies 300kWh to the National Grid and reduces the quantity of methane, a potent greenhouse gas, being released to the atmosphere.

Automated leachate removal system is working round the clock to reduce leachate levels in the site.

New midlands group preserving archaeology

Recently, a new group has been set up to assess the archaeological heritage of the Trent Valley, including its tributaries. The Trent Valley Geoarchaeology Group has representatives from many interested organisations, including the Agency and two meetings have been held so far. A key aim of the group is to digitise the

SMR (Scheduled Monuments Register), but the group is also interested in buried archaeology of all ages. Initially focus is on the main river, but it is hoped that the methodologies developed for the Trent will eventually be applied to the Derwent. With its considerable industrial heritage, parts of the Derwent Valley are

well studied. The Derwent Valley Mills, which stretches from Masson Mill, Matlock down to Derby, has been nominated as a World Heritage site. The Derwent Valley itself has been designated the National Heritage Corridor.

Wetlands count up

Part of the Agency's new Vision is that in the long term we will work with partners to help achieve degraded habitat restoration, especially rivers, estuaries and wetlands. A project that works towards this goal has been set up in partnership with the Derbyshire Wildlife Trust (DWT). Staff from DWT will identify wetlands along the River Derwent and to make recommendations for their restoration and creation. This project has been hampered by lack of access to sites caused by the Foot and Mouth crisis. However, access to the floodplain of the Derwent is opening up, and the necessary site visits will commence



Restocking the Amber

During 2000/01, Chub and Dace from the Agency owned fish farm at Calverton, Nottinghamshire, have been released on to the River Amber which runs along side the A610. These fish have joined the 10,000 released last year as a pioneer stock to aid the re-establishment of self-sustaining fish stocks on the lower reaches of the River Amber below the Alfreton Brook confluence. Here, the maintenance of a fish population is made more difficult by obstructions to migration and siltation of spawning grounds caused by old mill weirs and fluctuating water quality.



Example of a chub that has been released.

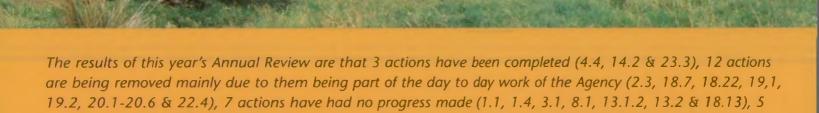
Derbyshire re-opens

bridleways - around 99.9% - are now open in Derbyshire and many important tourist sites have re-opened. Virtually all the area's hotels and guesthouses continue to take bookings and visitors are being encouraged back to the area.

Throughout the Foot and Mouth crisis, the Agency has played a vital role. Its key function has been to advise MAFF (now part of DEFRA) on the suitability of disposal sites, both on farm and off farm sites. The Agency provided advice on carcass removal for rendering, incineration or burial/burn at an alternative location. Assessment of each option at a site involved the consideration of the local geology, groundwater, local abstractions, watercourses and wetlands. The Agency's experts also undertook modelling of emissions from pyres as part of a Department of Health assessment on possible impacts on human health.

With the reduction in numbers of new cases being reported, the Agency has begun to return to concentrating on its day-to-day duties. However, Foot and Mouth carcass disposal sites will continue to need periodic checks to ensure that environmental pollution does not occur. Additionally there will be around 250 disinfectant disposal activities in the Midlands region, arising from cleansing operations at infected farms that need to be undertaken in a safe manner over the coming months.

If you are planning to visit the area shortly, you should be aware that there are still some areas where restrictions apply and the footpaths are still closed, mainly in the south west of Derbyshire. The restrictions are clearly marked on the paths, so please follow all official notices. In other areas, much work has been done to remove restriction notices. However, if you come across a notice that you think should have been removed, please let Derbyshire County Council know by contacting 'Call Derbyshire' on 08456 058 058 (Monday to Friday 8am to 8pm). They will investigate, and remove any notices that have been overlooked



new actions have been added and 59 actions are being carried forward to next year.

We would be delighted to receive your feedback. For further details on any of the articles in this newsletter or to give us your views on this new newsletter style of Annual Review reporting, please contact:

Environment Agency Lower Trent Area Trentside Offices West Bridgford Nottingham, NG2 5FA Tel: 0115 945 5722 Fax: 0115 981 7743

Partnerships Team Leader James Freeborough Direct Dial: 0115 846 3620 e-mail address: james.freeborough@environmentPartnerships Officer Sam Todd Direct Dial: 0115 846 3620

e-mail address: todds@environment-agency.gov.uk

This newsletter covers the Derbyshire Derwent catchment area. Other catchments covered by the Lower Trent Area are: Lower Trent and Erewash, Soar, and Idle and Torne.

Environment Agency - General Enquiry Line 0845 988 1188 Environment Agency - Emergency Hotline 0800 80 70 60

Environment Agency website: