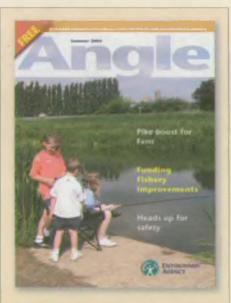


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Front Cover Picture: Young anglers on the Witham in Lincoln

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If you have an idea for a feature in the next edition of **ANGLE** please write to Nigel Tomlinson, Regional Strategy Unit, Environment Agency, Kingfisher House, Goldhay Way, Orton Goldhay, Peterborough PE2 SZR.



Fellow anglers,

It gives me great pleasure to write the introduction to the 2004 edition of ANGLE magazine as there has never been a better time for all of us anglers to benefit from a closer and better working

relationship with the Environment Agency.

We are fortunate to have some of the finest rivers and stillwaters in the country on our doorstep here in Anglian region. The Agency is running many new and exciting initiatives, some of which are described in this magazine, to ensure this continues. However, we should never take our sport for granted.

The environment faces an increasing number of challenges, such as increased water abstraction to cater for the new housing developments across the region, increased discharges of sewage effluent and the rising level of nutrients entering the watercourses from farms.

At the same time the recreational pressures on waterways are ever increasing. Gone are the days when you could spend a day by the river and not see another person all day.

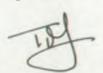
With all this going on it is little wonder that some anglers are deserting our rivers for the comparative peace and privacy of heavily stocked stillwaters, where a good catch is almost guaranteed. I fish stillwaters regularly and thoroughly enjoy them. They are a valuable addition to the angling experience.

But the unique pleasure of river fishing, whether it's catching natural stocks of pristine roach and dace (cormorants permitting!), battling with a stroppy barbel or large pike in a weir pool or stalking a wily wild brown trout in one of our smaller rivers, needs to be maintained. River fishing is not easy and the pressures of diverse water usage threaten to make it even harder.

The Agency has a duty to 'maintain, improve and develop' our fisheries but they cannot do it on their own. It needs all of us to work together. The easiest way to do this is by joining your local fishing club or your local consultative group (see page 10).

We are fortunate in Anglian region to have such fantastic fisheries. Let's keep it that way by all working together with the Agency to ensure that our voices are heard. If we do, we will ensure that future generations get as much pleasure from angling as we do.

Tight lines



Terry Mansbridge

Chairman, Anglian Regional Fisheries Forum.

IVIRONMENT AGENCY . ANGLE SUMMER 200

Wensum restoration begins

Around £40,000 is being invested this year on a project that aims to restore the River Wensum to its former glory.

£30,000 is being allocated from the Environment Agency fisheries budgets to enhance targeted stretches of the river in partnership with clubs and landowners. A further £10,000 from the Habitats Directive budget is being channeled

improve the river as a fishery following evidence of recent decline. The issues and the decision on where to invest funds was undertaken following extensive dialogue between members of the FAP Steering Group, comprising representatives of the Agency, English Nature, fishing clubs, and other local interests.

"The priority now is to get action on



towards a river audit. This will improve understanding of how the river works as well as identifying a programme of further restoration works. The audit will be carried out in conjunction with English Nature and the Internal Drainage Board.

Due to the historical importance of the Wensum as a fishery, angling and conservation groups have been working with the Agency to develop a management strategy, known as a Fisheries Action Plan (FAP), for the Wensum. FAPs emerged in response to the Government review of the Salmon and Freshwater Fisheries Act, which recommended wider consultation on the future of fisheries.

The Wensum FAP, due for publication later this year, outlines the key issues which will be tackled most urgently to

the ground that delivers tangible and sustainable benefits," says Rob Pilcher, the Agency's Technical Specialist for Fisheries, Recreation and Biodiversity.

The importance of the river has also resulted in a specialist contractor holding five training days to advise anglers, landowners, Norfolk agronomists, conservation advisors and Agency staff on reducing diffuse pollution from fields getting into the Wensum.

The contractor explained the problems associated with diffuse pollution and how to identify those areas most at risk from water run-off and erosion, together with practical techniques available to help reduce the risk.

"There was a very encouraging uptake to the training with over 120 people attending one of the five sessions," says Rob.

Spined loach study

The Agency has completed three years of research into the impact of its fisheries management work on spined loach.

The fish, a relic of prehistoric times, is found in UK rivers such as the Ouse, Nene, Welland and Trent that centuries ago were connected to the River Rhine. Today the species is listed under the EC Habitats Directive because of its rarity.

Although the tiny species doesn't generate much interest among anglers, fishing does have an effect on it. The spined loach's habitat is easily damaged by, for instance, weed cutting for flood defence purposes and by fish stocking.

"We're particularly worried about carp getting into the river systems because of the damage they can do to the spined loach's habitat," says Chris Randall, the Agency's Technical Officer for Fisheries, Recreation and Biodiversity. "We will be looking closely at what we do in the light of the research findings."

Pike boost for The Fens

ore than 150 angling platforms have been created or refurbished along a Fen drain that hosts the British Pike Championships.

The championships, which are held every autumn, are one of the highlights of the match angling calendar. Around 500 predator hunters flock to the Fens to take part. The work that has been carried out at Glassmoor Bank, on Bevill's Leam, should ensure the competition remains in the region.

The Agency contributed £16,000 towards this, and a second project in Whittlesey to improve disabled access, building 42 platforms for disabled anglers and refurbishing 119 existing platforms. Other funders included the East of England Development Agency (£22,000), Awards for All (£4,000), Peterborough City Council (£3,600) and Fenland District Council (£500).

Whittlesey Angling Association,

which led the project, was able to attract grants from several sources because of the wider benefits to the community of hosting such a major angling event.

"The improvements were essential if the club was to secure the competition on a full-time basis," says Ian Hirst, the Agency's Technical Specialist in Fisheries, Recreation and Biodiversity.

He added that Whittlesey Angling Club's professional approach in putting together a management strategy had helped to secure the Agency's backing. "Each year we are approached by a number of clubs to undertake projects and it helps if they have worked them up first, although we will consider any suggestions or ideas for projects, whether big or small," said lan.

Young offenders taking part in a community service project carried out the work.



Licence sales

Fishing in Anglian Region remains as popular as ever with more and more people being attracted to the sport, according to licence sales figures for 2003/2004.

Almost 193,000 licences were sold in the region last year, bringing in a rodbending record total of £2,776,000. The amount is 12 per cent up on last year's income and seven per cent up on the year before that, making Anglian region one of the bigger fish in the national rod licence sales pool.

Licence sales have been consistently high over the last decade, with increases recorded most years.

"The statistics are really encouraging for fisheries and fishing in this region," said Nigel Tomlinson, the Agency's Principal Officer for Fisheries. "We have put in considerable effort in marketing and promotional work locally, which has undoubtedly contributed to the sales.

"But more important has been the commitment and enthusiasm of anglers in this region. Without their support we would be unable to carry out the range of fisheries work currently undertaken.

"As rod licence income is wholly re-invested into fisheries work, increased sales mean more work on habitat improvement, fisheries development and improved angling facilities. The benefits to fisheries cannot be understated and we really appreciate the support we receive from anglers."

VIRONMENT AGENCY . ANGLE SUMMER 201

Off-river supplementation units - ORSUs

Few things are more perilous to fish than floods and pollution.

The Agency is well known for the rescue operations it carries out in response to such incidents as floods and pollution. But less familiar is the proactive work it carries out to give the fish themselves a better chance of pulling through when such disasters occur.

Off-river supplementation units are one of the most successful methods. These units are nursery areas away from the main flow of the river where young fish in particular can seek refuge.

The concept dates back to the 1980s when fisheries staff built or adapted rectangular ponds, which were linked by tunnels to adjacent rivers, with sluices to control inflow and outflow. This provided a safe, protected environment for eggs and fry to hatch and develop away from any potential hazards in the main flow of the river.

During the 1990s fisheries policy focused on developing natural river features, such as backwaters and side channels, for the same purpose. In Anglian region the Little Ouse and the Bedford Ouse benefited in particular from



the creation of these safe havens.

"We've identified and renovated many existing ponds over the last 10 years," says Ian Hirst, the Agency's Technical Specialist for Fisheries, Recreation and Biodiversity. "Now we've reached the stage where we've pretty much



exhausted them so we're digging out new ponds."

Locating sites isn't as easy as it sounds: finding land that will permanently hold water requires a scientific approach as well as reaching agreements with clubs and landowners.

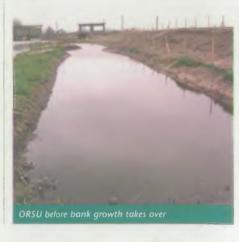
The units typically measure 10 square metres but they can be bigger. Roswell pits near Ely, Cambridgeshire, is an example of a vast, natural refuge. When flow on the nearby river picks up, pike and zander head straight to them. "They seem to be able to sense slack water," says lan.

The pools, which are often a degree or two warmer than the river, also support a different habitat, which means they often become havens for wildlife and butterflies as well as fish.

The Agency is investing £25,000 on identifying and creating new safe havens for fish. "We're looking at 50 sites but first we need to conduct feasibility studies into

their suitability as well as talking to the clubs and land owners," says lan. "We hope to narrow it down to 20 we can look at in more detail. If we can create three or four a year for the next five years it will be a considerable achievement."

Activity in Anglian region will centre on the Great Ouse system and this concept has been exported for similar projects on the Trent and Thames.



Re-stocking for success

Two of the region's most popular rivers for anglers are on the road to recovery following major fish stocking programmes by the Environment Agency.

Separate fishkill incidents on the Old Bedford and the River Slea devastated sport on the two venues.

But the outlook on both waterways is improving following vigorous monitoring and the addition of coarse fish from the Agency's Calverton fish farm, near Nottingham.

OLD BEDFORD ON THE MEND

Five thousand two-year-old fish (bream, roach and tench) were added to the Old Bedford at Welney in November last year. Larger fish could be stocked over the next three to five years as part of the Agency's long-term strategy to revitalise the river.

The river is recovering from the loss of around 145,000 fish in August 2002. Initial surveys conducted last year revealed that an extensive stretch of the river downstream of Welney had a very low fish population and without restocking would be unlikely to recover naturally.

The Agency leases the stretch of the river, which is popular with match and pleasure anglers, to Welney Angling Club.



Both the club and English Nature welcomed the restocking.

"We have also dredged the riverbed to remove a deep layer of silt and added 100 lily plants to further improve conditions for angling," says Roger Handford, Agency Team Leader for Fisheries Recreation and Biodiversity. "Added together these actions have gone a long way to restoring a once superb fishing area, and we'll be keeping a close eye on the fish to check how they're getting on."

15,000 ROACH RELEASED IN SLEA

The battle to save sport on the Slea has been equally challenging since chemicals entered the river in Spring 2003, killing almost everything downstream of Sleaford.

"The effects were so devastating they were even felt in the River Witham, which

around 15,000 two-year old roach, plus a smaller number of chub, were purchased from Calverton Fish Farm.

Ongoing survey work revealed that contrary to the early indications, some fish had survived the pollution. Larger specimens have been spotted in inaccessible areas of the river that haven't been restocked.

Survey results will be used to evaluate fish stocks in late summer to determine whether further restocking should take place this winter. "It might be three or

is 20 kilometres downstream", says Chris Reeds, Team Leader for Ecological Appraisal for the Northern Area.

The Slea is a popular mixed fishery that is known for excellent winter catches around Kyme Eau. However that has changed since the disaster, which resulted in the Agency's Environmental Protection team having to remove around 80,000 roach, 9,000 dace, 4,000 rudd, 200 chub and 100 trout from the river.

In the weeks after the incident there was little the Agency could do besides monitor the situation. "We couldn't restock immediately because the entire ecology of the river had been affected," says Chris. "Had we put fish in, there would have been no food for them to survive on. There was nothing we could do to speed up the recovery: we just had to wait for downstream migration of invertebrate food organisms."

By the end of last summer, the first signs of recovery were apparent. An initial restocking took place in winter, when four years before restocking is complete," says Chris. "However the long-term prospects for the Slea are bright, with the invertebrate population stabilising to support the growth of the stocked fish" he added.

BARBEL BONANZA FOR RIVERS

Barbel anglers have extra reason to look forward to future seasons after hundreds of the hard-fighting species were added to the region's rivers.

Two hundred were stocked into the Great Ouse, the nation's premier big barbel fishery, at Haversham, in partnership with Leighton Buzzard Working Men's Club and Great Linford Lakes Angling.

The stocking took place following survey work undertaken to investigate current population levels along a 600m stretch of the river during July 2003.

"Although the stretch was difficult to electrofish due to low flows and excessive

weed growth, we found a small number of very large barbel and felt the population would be enhanced with the introduction of some new juveniles," says Andy Sadler, the Agency's Technical Officer for Fisheries, Recreation and Biodiversity.

Angler catch records and fishery survey work will help monitor the success of the operation.

Additionally, in Bedfordshire, a further 400 two-year-old barbel were added to the River Ivel at Tempsford in partnership with Biggleswade, Hitchin and District Angling Association.

Following requests from the club, an assessment of the habitat was undertaken followed by an electrofishing survey. It was agreed that the river provided the optimum environment for barbel, in addition to great future angling opportunities.

The barbel were stocked in November 2003, with future survey work planned to help determine whether the project has succeeded in extending the distribution of barbel in the lyel.

STOUR SUCCESS

Anglers on the River Stour, which straddles the Essex and Suffolk border, will also be reaping the benefits of the barbel boom in the region's rivers.

Over 8,000 of the species have been stocked along the river's upper to middle reaches as part of a river enhancement scheme since April 2002.

Barbel were historically present in the Stour, but declined because of changing conditions and loss of habitat in the river. A 5-year stocking programme and habitat improvements are under way.

"To complement the stocking we improved conditions in the river for barbel, for instance by creating nursery areas, as well as spawning and foraging habitats," says Andy Hindes, Fisheries Scientist and Project Manager.

One project around Sudbury improved conditions for barbel, which love fast-flowing water, by adding lots of gravel and narrowing the channel to increase the speed of the flow.

Fish are stocked usually at two years old, when they are about 20cm in length. Results show that these youngsters are growing on, with the largest reported caught fish weighing in at 8 to 10 lbs.

Hooked on fishing - Angling p

Each year, the Environment Agency is involved in projects across the region to encourage more people to go fishing. Some target particular groups, such as the young or anglers with disabilities, others encourage everyone to share in this great sport.

ere are some examples of the projects that are being carried out to promote angling in Anglian region.

GETTING LINCOLN HOOKED

For some young people fishing is not just fun, it's also a way to a better life.

The Get Hooked on Fishing scheme, which began in autumn last year in Lincoln, taps into the wider benefits of the sport by selling angling as a positive activity for young people with behavioural or other difficulties.

Up to 200 children who have been excluded from schools for anti-social behaviour will benefit from Get Hooked funding by being offered free coaching and facilities to encourage them to take up fishing.

A key factor in the success of the scheme has been the formation of ACE (Angling Community Education) by coaches committed to getting more local people interested in angling.

Besides the therapeutic benefits that can provide a calming influence, angling encourages care for wildlife and gives a greater awareness of the natural environment.

The Get Hooked message is that fishing is for everyone, regardless of their background. Local angler Stuart Goodacre launched and co-ordinates the scheme, which is supported by the Agency, the City of Lincoln Council and Lincolnshire County Council.

For one initiative, 31 children took part in training sessions at Stamp End lock on the River Witham and at Whisby Garden Centre Lakes near Lincoln. Tackle and bait were provided and the youngsters also received practical lessons and instruction on how to catch fish, as well as health and safety guidance.

RUNNING TASTER DAYS

A unique angling taster day gave newcomers to the sport the chance to experience coarse, sea and game fishing at the same site.

The event, which was held at Cleethorpes boating lake last summer, was aimed at people who had never been fishing before.

Many youngsters who took part in the event went on to participate in a series of junior angling competitions, involving more than 100 other young people, at Cleethorpes country park.

Seventeen local adult anglers, who had completed a National Angling Coaching qualification, were handed their certificates and were asked to coach at Sky TV's Fish 'O' Mania event at Hayfield Lakes, Doncaster, where more people from all over the country had the opportunity to try fishing for the first time.

The event was organised jointly by the Agency, the National Federation of Anglers, Grimsby and District Amalgamated Society of Anglers and North-East Lincolnshire Council.

IMPROVING LAKES

Local anglers and residents teamed up with the Agency to improve angling facilities on a popular venue in Lincoln.

Sport on Boultham Park Lake had been hampered by a build-up of organic sediment, caused partly by 100 years of accumulated leaves, on the lakebed.

The Agency agreed to help out when local people requested advice and financial support to improve the situation from both an angling and conservation perspective.

Working with the City of Lincoln

Council, a natural lime based product was applied to layer of sediment to help reduce the build-up of organic matter in the bottom of the lake, which will help fish, plants and insects to thrive.

Unfortunately, last summer's hot weather caused a setback when the lake suffered an outbreak of blue-green algae, which depletes oxygen levels and can affect fish stocks.

The Agency is taking action to prevent a similar occurrence this summer and tests will be carried out to assess the lake's progress.

To give the lake a boost, the Agency introduced 500 crucian carp and installed coir rolls. Native plants, which were planted in spring, will provide shelter and refuge for fish as well as promoting a more favourable habitat.

IMPROVING CANALS

More people can fish in safety on Grantham Canal after 15 recycled plastic angling platforms were installed.

The Agency carried out the work on the Earlsfield Road area of the waterway in partnership with Grantham Town Council and Grantham Angling Association (GAA).

A number of GAA members are training to become fully qualified angling coaches and will be using their qualifications to offer angling sessions for local youngsters at the newly installed angling stations.

GIVING YOUTH A BOOST

Young anglers in Lincolnshire have benefited from a partnership between the Agency and a local fishing club.

Boston Young Anglers Club meets Wednesday evenings from mid-June to

articipation in the region



the end of August for practical and theoretical coaching from Dave Rance, of Boston and District Angling Association. The youngsters also enter local and national fishing competitions.

To help promote this initiative as well as providing better angling access for local anglers, the Agency has teamed up with Boston and District AA and Boston Town Council to install 42 recycled angling pegs throughout the town centre reach of the Maud Foster drain in Boston.

The Agency also supplied £100 of tackle as prizes at a presentation night for the junior anglers last summer.

The Agency has been helping another junior angling initiative in the county. Members of Louth Crown and Woolpack Angling Club started running junior sessions two years ago. Up to 20 young people now attend regularly and a club has been set up under the name Louth Jacks.

The Jacks raised their own funds to hire a pavilion during the winter months and for their own lifesaving course at a local pool.

The Agency has supplied their pond with crucian carp, coir rolls for bank strengthening and a floating island and a

duck platform. Also, Agency Technical Officer, Reuben Page, has been advising the youngsters on fish welfare and water management.

COACHING YOUNG ANGLERS

Agency staff went along to junior coaching days run by clubs across the region last year. While experienced anglers passed on tips, the Agency team awarded prizes and even took along a fish tank showing various species to show the youngsters what they were trying to catch.

King's Lynn Angling Association, Royston and District Angling Club, Cambridge University Sports and Social Club are among those to have teamed up with the Agency recently.

"This year we've got a project in mind to look at coaching across the area," says Roger Handford, Fisheries, Recreation and Biodiversity Team Leader (Central Area).

"It will involve helping clubs to set up coaching events, letting anglers know how to qualify as coaches, and putting them in touch with people who have already qualified. We may also buy some tackle to take around with us."

HELPING ANGLERS WITH DISABILITIES

Suffolk Disabled Angling Forum was set up by the Agency, Rethink Disability and the National Federation of Anglers to provide fishing in a supported environment for people with disabilities.

Trained angling coaches are available to offer angling advice, and volunteers are also on hand to help out.

Membership is free, although a small charge is made for each fishing session. For freshwater fishing it is usually £3 while sea fishing sessions cost £12. Both prices include equipment.

The sessions take place at Clare Fisheries, courtesy of Haverhill AC, Battisford and Needham Lake, which is under Gipping Valley AC control, and Rushbrook Lake, which is provided by Last Cast Fishing Tackle.

Phoenix from the flames Fisheries Consultatives alive and well

Anglers are not known for being particularly political or demanding. After all, most people go fishing to relax and to escape all that.

But fishermen in Anglian region are being urged to take a more active interest in their sport in order to make sure their interests are heard.

It's sometimes easy to forget the sheer volume and diversity of river and lake-users, all of which are battling to get the best deal for their members. They include English Nature, wildlife trusts, the RSPB, farmers and the Countryside Agency, to name just a few.

And it's probably fair to say that in recent decades angling has lost out to some of these other stakeholders because it hasn't had a powerful enough voice.

But the situation is beginning to change. Five fisheries consultatives have been set up across the region to give anglers the chance to come together to lobby for what's best for the future of fishing. They are Essex Consultative Association, Anglers Consultative

Association for Norfolk and Suffolk, Upper Ouse Consultative, Lower Ouse and Fenland Consultative and Nene and Welland Consultative.

Consultatives are not a new idea: they first emerged after the Second World War when, besides farmers, there were few other non-angling groups with an interest in rivers.

In the 1970s and 80s other stakeholders became better organised while angling's early impetus was not maintained. But in recent years the need for joint action has become more apparent and the mechanisms for it to occur have been put in place.

The Government review of the Salmon and Freshwater Fisheries Act called for greater consultation into how fisheries are run. The Agency, among others, now canvasses opinions more rigorously before embarking on action.

"The Agency now consults first before preparing the plan rather than doing the plan and then asking us," says Norfolk angler Terry Mansbridge, chairman of the National Association of Fisheries and Angling Consultatives (NAFAC), the organisation that represents all the angling consultatives on a national basis.

The Agency canvasses views through its Regional Fisheries, Ecology and Recreation Advisory Committee (RFERAC), which as the name suggests consults with a wide range of stakeholder interests. The five fisheries consultatives can influence RFERAC as well as the wider network of consultative groups beyond the Agency, such as NAFAC, the National Federation of Anglers and the Government.

The emergence of fisheries action plans (FAPs), which are strategies for developing important fisheries such as the Wensum and the Broads, has built wider consultation into the decision-making progress. Stakeholders need to take a more professional approach if they want to be heard.

"We need to have an effective way of getting our views across to those who make the decisions," says Terry, who is keen to see more fisheries consultatives established across the region.

Setting one up is not as daunting as it sounds: all it takes is a few people who love the sport, such as anglers, clubs and tackle shop owners, to talk to each other. "It's up to local stakeholders to get together and form these groups," says Terry. "If you want any help, contact me."

• Terry can be contacted on 01553 829411

Do you want fair deal for fisheries? Do you want to protect angling? Do you want a stake in the future?

Pressures on our waters increase every day. More people are demanding access to water space.

The need for anglers, clubs and local consultatives to respond to changing circumstances has

The National Association of Fisheries & Angling Consultatives is there to make sure that anglers and anybody interested in fisheries get a fair hearing. It helps people to become active in local consultatives and it provides a professional standard of representation at national level.

Help yourself and get • a considered approach to national issues • support in local matters • information • advice • insurance • a regular newsletter • Associate Membership for clubs for £50 • Personal Membership for individuals for £10

	Yes please! I wan	it to take stake in the future by j	oining NAFAC today!
Name			
Club (If applying for			
Associate Membership) Address			
Address			
	Post Code	Phone	
Payment enclosed (tick appropriate box)	Associate Membership £50	Personal Membership £10
	etails will be held o	on a database for membership pur	poses only, but If you would like

VIRONMENT ABENCY . ANGLE SUMMER 20

Heads up for safety

The risk of death or severe injury on a peaceful day's fishing is not something anglers want to think about. But over the years many fishermen have risked electrocution through their rods and poles touching overhead power lines, and the danger is still live today.

The Agency has teamed up with power companies in recent years to campaign to make anglers and clubs more aware of the dangers. Anglian region, with its many drains, is particularly vulnerable to the threat.

Agency staff have been working with the Energy Networks Association, formerly known as the Electricity Association, to reduce the risk over the past six years.

At first, efforts focused on alerting anglers to the danger. Information leaflets called 'Look out! Look up' were distributed to anglers advising them of the energy companies recommendation that no fishing should take place within 30m of overhead lines crossing a river. The guidance was extended last year to include power lines that run parallel to waterways as well as ones that cross them.

Tackle manufacturers were approached for support and agreed to requests to put warning stickers on rods and poles.

Clubs were given free signs, warning of the danger and banning fishing within the 30m range. "Where angling has been prohibited we've been trying to facilitate it in other areas," says Agency Technical Officer Reuben Page.

The indications are that the campaign is saving lives. "There haven't been any fatalities for three or four years," says Alan Claxton, Health and Safety Advisor of the Energy Network Association. "But the risk is still there and we can't be complacent."

While alerting anglers and clubs remains a priority, the Association is now also taking a more proactive approach by producing a document to promote safety issues. This is aimed at advising angling clubs, waterway owners and planners that are thinking of developing new fisheries.

The document, which is called Managing Risks Associated with Angling in Close Proximity to Overhead Power Lines, is expected to be out this summer. Clubs are



reminded that they can also still receive free signs warning of the danger.

"With the growth of carbon fibre rods and longer poles, electrocution remains a major risk," says Jeremy Carnell, Chairman of the Angling and Overhead Lines Working Group, which co-ordinates efforts between power companies, anglers and the Agency.

Remember...

- Most fishing rods conduct electricity, especially those containing carbon fibre
- Overhead lines are normally bare: don't confuse them with telephone wires and if in any doubt whatsoever do not fish
- Higher voltage electricity jumps through the air, which means your rod doesn't even have to touch the lines to cause an electric shock

 Pay particular attention when fishing in dark conditions when power lines can be difficult to see

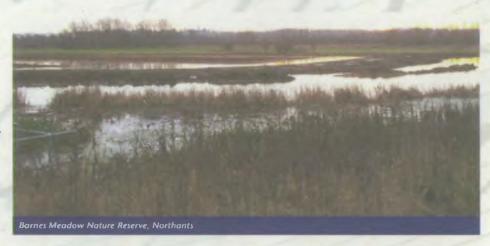
What to do...

- Be Observant
- Never fish within 30 metres of overhead lines
- If you see fishing line tangled on power lines report it to the land or water owners and the angling club
- Make others aware. Safety signs are available free of charge. Contact your local Agency Area Office for more advice:

Central, Huntingdon 01480 414581 Northern, Lincoln 01522 513100 Eastern, Ipswich 01473 727712

Funding fishery improvements - What

Your rod licence money
plays a vital role in
securing the future of
fishing in Anglian region.
Without it, continuation of
the fisheries work carried
out each year by Agency
staff would not be possible.



ere are some examples of the projects that have been carried out over the last 12 months on the region's rivers, canals, drains and stillwaters.

NENE FISH REFUGE

The Agency created a fish refuge on the River Nene at Stibbington by reconnecting a former trout lake to the main course of the river.

The £5,000 project took place after fish surveys along the Lower Nene revealed that a large proportion of fry were failing to survive to maturity. Thousands of newly hatched fish could be seen in the shallows in early summer, but not enough made it through the winter. Reports from anglers supported this view.

Allowing the fish to get into the landlocked backwater would greatly enhance their survival prospects by providing refuge during high flow as well as an ideal spawning area.

Although fished by members of Deeping St James Angling Club, they were happy to see the pond connected to the river.

"The club approached us with a view to reconnecting the backwater when it heard the Agency was looking for sites to use as fish nurseries," says Andy Beal, of the Agency's Ecological Appraisal team.

A site visit confirmed the location as an ideal candidate: not only did it have all the physical features required but access for machinery was good, and the landowner was happy for work to go ahead.

Accumulated silt in the mouth of the

channel was removed before a 600mm wide pipe was installed to reconnect the long, narrow lake to the Nene and a route cut through to the river.

"Because the backwater already had good numbers of plants present we expect fish to be using the new habitat straight away," says Andy. "Roach and bream will find plenty of scope to spawn while their hatching fry will benefit from the higher level of plankton that is found in these offriver areas. Once they have grown they will swim out into the river where they will spread downstream."

The Stibbington improvements are part of a wider fishery improvement project by the Agency along the Nene. In Northampton, it has invested £12,000 on habitat work, another £10,000 on installing 20 angling platforms on a steep sided bank and the same amount again on improving a car park and local paths to provide better access to the river.

BRINGING FISHING TO SCHOOLS

Pupils at Knossington Grange
Therapeutic School at Oakham have been introduced to the joys of angling after receiving £2,000 from the Agency to restore a lake in their school grounds.

Around 30 of the 60 pupils, aged 11 to 14 years old, cast lines after the money was used to pay for the lake to be dredged and fishing pegs installed.

The school has since purchased a second lake. With help and advice from the Agency's fisheries section, it will be dried out and accumulated silt removed so that it can

be established as a second angling water.

The children, some of whom had no interest in fishing before this project, have caught carp, roach and rudd. Therapists at the school, which helps children with special educational needs, have praised the project.

The school is now planning a fishing trip to France, which it is hoped will become an annual event.

CREATING WITHAM RIFFLES

The Agency contributed £1,000 to a £9,000 habitat improvement scheme on the Upper Witham, near Barkston, Grantham.

The scheme centred on the creation of three riffles to increase spawning areas for brown trout and grayling as well as providing foraging habitat for native whiteclawed crayfish.

The riffles, which are approximately 30 metres long, will create a more diverse substrate for fish by increasing the flow. The faster flow will erode sand and silt substrate downstream of the riffles, which in turn will create deeper areas of water or pools.

Faggots installed on the river margins will narrow the channel and accumulate silt, while the aquatic plants that colonise the environment will help to create the right habitat for water voles.

"All of these species have conservation status or are of local importance, and the continuing improvement of the Upper Witham will ensure greater habitat availability," says Paul Hyatt, of the Agency's Ecological Appraisal Team.

Grantham Angling Association organised the work, which fulfils phase two

we are doing with the angling pound

of work initiated in 2001 with funds from the Landfill Tax.

RECONNECTING WAVENEY BACKWATER

A project to rehabilitate a backwater channel on the River Waveney has given Suffolk and Norfolk anglers a fresh challenge this year.

The channel, which runs to an old mill site at Outney Common on the border between the two counties, had silted up and become unfishable.

The Agency's Fisheries and Flood Defence departments collaborated to restore the venue in order to promote angling as well as improve the habitat for small fish that are vulnerable during high flows.

Fisheries and Flood Defence each contributed £7,000 towards the work, which involved clearing numerous trees that covered the route of the channel. The channel itself had practically dried up and the accumulated silt had to be removed.

"The river had become unfishable and unattractive," says Andy Hindes, Project Manager for the Agency. "The water in some places was no more than a few inches deep."

Besides reconnecting the 250m-long channel, the Agency also installed a gravel bar to protect the newly created off-river refuge at times of high river flows, enabling species such as roach, dace and bream to thrive in a safe environment.

The project is due for completion in October although the majority of work has already been done.

RESTORING URBAN FLOODPLAIN

Barnes Meadow wetland nature reserve is being enhanced in a £38,000 project to improve angling, wildlife and public access.

The reserve, which nestles alongside the River Nene, is an underused urban fringe location that is just a short walk from Northampton town centre.

The Agency has teamed up with the Wildlife Trust for Northamptonshire, Northampton Borough Council, Northamptonshire County Council and local angling clubs to make improvements to the

site, which extends from the centre of town out to the Washlands south of the A45 road.

"The initial stage involved scraping a shallow lagoon on the old meadow between the river and the old course of the Nene, which already makes up part of the Barnes Meadow Nature Reserve," says Chris Randall, the Agency's Technical Officer who managed phase one of the project

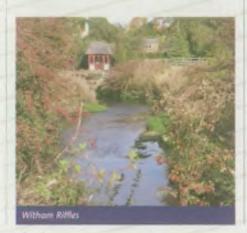
"The shallow water will be ideal for wading birds such as snipe and redshank. Soil from this excavation has been used to create an underwater shelf within the backwater that will soon become colonised with a variety of reeds transplanted from other parts of the site.

"This area will be perfect for fish to spawn each spring and the shallow water will act as an ideal nursery for the young of roach, bream and tench in the vulnerable first few months. The reeds will be home to a huge variety of insect life, supporting the growing fish"

Phase two focuses on another part of the site across the road from the nature reserve that used to form part of an old flood relief channel. The channel was widened when the A45 was built and is silting up now that it no longer receives such high flows.

Work here has concentrated on restricting the flow to a more defined channel by a 19th century technique in which panels of hand-woven willow are laid along the bed to encourage the river to adapt to a new course. This narrower, fasterflowing route should expose the gravel bed and create ideal spawning conditions for fish such as chub and dace.

New facilities for anglers, including improvements to access paths and the



provision of fishing platforms at sites in Midsummer Meadow and at Rushmere Road, will be included in the final phase of the project.. Made from recycled plastic, the platforms will provide safer access for fisherman and prevent them from having to dig away the banks or damage vegetation to reach their swims.

Several platforms specifically designed for anglers with disabilities will be included.

IMPROVING SLIPWAYS ON THE BROADS

The Agency is developing a slipway strategy for anglers on the Norfolk Broads.

The Broads was the first angling hotspot in Anglian region to become a Fisheries Action Plan (FAP) area.

FAPs were created to promote greater partnership between water users in the management of fisheries, and the lack of public slipway facilities has been identified as one of the issues that needs addressing on the Broads.

Providing more places to launch boats will benefit not only anglers but also other recreational users of the Broads. The strategy will identify existing slipway locations as well as the sites where new ones are most required.

The Broads Authority is managing the project, which costs £10,000.

CREATING PLATFORMS FOR DISABLED ANGLERS

The Agency has invested £12,000 on installing platforms for disabled anglers at three venues. Two platforms have been built at each of Riverside Park, St Neots, Harrold Country Park, near Bedford and on the River Hiz at Arlesey, Bedfordshire. The Agency is also talking to the National Trust about the possibility of holding coaching events at sites owned by the heritage charity.

 If you have an idea for a fisheries improvement project on the River Wensum the Agency would like to hear it. "We are always looking to work alongside clubs in habitat improvement schemes," says Rob Pilcher, the Agency's Technical Specialist for Fisheries. Contact him on 01473 706734.



Crayfish - friends and foes

When people go fishing, one species they rarely think about is crayfish. But by ignoring this freshwater lobster lookalike, anglers could inadvertently be contributing to its demise.

The White-clawed crayfish, a native British species, is increasingly under threat from its exotic relative, the American signal crayfish. Signals are not only bigger, they also carry a fungal disease that isn't harmful to them but is fatal to the native variety.

The alien invaders have been present in some of the region's waterways for well over a decade now and the Agency, which has a statutory duty to promote conservation, has struggled to halt their spread.

A five-year study by Leicestershire and Rutland Wildlife Trust of crayfish entering Rutland Water from the River Gwash, which feeds into the 3,000-acre reservoir, discovered it was practically impossible to significantly reduce their numbers over the long-term.

Volunteers that took part in twiceyearly crayfish removals found that whatever strategies they implemented, the population hardly altered. More than 15,000 crayfish have been removed from the Gwash since small numbers were illegally stocked there in the 1980s.

"The survey provided useful data but didn't have any effect on getting rid of them," says Chris Reeds, the Agency's Team Leader for Ecological Appraisal. He added that Signals had recently spread into the upper reaches of the River Nene. "We have to accept that we can't get rid of them once they are established somewhere," says Chris.

The outlook is similarly bleak in the central part of the region where Roger Handford, the Agency's Fisheries, Recreation and Biodiversity Team Leader, described the crayfish distribution as 'widespread and increasing'. "Signal crayfish have been in the Upper Ouse for 15 years and we now have established populations in the River Tove near Towcester, the Cam upstream of Cambridge, and in the River Lark" he says. "We can never eradicate them."

With the emphasis switching from eradication to management, anglers are

being urged to do their bit to prevent Signals from entering waterways that have so far remained free of them.

The message to fishermen is to wash tackle in clean water after fishing an area that is believed to contain Signals. If they don't, there is a risk of spreading crayfish plague once they wet a line elsewhere.

The benefits of the fight against crayfish extend beyond conservation: signal crayfish are known to eat the eggs and fry of coarse fish so they also pose a threat to fish populations and angling.

If a fishery is particularly badly affected by them, the Agency can provide clubs with traps to enable them to at least reduce the population in the short-term.

The Agency is also investigating the possibility of stocking crayfish-infected waters with eels, which eat them, and sponsoring research into other means of control, as well as reminding anglers that it is illegal to remove fish without permission.



Renew your rod licence

Anyone aged 12 years or over who fishes for salmon, trout, freshwater fish or eels in **England or Wales must have an Environment Agency Rod** Fishing Licence.

Rod Licence type	Category	Price 2004/5
Salmon & Sea Trout	Full	£62
Concession		£31
	8-day	£19.50
	1-day	£6.50

Concessionary Licences

- You are less than 17 (Junior)
- You are aged 65 or over
- You receive:

- Online at www.environment-agency.gov.uk/fish
- Environment Agency Telephone Sales on: 0870 166 2662
- At every Post Office in England and Wales
- By direct debit for 2005/6 season call the Direct Debit Helpline



Failure to produce a valid **Environment Agency rod licence** could result in prosecution (max fine £2,500)

Focus on chub

Spotlight on an angler's favourite

The chub Leuciscus cephalus is a fish for all seasons: whether you're stalking in a small summer stream or trotting bread flake on a frozen winter's day, chub can be relied upon to provide year round sport.

Their usual habitat is fast-flowing streams, such as the headwaters and tributaries of the Upper Great Ouse, or more moderately flowing middle reaches of rivers such as Norfolk's River Wensum.

In these stretches, beds of water crowfoot provide cover; shallow gravel riffles provide spawning habitat, and fry and juvenile fish use the deeper pools for respite.

They love cover and can often be found using 'rafts' of debris caught around trailing branches to hide under. From these vantage points they protect themselves from avian predators and anglers and pick off assorted insects, berries and seeds as they fall from trees.



An elongated fish, silvery bronze in colour, chub become darker with age and have pinkish to red pelvic and anal fins. When viewed in the water, the smaller fish can be distinguished from



other species such as bleak and dace by a black edge to the tail (caudal) fin.

Small dace and chub can easily be mistaken but the concave anal and dorsal fin sets dace apart from chub, whose fins in contrast are convex.

Chub are sometimes stocked in commercial stillwater fisheries, where they have been known to grow very large and sometimes become predatory in nature. In these circumstances baits such as sprats and sardines are effective.

The British record is a 8lb 13oz whopper, which was caught on a boilie from Dobbs weir on the River Lea. But an 8lb 14oz specimen, which is awaiting verification from the British Record Fish Committee, was caught from a stillwater, also on a boilie, by a carp angler.

Chub spawn from May to June when water temperature rises above 12 degrees centigrade. Smaller fish spawn in groups, with the larger older fish tending to keep away from the hustle and bustle, choosing instead to spawn in twos or threes.

The amount of eggs a female produces varies according to size. But it can range from 25,000 to 100,000.

The eggs, which average 1mm in size, stick to weed, stones and gravel before hatching. The resulting fry drop downstream into pools and slack water to commence feeding and growing.

Chub can be caught on a variety of baits and a range of methods from floatfished maggots and casters to ledgered or trotted breadflake. A variety of small plugs and spinners will also provide good sport.

Chub can be hard fighters, especially in fast flowing streams, so strong tackle is recommended. They sometimes share the same habitat as barbel, which should be taken into account when selecting tackle. Reel lines of 3lb to 6lb should be used.

A devastating method, especially during the summer months, in small overgrown streams is freelining slugs, which provoke an immediate, aggressive response when plopped right on their noses

Some people also fly-fish for chub, which when added to all the methods, rigs, baits and habitats chub can be caught on shows just what a omnivorous and opportunistic species it is.

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* ANGLE SUMMER 2004