Press release: Fish stocks boost for endangered pearl mussel

Thousands of sea trout have been released into rivers in Northumberland to stock rivers for anglers and help protect the future of a critically endangered species, the freshwater pearl mussel.

Pearl fishing and water pollution from industry have led to worldwide decline of the pearl mussel.

A healthy population of endangered freshwater pearl mussels is important for water quality — each mussel filters 50 to 70 litres of water. They improve the quality of the habitat, increasing the ecological diversity, which includes juvenile trout and salmon numbers.

The Environment Agency's Kielder Salmon Centre staff Richard Bond and Jess Anson have developed a technique to enable pearl mussel larvae to attach to the fish gills, replicating their natural life cycle in the wild.

The larvae will drop off the sea trout gills towards the end of May where they will settle on to the river bed. Given the right conditions, these juveniles could survive into adulthood and live for up to 100 years.



Close up of pearl mussel larvae (white dots) attached to the sea trout gills

Around 12,000 one-year-old sea trout, which have been bred at Kielder Salmon

Centre, were released this week into North Tyne tributaries of the River Tyne.

The larvae attached to them were harvested from 80 adult mussels which are cared for at the centre.

Kielder Salmon Centre breeds 360,000 salmon and between 10,000 and 20,000 sea trout every year to stock rivers.

Complex life cycle

Richard said:

The pearl mussel has a complex life cycle which begins as larvae. These larvae, called glochidia, requires salmon or sea trout to host them for the first stage of their development.

They attach to the gills of trout in the River Tyne between late July and early August, where they remain until the following spring when they drop off the fish's gills. They need clean water and gravel, and well oxygenated water where they continue to grow.

The survival rate for juveniles has declined over the years, which has led to an ageing population, with few mussels under 50 years old.

This means they are a critically endangered species with only around 30,000 adult mussels in the wild in the North Tyne area, and 500,000 across the country.

This work at the hatchery is to try to increase the numbers of juveniles in the river, boost future numbers, natural reproduction and survival rates in efforts to halt the population decline.



Water quality improvements

After considerable investment, water quality has improved dramatically across the UK and rivers in England are the healthiest they have been for 20 years.

The improvements in water quality of the River Tyne and its tributaries has been excellent, and along with the continued work of the Environment Agency and partners, has resulted in improved conditions for natural breeding in the rivers, and a flourishing ecology.

Kielder Salmon Centre pearl mussel project

Richard added:

In 2010 we first managed to successfully get freshwater pearl mussel larvae to attach to the gills of sea trout. Since then we have released sea trout every spring to the River Tyne tributaries.

Over the next two years we will be carrying out surveys, looking for the first of these juvenile mussels that were released to see if or where they have survived.

Even at 7 years old they will be less then 3cms long, most of which will be buried under the river bed. In another 7 to 10 years they should be old enough to breed.

<u>Press release: Appeal for information following pollution in Hampshire</u>

The Environment Agency were alerted to a pollution of oil on the River Anton close to Andover College on 4 April.

Since then, Environment Officers have been working on site to determine the source and reduce the impact on the environment, and booms have been deployed across the river to contain the pollution.

Adam Fulton, Area Duty Manager for the Environment Agency, said:

Our Environment Officers are working hard at the site to manage the environmental impact, and at the moment we have had no reports of dead fish.

We will continue to investigate the source of pollution, and are asking anyone who might be able to assist our enquiries to call our Incident Hotline on 0800 807060.

Press release: Applications for permits received at Holmwood oilfield

These applications are for 1 bespoke Environmental Permit and 2 Standard Rules Permits. They have been submitted by the site Europa Oil and Gas Limited to begin exploration drilling for oil or gas at the site.

In deciding whether or not to issue the permits, the Environment Agency will take into account all relevant considerations and legal requirements.

You can view and comment on the application.

An Environment Agency spokesperson said:

An environmental permit sets out stringent conditions that a site must adhere to. We will not issue an environmental permit for a site if we consider that activities taking place will cause significant pollution to the environment or harm to human health.

We are in the process of determining the applications to permit this site and we want to hear from the public and understand peoples' views. Everybody has the chance to see what the bespoke permit may look like and to raise any additional concerns before we make any final decision.

For all media enquiries please contact 0800 141 2743 or email Southeastpressofficel@environment-agency.gov.uk

Press release: Environment Agency warns landowners in East Anglia about illegal storage of waste

The warning comes from the Environment Agency after a spate of incidents across the country.

Businesses are being targeted by waste criminals looking to dispose of waste by dumping it in warehouses, industrial units and some open spaces. They can be very convincing in persuading landowners to allow them to use their properties and are able to fill the sites with waste which would cost hundreds of thousands of pounds to clear, ultimately leaving the landowner with an expensive clearance bill.

The Environment Agency is urging all landowners to use reputable agents and brokers, carry out suitable checks and due diligence before allowing potential criminals to use buildings or property.

Kevin Rutterford, Environment Manager at the Environment Agency, said:

It's crucial that all businesses understand their duty of care responsibilities for the waste they produce, who they allow to transport it and ultimately where it goes.

Too often, when these responsibilities are misunderstood or ignored, we see the impact of waste crime where waste is deliberately dumped on land illegally. This can cause serious pollution, put communities at risk and undermine legitimate businesses that are doing the right thing.

Even if the landowner has no involvement, legally they may still be responsible for that waste and that could mean a large clear up bill.

Waste stored inappropriately can create issues for neighbours through smells and pests. It can also have a detrimental effect on the environment and impact on rivers and streams. There is a high risk of waste fires due to the waste not being stored correctly.

Recent survey statistics released by the Right Waste Right Place campaign http://www.rightwasterightplace.com/news/ show that agricultural businesses and rural land owners throughout the UK are bearing the brunt of waste crime. More than a third of those in the East of England (39%) have suffered incidents of fly-tipping on their land in the past 3 years with almost half (48%) of them disposing of the waste themselves at their own cost.

In recent years a man was sentenced to prison for dumping hundreds of thousands of tyres at sites he had leased across the country, including in Essex and Norfolk, which he failed to clear.

Fires involving mixed baled waste can be hard to extinguish and pose a risk to public health and the environment as they often contain hazardous materials. In extreme cases this can lead to the loss of the property in which the material is being stored.

Dumping commercial waste like this is a crime. Individuals involved in such illegal activity can be hostile and the Environment Agency urge members of the public not to put themselves in any danger if they encounter any such activity and to avoid any direct contact with the culprits.

Anyone suspecting any illegal waste activities, who has been approached to store waste or may currently be storing such waste are urged to contact the Environment Agency via a 24 hour incident hotline 0800 807060. Alternatively they can contact Crimestoppers anonymously on 0800 555 111.

<u>Press release: Waste scam warning for Lincolnshire farmers and landowners</u>

In the last week the Environment Agency's environmental crime team have dealt with two new incidents where farmers have been approached and asked if they want tarmac road planings that can be used to repair roads and farmyards on their land. After accepting the offer and cash they found bales of landfill waste dumped on their land instead of the expected road planings, leaving them with an environmental liability and a bill to transport and remove the waste to an authorised disposal site.

Farm insurance policies often do not cover poor business ventures. The first farmer had 25 bales deposited on his land this week, including transport and disposal of the waste to a permitted disposal site; this could cost the farmer approximately £3,000.

The second farmer had approximately 2,500 bales deposited on his land. The cost of disposal at a permitted disposal site could result in a bill of approximately £300,000.

The Environment Agency is urging all landowners to be wary and not become the next victim of illegal waste disposal and dumping.

Advice from the Environment Agency includes:

- use reputable agents and brokers
- carry out suitable checks and due diligence, i.e. get the individuals details, vehicle registration, ask where the waste is coming from (address, permit number, waste carriers registration)
- inform them you'll be contacting the Environment Agency or call us whilst they are there
- don't agree to accept any waste until you have carried out some checks and had a cooling off period to fully consider the offer

Peter Stark, Senior Enforcement Officer, said:

Criminals operating in and around the waste industry can be very convincing and persuasive, sometimes offering thousands of pounds in cash up front. Don't be tempted by quick money, you could end up with an environmental risk, flies, polluting liquids running out of bales of waste and even fire risks alongside the massive disposal bill.

We will investigate these two illegal waste incidents fully and take enforcement action if we can. However these farmers and landowners may have to pay significant sums to remove the waste legally. Waste crime is a serious issue diverting as much as £1 billion per annum from legitimate business and treasury.

Although these specific incidents occurred in Lincolnshire, we would not be surprised if this scam was attempted in neighbouring counties due to convenient transport links.

The Environment Agency provides impartial advice to customers, individuals and businesses to help them grow, our local officers will be happy to talk to you, can make public register checks whilst you are on the phone or you can make checks on our website for free, or you can call our Customer Contact centre on 03708 506 506.

The Highways Agency and county council's highways department and their contractors will always use legitimate waste carriers and sites for the reuse or disposal of waste. They may approach farmers and landowners to see if they want to reuse tarmac road planings or crushed rubble and concrete to repair road and yard areas but farmers need to register the <u>U1 waste exemption</u> with the Environment Agency and abide by the rules.

The vast majority of waste sites we regulate are well run and provide essential waste management services. The Environment Agency are here to help the legitimate businesses.

Waste stored inappropriately can create issues for neighbours like smells and pests. It can also have a detrimental effect on the environment and impact on rivers and streams. There is a high risk of waste fires due to the waste not being stored in the correct manner.

Everybody has a part to play to help solve the waste crime problem and make sure waste is managed responsibly. If you see or suspect illegal waste activities, report it anonymously to Crimestoppers or call 0800 555 111.