

Research and analysis: Effects of run-of-river hydroelectric power schemes on small in-stream animals

This project explored the effects of existing run-of-river hydroelectric power (HEP) schemes across England and Wales on communities of small freshwater animals (macroinvertebrates). The research found a very small but statistically significant reduction in the proportion of invertebrates of different families (called evenness) after the HEP schemes were built. It's unclear whether a change in evenness is ecologically important or just a reflection of adaptation to changing conditions.

The aim of the study was to see whether macroinvertebrate communities associated with HEP schemes have changed in a different way from unaffected but similar sites over the same time period. The research highlighted the wide variability in invertebrate communities in streams and rivers at a given site over time and between sites at the same time. The study also demonstrated the value of looking at as many sites as possible to detect the presence or absence of effects from site-based interventions where other drivers of change may be present.

Research and analysis: The early stages of implementing geological disposal: regulatory use of geoscientific information

This study reviewed how regulatory bodies in 5 countries have used geological information to make decisions on proposals for the geological disposal of higher activity radioactive waste. The report's findings on the use of generic site safety assessments, site-specific investigations and pre-permitting discussions will inform the Environment Agency's preparations for any geological disposal facility that might be proposed or developed in England.

The review considers lessons learnt from radioactive waste disposal programmes in France, Finland, Sweden, Switzerland and the USA, all of which are at different stages of development. These countries have similar regulatory regimes to the UK and represent a range of geological environments.

[Research and analysis: Understanding eel and fish behaviour to improve protection and passage at river structures](#)

This project studied the behaviour of fish and eels to find better ways to protect them at flood control structures, weirs, hydropower sites and other intakes.

The study showed significant impacts of some river structures on migrating eels, but also that understanding eel behaviour at such structures and intakes in relation to flow could help improve their passage.

[News story: New app to report Asian hornet sightings](#)

The nation's smartphones are the latest weapon in the fight to prevent the spread of the Asian hornet, thanks to a new app which has been launched today.

People will be able to use the free app – called Asian Hornet Watch – to quickly and easily report possible sightings of the invasive species and send pictures of suspect insects to experts at the National Bee Unit.

While Asian hornets pose no greater risk to human health than a bee, they are a threat to our native honey bees, which is why it is important to quickly contain them.

By using the eyes and ears of smartphone users, we can more quickly identify any Asian hornet nests in the UK and eradicate them before they have the opportunity to spread.

Biosecurity Minister Lord Gardiner said:

This innovative new app is designed to be easy to use and allows people to report quickly any possible sightings of Asian hornets, which will help us to halt their spread.

This invasive species poses a threat to our native honey bees and we must do all we can to encourage vigilance – this new technology will advance this.

The interactive app, developed by the Great Britain Non-native Species Secretariat and the Centre for Ecology and Hydrology, will also make it easier for people to judge whether an insect may actually be an Asian hornet; with pictures available of other insects that it could be confused with and helpful information about their size, appearance and the times of year they are most likely to be spotted.

If there is a sighting of the Asian hornet, the government's well established protocol for eradicating the species will kick quickly into action: This was the case in Gloucestershire last Autumn, when bee inspectors rapidly tracked down and [destroyed an Asian hornet nest](#), containing any further outbreak.

There are fears the pest could reappear this spring, so members of the public are being urged to report any sightings quickly to again allow inspectors to intervene. Asian hornets can be distinguished from their native counterparts by their abdomens, which are entirely dark except for a single band of yellow – native hornets' abdomens are predominantly yellow.

Martin Smith, Public Affairs Manager at the British Beekeepers' Association, said:

This new app launched today by Defra is a welcome addition to current reporting methods that have enabled beekeepers and members of the public to report possible sightings. The key to containment is catching outbreaks as early as possible and allowing fast tracking of the insects back to their nest. We will certainly be encouraging all our 25,000 beekeepers to install the app and use it if they see what might be an Asian hornet near their hives.

Asian hornets arrived in France in 2004 and have since spread across large areas of Western Europe. It was discovered for the first time in the British Isles in Jersey and Alderney last summer.

The native European hornet is a valued and important part of our wildlife, and queens and nests of this species should not be destroyed.

Notes to editors

1. The 'Asian Hornet Watch' app is available to download from the [Apple](#) and [Android](#) app stores.
2. The Great Britain Non-native Species Secretariat is a joint venture between Defra, the Scottish Government and the Welsh Government to tackle the threat of invasive species. More information can be found on

their website <http://www.nonnativespecies.org/home/index.cfm>

3. Members of the public can also report sightings by email to alertnonnative@ceh.ac.uk with a photo or on the Non-native Species Secretariat [website](#).
4. For details on the appearance of an Asian hornet please can be found on [Bee Base guide](#) or the [non-native species identification guide](#).

[Press release: Big fines for two Kent anglers caught fishing without a licence](#)

The 2 illegal Kent anglers had their day at Maidstone Magistrates Court last Thursday (23 March), with one of them now having to pay out over £600.

Bill Haythorpe of Yalding, Maidstone was caught at Monk Lakes, Staplehurst on 18 August 2016 and fined £440 for 2 offences (fishing without a licence and failing to state his address) plus £127 costs and £30 victim surcharge leading to a total bill of £597.

Ryan Zuczok of Chatham was caught fishing without a licence on the Medway in Maidstone on 20 August 2016 and fined £440 plus £127 costs and £44 victim surcharge, a grand total of £611. This was the second time Mr Zuczok was apprehended within a month. He had previously been caught on 23 July 2016, also on the Medway. Neither Mr Haythorpe nor Mr Zuczok entered a plea.

Environment Manager Dave Willis said:

We are seeing higher and higher fines for fishing without a licence. It makes no sense to have the embarrassment of a court visit, a criminal conviction and a bill for over £600 when an annual licence is just £30 (post 1 April 2017). We think these cheats will think twice before picking up a rod illegally again and if they don't, our officers are ready and waiting.

The money from licence sales supports fish, fisheries and fishing, and protects the future of the sport. A small number of anglers refuse to buy a licence, cheating the sport and their fellow anglers. For the minority who flout the rules, the most common offence is fishing without a valid licence. Fishing without a valid licence could land you with a fine of up to £2,500

and a criminal record.

Dave Willis added:

Last Thursday was a good day for the near million anglers that fish legally every year, respecting each other and the sport. There really is no excuse; if you don't have a licence, pick one up from the post office or online, before we pick you up.

In Kent, South London, Surrey and East Sussex, since April 2016 our fisheries enforcement officers have checked 4,252 licences and reported 269 people for fishing illegally.

Last year, in England, the Environment Agency checked over 62,000 rod licences and prosecuted more than 1,900 anglers for rod and line offences, resulting in fines and costs in excess of £500,000.

From 1 April 2017 a full rod licence costs from just £30 (concessions available) and a junior rod licence (for 12 to 16 year olds) is free. You can buy your rod licence from your local Post Office or by phoning 0344 800 5386.

Money from rod licence sales is invested in England's fisheries, and is used to fund a wide range of projects to improve facilities for anglers including: protecting stocks from illegal fishing, mitigating pollution and disease, restoring fish stocks through restocking, control of invasive species, and fish habitat improvements. Rod licence money is also used to fund the Angling Trust to provide information about fishing and to encourage participation in the sport.

To help crack down on unlicensed fishing the Environment Agency urges anyone to report illegal activity by calling the Environment Agency incident hotline on 0800 80 70 60 or anonymously to Crimestoppers on 0800 555 111.

For more information, contact the press office on 0800 141 2743.