



Invasive Species Action Group



Environment
Agency

Non-Native Species Newsletter: Autumn Edition 2013

Contents:

We give evidence to the Environment Audit Committee

Black Bullhead – we are coming to get you!

Volunteers help to survey Yorkshire crayfish populations

Could shoreweed be useful for *Crassula* control?

Confirmation of non-native crayfish population in Dudley

Invasive alien species: MEPs reach agreement with the Greek Presidency

Community of Practice to discuss invasive non-native species

Do you have a story you'd like to share?

Black Bullhead - we are coming to get you!

A population of Black Bullhead catfish has been discovered in the UK for the first time, in a small lake in Essex.



Black Bullhead (*Ameiurus melas*) originates from North America ranging from the Great Lakes to North Mexico. Outside its natural range it is highly invasive. This small

catfish reaches only about 12cm, but is very tough, tolerant of poor water quality, able to survive temperatures up to 35°C with low oxygen, has a very broad diet, guards its eggs, has sharp spines in its fins and shoals in balls for added protection from native predators.

The North East Thames Area Fisheries team have been working with National Fisheries Services to study the fish and found they cause a range of impacts on our native wildlife. Being omnivorous and reaching high densities, they out-complete native fish, will eat almost anything, from plants to insects, dead or living fish and crustaceans, increase water turbidity and carry novel parasites and diseases.

They represent such a risk the Area Fisheries Team are working with the Virtual National Non-Native Fish Management Team to conduct a piscicide based eradication operation in early May 2014; removing this highly invasive species as a threat to UK wildlife.

For further information, contact [Neil Winter](#), Technical Office (Fish), North East Thames. Tel: 01707632447 and [Gareth Davies](#) Technical Officer, National Fisheries Service. Tel:01480483878

We give evidence to the Environment Audit Committee.

Parliament has commissioned an Environment Audit Committee hearing into invasive non-native species. Geoff Bateman, Head of Fisheries & Biodiversity gave evidence to the committee on 26th Feb.

Defra, Natural England, Scottish Natural Heritage and the Non-Native Species Secretariat also gave evidence, in addition to a variety of NGO's.

This event provided us with an opportunity to explain our approach to managing invasive species and the cost-benefits we accrue by doing so. Geoff explained the potential impact invasive species may have on ecological quality, amenity and our ability to manage flood risk.

A record of written and oral evidence is available on the [parliament website](#).

Volunteers help to survey Yorkshire crayfish populations

Signal crayfish have been known to be present in the Wharfe catchment since 1990, however, the current extent of the species and risk to the catchment was not known as no full survey of the catchment had been undertaken.

As part of the Yorkshire crayfish project, a full survey of signal crayfish populations in the Wharfe catchment was undertaken using volunteers from the University of Leeds. A training day was organised where students learnt effective survey methods and how to apply biosecurity measures.



Students were organised into groups and given a list of sites to survey. Following this method, the vast majority of tributaries of the Wharfe were surveyed.

Results have shown that signal crayfish have become well established in the catchment and have begun expanding into the tributaries. On one particular tributary they were found above a 20ft waterfall. This spreads doubts over the defendability of the upper reaches of some watercourses to signal crayfish invasion. No native crayfish were found during the survey, indicating crayfish plague may have impacted native populations.

The results of this work will be used to plan similar best practice assessments of other catchments at risk from signal crayfish invasion and determine barrier defendability on a catchment scale.

Contact: [Ian Marshall](#), Biodiversity Technical Officer 1, Yorkshire Area, Tel: 0113 819 6342

Could shoreweed be useful for Crassula control?



Australian swamp stonecrop *Crassula helmsii* has frustrated most of our efforts to control it. Research suggests that nature may have a partial solution.

For over 25 years, Jonty Denton, a freelance ecologist, has been monitoring the flora of Woolmer Pond, Hampshire. In that time, he has seen *Crassula* spread from an accidental introduction in 1986 to 15 waterbodies. Various methods have been used to control it. Glyphosate treatment provided a good 'kill', but it returned worse than ever within two years.

In 1995, Jonty noticed a small patch of shoreweed *Littorella uniflora* appear amongst the *Crassula*. This has steadily spread, and has now replaced 25% of the *Crassula* in the pond basin. Jonty stated "the dominance is very clear-cut, and even when completely surrounded by *Crassula*, shoreweed seems able to spread, once established, to the complete exclusion of the former".

In 2008, he planted small plugs of shoreweed, which spread and excluded the *Crassula* within a 2-3 m² area. Even in obvious gaps within the shoreweed sward, *Crassula* didn't survive, suggesting there may be a chemical effect within the soil.

This isn't a solution that can be used widely against *Crassula*, but it does provide another management technique that may be applicable to certain sites. It also provides an interesting insight into how our native flora can occasionally fight back against invasive non-native species.

Contact: [Trevor Renals](#), Technical Advisor, Invasive Species, E&B. Tel: 01208265033

Confirmation of non-native crayfish population in Dudley



Following reports from the Canal and Rivers Trust about the presence of two species of non-native crayfish in lakes at the Buckpool and Fens Pool Nature Reserve, Dudley, members of the Midlands Central Biodiversity and Analysis and Reporting teams carried out a survey in November to assess the risks to a nearby population of native White-Clawed Crayfish.

Midlands Central staff have been working in partnership with the CRT and Dudley Metropolitan Borough Council to assess and conserve our native crayfish species.

It had been reported that both American Signal crayfish, *Pacifastacus leniusculus*, and Turkish Narrow-Clawed crayfish, *Astacus leptodactylus*, had been present in some of the lakes for about five years, although no records were available on Easimap or NBN Gateway. Reports suggested that very large specimen crayfish were present; both species are capable of reaching 30cm body length.

EA staff from Sentinel House, Lichfield, carried out a survey for crayfish by manual searching in the lake margins in early November. A significant population of Turkish narrow-clawed crayfish was confirmed in Fens Pool and Middle Pool, SO 917 885, with crayfish concentrated in shaded areas with refuges in the form of leaf litter, bricks and woody debris. Crayfish were

removed and preserved as part of the invertebrate reference collection at Sentinel House.

No signal crayfish and no monster specimens were found at the site, despite the rumours.

The distribution of Turkish narrow-clawed crayfish in Britain is uncertain, with many records remaining from the 1990s and earlier. This species is also susceptible to crayfish plague transmitted by the American Signal crayfish, like our own native white-clawed crayfish, so previously reported populations may no longer exist. It seems that the current distribution of *Astacus leptodactylus* in the Midlands is limited to a handful of sites.

Contact: [Peter Cowley](#), Environment Monitoring Officer, Midlands Tel: 01543 404887

Invasive alien species: MEPs reach agreement with the Greek Presidency

Plans to prevent the introduction or halt the spread of “invasive alien species” of plants, animals or insects that cause ecological and economic damage were agreed by MEPs and the Greek Presidency of the Council on 5th March. The draft legislation, which would require EU member states to coordinate their efforts, provides for a ban on species declared to be of “Union concern”.

“Invasive alien species cause damage worth at least €12 billion every year in Europe and many member states already have to spend considerable resources in dealing with them”, said MEP Pavel Poc (S&D, CZ) who is steering the legislation through Parliament.

“Their efforts are very often not effective simply because those species do not respect geographical borders. Cooperation between the member states is therefore crucial. The negotiations were very difficult and we had only limited time to strike a deal. That's why I am happy to say that today's negotiations were successful” he added.

The draft legislation will require EU member states to carry out an analysis of the pathways of introduction and spread of invasive alien species (IAS) and set up surveillance systems and action plans. Official checks at EU borders would also be stepped up. For IAS that are already widespread, member states would have to draw up management plans.

Alien species of “Union concern”

Species deemed to be of “Union concern” would be placed on a list of those that should not be introduced, transported, placed on the market, offered, kept, grown or released into the environment.

The Presidency accepted Parliament’s view that the IAS list should not be capped at only 50 species. Priority on the list would go to IAS which are expected to become a problem and those that cause the most damage. MEPs also inserted provisions for tackling IAS of concern for single member states. Species that are native to a part of the EU but begin to invade others would be tackled through enhanced regional cooperation between member states, facilitated by the European Commission.

Member states would have to decide appropriate penalties for breaches of the legislation. Where authorised by the Commission, they could grant specialized establishment permits to carry out certain commercial activities with IAS.

MEPs also insisted that a dedicated scientific forum should be established to advise on the scientific aspects of enforcing the new rules, and on applying the “polluter pays” principle to the recovery of restoration costs.

If endorsed by the committee of member states’ permanent representatives (COREPER) on Friday 7 March, the agreement is to be put to a vote in the Environment Committee on 19 March.

Community of practice to discuss invasive non-native species

We have had a [community of practice for invasive non-native species](#) for a while, but it has fallen out of use. We want to re-energise it.

We need a forum to enable staff to share their ideas on biosecurity. Our biosecurity programme will explain the importance of biosecurity to staff, and the species that are of particular concern to us, but most of the

solutions will come from the staff doing the work. This is important to ensure that solutions are pragmatic and staff have a sense of ownership for them. We have to achieve behavioural change in many of the tasks we perform, and we need to be clear on the need for change and committed to new ways of working.

We have already embedded many good examples of biosecurity into our work, and we continue to find new ways of further reducing the risk of spread. It is important that we share those ideas, so that colleagues performing similar tasks across the organisation can benefit from them. Details on how to join a community of practice are available on the [easinet](#).

You can also share your ideas with your Area contact/s within the Invasive Species & Biosecurity Operational Technical Lead (OTL) network. OTL contacts were listed in the Autumn newsletter and are also available at [O:\Invasive Species National Resources\OTL network](#).

Contact: [Trevor Renals](#), Technical Advisor, Invasive Species, E&B. Tel: 01208265033

Do you have a story you’d like to share?

If you’re involved with invasive species management and biosecurity, maybe you’d like to share your work with readers of the newsletter?

The newsletter is produced quarterly and distributed throughout the Environment Agency and some of our external partners. Your article could be on the measures you’ve taken to manage an invasive species, a novel approach you may have adopted to improve biosecurity or an invasive species that is causing concern in your Area.

Contact: [Trevor Renals](#), Technical Advisor, Invasive Species, E&B. Tel: 01208265033