



Non-Native Species Newsletter: Spring Edition 2014

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New information on invasive species on Enviropedia

The Easinet invasive species pages have been moved to a new [Enviropedia page](#). Enviropedia is our version of 'Wikipedia'; a reference tool that captures our knowledge and information about the environment and the work of the Environment Agency.

The Enviropedia INNS page contains information about our priority invasive species and how we manage these, the Invasive Species Action Group (ISAG), the Invasive Species and Biosecurity Network (ISBN) and biosecurity. Content will be added regularly.

We will also shortly be working on a new Biosecurity page for Enviropedia and would be keen to hear about content that you would find useful to include in it. If you also have examples of Good Biosecurity Practices, please get in contact so that these can be included as well.

Contact: [Jo Heisse](#), 7-23-3179

Beware of Marmorkrebs; the clones are here!

The Marbled crayfish *Procambarus fallax f. virginalis*, often known by its German name 'Marmorkrebs', has been sold from a retail outlet in Surrey. Marmorkrebs is unique amongst crayfish because it can clone itself.

Thankfully, when the owner of the crayfish realised the true nature of the pet he'd owned for two years he contacted our staff at Red Kite House, Wallingford. The crayfish were subsequently destroyed. It is an offence to sell this species under the Import of Live Fish Act 1980. The Fish Health Inspectorate has been informed and has visited the premises and an alert has been issued throughout the ornamental aquatic trade.

Marmorkrebs, are a variety of crayfish that appeared in the aquarium trade in Germany (hence the German name) in the 1990's. It is believed to be related to the



Slough crayfish *Procambarus fallax* of Florida. Marmorkrebs is parthenogenic, which means that it can clone itself and does not require a male crayfish. Thus, a single individual has the potential to escape and colonise the environment. So far, it has yet to be found in the wild in GB, but it is now breeding in the wild elsewhere in Europe.

Marmorcrebs are usually brown, ranging from tan to dark brown. They can carry crayfish plague, which threatens our native white-clawed crayfish populations. The marbled appearance on the side of the body is the most convenient identification feature.

If you think you have found this crayfish it must be killed, either by submersion in industrial methylated spirits or frozen. Please provide good quality images and details of the location to [Trevor Renals](#) as soon as possible.

Contact: [Trevor Renals](#), 7-24-5033

Managing floating pennywort on the River Nene

The Fisheries & Biodiversity team in Anglian Lincolnshire & Northamptonshire Area have recently been working on a successful Floating Pennywort control programme on the river Nene in Northamptonshire.



Floating Pennywort was first discovered growing in the river Nene near Higham Ferrers, Northants, in 2007. A control programme was developed by the Area F&B team and work began immediately to treat the plant. A local contractor experienced in non-native species management was employed and they began a combination of spraying and manual removal of the pennywort. At the same time the F&B team targeted river recreational users such as boaters, anglers and walkers, with a promotional campaign to raise awareness of Floating Pennywort and to report sightings. Reports received from these users lead to further stands of Pennywort being located and treated.

Between 2007 and 2010 the number of FP sites slowly increased, peaking at 14 in 2010. These sites were distributed along a total length of 17km of river,

downstream of the original site. Treatment of Pennywort continued and by the end of 2011 the number of sites had decreased to 10 within 12km length of river, downstream of the original site. Also of interest is that by this point the number of new FP sites had been reduced to three; it was encouraging to note that FP had not grown back at sites where it had previously been treated. By the end of 2012 the number of FP sites was significantly reduced to three along a 7km length of river. FP was not present at any sites during 2013 surveys.

The F&B team will be continuing the Floating Pennywort control project on the river Nene in 2014. The annual F&B budget for this work has been a maximum of £2,500.

Contact: [Robert Pitkin](#), 7-50-5994

Supersized knotweed found on the Isle of Wight



A group site visit to Sandown Waste Water Treatment Works led to the discovery of a small patch of Giant knotweed growing in a ditch right outside the works boundary fence. There are only 2 previously known locations on the Island.



Giant knotweed or Sakhalin knotweed (*Fallopia sachalinensis*) is a giant relative of the more common Japanese knotweed (*Fallopia japonica*). Its stems can grow 4-5 meters high and its leaves around 20-40cm long. Giant knotweed also

has flowers that are greener in colour and its leaves have a heart-shaped base compared to the straight base of Japanese knotweed.

It was introduced into the UK in 1896, originating from the Japanese island of Sakhalin where it was thought to be used as an experimental forage in wet grasslands for livestock during a period of drought in Europe. It is widespread across lowland parts of GB with highest concentration in London and the Home Counties. It prefers the warmer and wetter parts of the country.

In the UK, the reproduction of Giant knotweed is vegetative, although it can act as a pollen source for Japanese knotweed (which is all female), producing the highly invasive hybrid, Bohemian knotweed *Fallopia x bohemica*. Seed is very rarely viable and Bohemian knotweed in the UK is largely as the result of vegetative spread.

Contact: [Claire Hamilton](#), 7-23-2742

Biosecurity: we have a plan

Biosecurity workshops took place in Leeds, London and Bristol, producing action plans for the North, East and West. These plans will provide direction for delivering biosecurity across their respective Areas, as well as identifying what we need to do in our national plan.

The workshops provided an opportunity for members of the Invasive Species & Biosecurity Network (ISBN) to meet each other and colleagues from the Invasive Species Action Group (ISAG). The workshop included a range of activities that were designed to identify the elements to an [action plan](#), which was produced and agreed by the end of the workshop.

Common themes that emerged across all workshops were the need to secure a clear mandate for the importance of biosecurity from management, both at National and Area level. The workshops also discussed opportunities for Area comms events to integrate with our National biosecurity comms programme. We also discussed what resources we need to raise awareness amongst colleagues. This provided a perfect excuse for a game of invasive species' trumps!

Contact: [Trevor Renals](#), 7-24-5033

New invasive species trump card game launched

Some of you will already have seen the new trump card game. Based on your feedback from the trial packs, the refined version will soon be available. The packs are designed to help staff become familiar with over 60 invasive non-native species that are of particular concern to us.



The [2012 biosecurity survey](#) identified that many staff were unaware of the broad range of invasive species that impact our business. If you are checking and cleaning clothing and equipment you should remove all plants and animals, but it is important to appreciate the diversity of species that concern us, so that you can avoid them in the field and report their location if you find them. The cards also identify 'Alert' species that are of particular concern to us. If you suspect you have found an alert species, you must take a good quality image, contain the specimen and report it immediately.

The trump card game was generously funded by Field Services, which is also funding other awareness-raising material and the recent biosecurity workshops. Packs will be available from your [Area Invasive Species & Biosecurity Network \(ISBN\) member](#).

Contact: [Vikki Russell](#), 7-24-4305

Five invasive aquatic plants are now banned from sale

Since 6th April 2014, five species of invasive non-native aquatic plant can no longer be legally sold in England.

Creeping water primrose *Ludwigia grandiflora*, floating pennywort *Hydrocotyle ranunculoides*, Australian swamp stonecrop *Crassula helmsii*, parrot's feather *Myriophyllum aquaticum* and water fern *Azolla filiculoides* have been banned under Section 14ZA, Wildlife & Countryside Act 1981. It is now an offence to sell or market these species. If you see these plants for sale, or contaminating other plants that are for sale, you should contact your local Wildlife Crime Officer.

This is an important step in reducing the impact these species have on the environment. The populations that have already established in the wild will need to continue to be managed. Gardeners and land-owners and who have these and other invasive species in their ponds and lakes should be encouraged to adopt the '[be plant wise](#)' campaign and ensure they dispose of plant material in a safe manner.

Contact: [Trevor Renals](#), 7-24-5033

Black bullhead catfish eradicated from GB

In May, the National Fisheries Services Virtual Non-native Species Management Team, working closely with Hertfordshire and North London Area staff delivered a rapid response eradication operation to remove the only known population of the highly invasive black bullhead from a fishery in Essex, England.



The black bullhead *Ameiurus melas* originally comes from North America. Outside of their natural range they are highly invasive. This small

catfish grows to only 20cm, but reaches huge densities, is very tough, tolerant of poor water quality and able to survive temperatures up to 35°C with low oxygen. It has

a very broad diet, including our native fish, guards its eggs, has (as our officers discovered to their cost) vicious, sharp spines in its fins and shoals in balls for added protection from native predators as well as carrying novel parasites and disease.

The fishery in North London had succumbed to this highly efficient invader, and the local angling club had lost one of their best fisheries. The club contacted the Environment Agency fisheries department and the operation to remove the catfish was planned. The angling club chairman said

"the EA fisheries department has been great to work with. Our fishery had declined to such a poor condition; all due to this menacing non-native catfish. They conducted the operation and dosed the chemical treatment in our lake with military precision. As a club we look forward to restocking with native fish and returning our fishery to greatness again".

Should the bullhead have spread, the risk to the wider environment was significant; so a piscicide based eradication was carried out by the specialist national virtual team using boat and bank based application systems. Early indications are that the eradication operation has been successful, and the species has been removed as a risk to our native species and habitats, our fisheries and the angling opportunities they provide. Monitoring of the site will continue.



Rapid operational response to new threats is a vital and effective component in our continued battle to combat invasive species. Cases where an

invasive species has been entirely eradicated from the UK are exceptionally rare; and this is the second high risk fish species we have removed through such action. The fathead minnow was eradicated in 2008; and through our wider eradication programme we are well on the way to removing the threat of topmouth gudgeon from our waters.

If anyone suspects a fishery holds non native species which could be threatening fish stocks , please call the Environment Agency incident hotline on 0800 807060.

Contact: [Matt Brazier](#), 07768 865202