

Briefing for the Public Petitions Committee

Petition Number: [PE1558](#)

Main Petitioner: John Thom on behalf of RNBCC Crayfish Committee, Ken Dee Catchment

Subject: American Signal Crayfish

Calls on the Parliament to urge the Scottish Government to amend the existing licencing regime to allow for the commercial trapping of American Signal Crayfish in Scotland.

Background

The American Signal Crayfish (*Pacifastacus leniusculus*) is an invasive non-native species (INNS). The Scottish Environment Protection Agency (SEPA) [defines](#) INNS as “those non-native species that have the ability to spread rapidly and become dominant in an area or ecosystem, causing adverse ecological, environmental and economic impacts”.



Signal Crayfish inhabit freshwater environments and, [according to GB Non-Native Species Secretariat](#) and [SEPA](#), are wide spread in England and Wales, less so in Scotland but there are well-established populations in places including Dumfries and Galloway. They can have a significant impact on native freshwater plants and animals through preying on young fish and fish eggs, and through competition for food and habitat. In running water, extensive burrowing by Signal Crayfish can destabilise banks, causing erosion, and bank collapse.

Coordinating bodies and licencing

Scottish Natural Heritage (SNH) is the overall lead body responsible for INNS issues with SEPA responsible for coordinating response to INNS issues in freshwater habitats. [SEPA have identified](#) the adverse impact that Signal Crayfish have on freshwater habitats. However, they consider it very unlikely that the Signal Crayfish can be eradicated from a watercourse once they have been introduced.

SNH is responsible for licencing trapping of crayfish. [According to the SEPA website](#):

“[SNH] only issue licences for survey work to monitor the distribution and spread of Signal Crayfish in Scotland. They don’t issue licences for the purpose of catching crayfish to eat because this creates incentives for people to move them to new areas.”

As described below, licences have also been given for research to study the feasibility of eradication. In England and Wales, commercial trapping of Signal Crayfish is permitted with [a licence granted by the Environment Agency](#).

Trapping and potential for eradication

In 2009, the Galloway Fisheries Trust and Marine Scotland were involved in a [research study](#) to understand the Loch Ken Signal Crayfish populations and investigate possible controlled trapping. This study found that the prawn creel trap was useful for catching crayfish and that the crayfish could be effectively killed on the boat with an industrial boiler. The study also suggested that larger male crayfish were caught first by the traps. It was recommended that the trapping programme continue on Loch Ken for a further three years with part justification that the initial research had suggested that a heavy trapping programme may have a significant impact on the crayfish population. However, no further action has been taken on this recommendation.

Commercial trapping, as proposed in this petition, has been suggested as a means to reduce the Signal Crayfish population. However, [SEPA state](#) that:

“trapping trials have concluded that although numbers may be reduced during the short-term, traps may favour the capture of larger individuals. An unintended consequence of selective harvesting is the increased growth and earlier maturation of juvenile crayfish, which can cause the population to increase.”

Regarding current action, [SEPA’s position](#) is that:

“no long-term solution has yet been found to eradicate Signal Crayfish... until a long-term solution can be found the only way of protecting unaffected water bodies is to prevent the movement of any crayfish or their eggs”

Scottish Government Action

The [Wildlife and Natural Environment \(Scotland\) Act 2011](#) makes amendments to section 14 of the [Wildlife and Countryside Act 1981](#). It includes the power for Scottish Government to produce a code of practice relating to non-native species including INNS such as Signal Crayfish.

On 28 June 2012, the Scottish Parliament approved the [Non-Native Species Code of Practice](#) which came into effect on 2 July 2012. Section 10 assigns responsible bodies, giving the overall lead coordinating role to SNH and

freshwater habitat coordinating role to SEPA. The role of Scottish Government is:

“to continue to lead on strategic policy on invasive non-native species in Scotland. This will include:

- coordination at the Great Britain and European level;
- coordination, development and strategic oversight of policy within Scotland;
- chairing the Scottish Non-Native Species Working Group;
- leading on matters relating to non-native species policy work including risk assessment, prevention, legislation and research.”

In 2014, Environment and Climate Change Minister, Paul Wheelhouse, held a meeting in New Galloway to discuss Crayfish issues in Loch Ken. [In response](#), the minister said that the Scottish Government would:

“undertake a study of fish stocks over the next 10 months and propose to explore opportunities for physical barriers to contain the migration of crayfish”

Scottish Parliament Action

The Rural Affairs, Climate Change and Environment (RACCE) Committee has previously taken evidence and made recommendations [on the Wildlife and Natural Environment \(Scotland\) Bill \(now 2011 Act\)](#) and [on the Non-Native Species Code of Practice](#). In evidence on the code of practice, Alex Fergusson MSP for Galloway and West Dumfries stated that:

“In the case of the American signal crayfish, there is a strong case to be made for a properly controlled commercialisation of the species.”

The then Minister for Environment and Climate change, Stewart Stevenson, responded:

“Commercial exploitation of a non-native species has been tried south of the border, but it was not successful. There is a tension between trying to manage down the numbers of such species and the risk of commercial exploitation sustaining their populations. It is thought that commercial exploitation could lead to their further spread.”

The issue of INNS and Signal Crayfish have subsequently been raised at the Rural Affairs, Climate Change and Environment Committee by [evidence from European Commissioner, Janez Potocnik](#), and in [recommendations to government on a revised strategy for biodiversity](#).

On 3 April 2014, a question ([S4W-20621](#)) was lodged by Joan McAlpine to ask the Scottish Government:

“whether there are plans to control or eradicate North American Signal Crayfish in (a) Lochrutton and (b) the Lochfoot Burn in Dumfriesshire”.

On 29 April 2014, Paul Wheelhouse answered:

“I am advised by [SNH] that they have not yet identified an effective method for the eradication of North American signal crayfish in water bodies such as Lochrutton and the Lochfoot Burn, albeit this is an objective the Scottish Government is keen to pursue if at all possible.”

With regard to current action being taken he stated that:

“The Fisheries Trusts and [SEPA] are working together to raise awareness of appropriate biosecurity measures that water users can take to avoid spreading the species ... this includes launching a number of biosecurity campaigns across Dumfries and Galloway this spring and summer to raise awareness of invasive non-native species”

[A biosecurity campaign](#) run by SNH gives advice to water-users such as anglers that can help avoid the spread of Signal Crayfish.

Declan Finney
Research Council Secondee
February 2015

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