

Environmental Standards Scotland

FMS Call for Evidence Response

Control and Impact of Invasive Non-native Species



CONTROL OF INNS

a) Is the terminology used to describe invasive non-native species, as understood by duty bearers and the public, sufficiently clear? Is further clarification needed?

The terminology used in the GB Non-native Species Strategy (2023 to 2030), as quoted in the call for evidence, defines invasive non-native species (INNS) as "a species intentionally or unintentionally introduced outside its native range by human actions that has the ability to spread causing damage to the environment, the economy, our health, or the way we live." We believe that this definition is suitably clear.

b) Do you support the current criteria used by Scottish public bodies to define an invasive species? If not, what improvements are needed? What level of impact must a species have to be considered invasive?

The GB Non-Native Species Committee advises on listing and delisting species of concern. This committee includes representatives from the Scottish Government, SEPA, NatureScot, and Scottish Forestry.

Supporting this committee is the Non-Native Species Risk Analysis Forum (NNRAF), comprising independent experts who conduct hazard identification through horizon scanning. This process, funded by Defra, identifies new non-native species threats in Great Britain.

In 2019, a horizon scanning exercise identified the top 30 non-native species likely to become invasive in Britain over the next decade. Experts used a consultative approach, applying a scoring system to assess each species for arrival likelihood, establishment potential, and impact on biodiversity, ecosystems, human health, or economies. This method produced four distinct ranked lists: biodiversity and ecosystems impact, human health impact, economic impact, and a combined priority list.

Whilst we don't intend to comment on the horizon scanning process in general, we would highlight Pink salmon, which serve as an example of the challenges within this current process. Despite huge economic and environmental impacts being apparent in northern Norway, pink salmon were not included in the combined list of the top 30 non-native species likely to become invasive in GB over the next decade. We have an opportunity to take proactive, rather than reactive measures to minimise and mitigate the impact of future invasions of pink salmon.

c) How effective are current awareness campaigns and public engagement efforts in educating the public about the risks and impacts associated with invasive non-native species? Are there any notable gaps in public understanding regarding INNS?

The GB Non-Native Species Secretariat has produced a suite of detailed guidance and resources aimed at a number of specific sectors, including anglers, boaters, paddlers and stand up paddleboarders, field workers etc. However, there is a need to raise awareness of this guidance and to ensure that the end-user is aware of, and acting in accordance with, such guidance. Fisheries Management Scotland have submitted an application to Marine Fund Scotland, to develop and distribute (via our network of District Salmon Fishery Boards and Rivers and Fisheries Trusts) specific signage to help raise awareness of these important issues. Unlike the situation in many other countries, there is very little prominent signage or information at entry points to Scotland, such as airports and ferry terminals. This is an area that needs urgent attention.

Despite these resources, there remains a lack of awareness among the public regarding the threat of INNS to Scotland's environment. A widely publicised route to allow members of the public to easily report the presence of INNS would be very helpful.

d) How well-defined and understood are the roles for duty bearers in managing INNS?

As set out in the call for evidence, responsibility for management of INNS is split between NatureScot (terrestrial), Marine Scotland (marine), SEPA (freshwater) as well as Scottish Forestry and Local Authorities. Whilst we can see the basis for these divisions, the overlap between these environments has the potential to make this very confusing. It will certainly be confusing to the general public. ESS might wish to consider whether a single body, with overall responsibility for INNS might make more sense. Many invasive non-native plant species proliferate near freshwater environments, acting as a seed-source for plants to spread downstream. Strategic, catchment-wide control of these species is therefore necessary, with coordinated action required by all relevant land-owners (See below with regard to landowner responsibility).

There is a clear risk that the current approach could lead to inconsistent management practices, delays in response efforts, and gaps in accountability, ultimately hindering the effective control and mitigation of INNS.

e) How effective are the current management strategies at addressing INNS? How could management of INNS be improved?

The Scottish Invasives Species Initiative is a partnership project set up to tackle invasive non-native species alongside rivers and watercourses in northern Scotland. This project covers ten fisheries trust/District Salmon Fishery Board areas and provides important support and practical management of INNS. However, it is not Scotland-wide and our experience is that it can be challenging to secure funding for INNS control in areas out with the SISI project. This means that INNS control out with the SISI area is not well-coordinated and is dependent on securing alternative funding.

Management strategies can be effective but are often hampered by a lack of regulation and it is clear that often the ongoing spread of INNS occurs from private properties or landholdings, especially along water courses. The lack of responsibility for landowners to deal with existing INNS populations is a barrier to effective control. In addition to private landowners, our members have reported particular concerns about managers of road and rail infrastructure, and Scottish Water among others. We believe that there is a strong case that farmers could be supported in this vital work through agricultural grant support.

Members of Fisheries Management Scotland know how to control INNS but this work is time consuming and must be consistently delivered. Stable, long-term funding of this work is absolutely critical. Effective eradication or long-term control of well-established INNS requires planned and strategic operations with clear, specific environmental and ecological outcomes based on thorough monitoring. We would note that many landowners take their responsibilities seriously. However, whilst we don't have widespread examples where access to land to undertake INNS control is a significant issue, there is a big difference between a landowner being willing to accept another organisation coming onto their land and applying a fully costed solution, and taking independent proactive action to address the issues on their land. This can result in areas of land being left untreated, therefore acting as an ongoing seed source within the catchment. Success of control should be measured by tangible ecological results. Indirect metrics, such as volunteer engagement, resource allocation, or effort expended can be useful, but they do not necessarily reflect the desired environmental outcomes.

It is important to recognise the scale of the problem. In many areas, the biggest challenge is the ability to treat INNS due to a lack of specialist contractors to carry out the work. This may be due to the fact that there is so much INNS work available that contractors can select the more straightforward sites, with the potential that particularly bad or challenging sites are left untreated.

The National INNS Plan, as highlighted in the Scottish Biodiversity Strategy to 2045, is a welcome step forward. To improve management, it is crucial that appropriate long-term resources are made available to support the effective implementation of these plans.

Our members have identified signal crayfish as an invasive species that is particularly challenging to address. ESS may wish to seek further information as to the current strategy in Scotland and where responsibility currently lies between the various statutory bodies in Scotland.

f) Is the current allocation of effort and resources across the categories of (i) prevention, (ii) early detection and rapid response and (iii) long-term management and control appropriate in effectively managing INNS in Scotland? What improvements are needed?

Efforts to combat the impacts of Invasive Non-Native Species (INNS) should be strategically planned and implemented as early as possible to minimise environmental damage and associated costs. The precautionary principle should be applied, meaning that action should be taken to mitigate potential risks of INNS identified through risk assessments without waiting for concrete evidence of damage.

Efforts and resources should not be reallocated away from vital long-term management and control. However, improvements are needed to minimise introductions, including rigorous biosecurity measures, enhanced early detection systems, and rapid response capabilities, which will ultimately save costs in the long term. As stated in Scotland's 5-year Strategic Biodiversity Strategy Delivery plan, investing in prevention provides economic returns up to fifty times higher than trying to manage an INNS after it arrives.

g) Are there any gaps in the management efforts targeting particular INNS species, such as marine species, freshwater species and pathogens?

No response

h) Is the existing legislation used/enforced? What challenges exist in application and enforcement?

Responsibility for invasive non-native plants rests with landowners and occupiers. Under common law, there is an expectation that landowners should take reasonable steps to prevent invasive non-native plants growing on their land from causing a nuisance or injury to others. However, it is not an offence for an owner or occupier to have invasive non-native plants growing on their land. With this current system in place, we would like to emphasise the challenges faced by downstream landowners attempting to control invasive populations, which suffer from the consequences of the presence of INNS upstream.

NatureScot can make species control agreements (SCA) and species control orders (SCO) to require control of invasive non-native species. This discretionary power is aimed primarily at preventing high impact invasive non-native species becoming established in and spreading within Scotland. For species that are already widespread, such as giant hogweed, NatureScot can offer species control agreements to support coordinated control programmes, where inaction on a particular land holding is jeopardising the success of the programme. It is an offence under the Wildlife and Countryside Act 1981 to fail to comply with an SCO. There is no penalty for non-compliance with an SCA.

According to a 2022 [parliamentary question](#), during a five year period between 2017 and 2022, NatureScot did not issue any species control agreements. During this same period, Scottish Forestry issued one species control agreement for *Rhododendron ponticum*, and SEPA issued one for North American signal crayfish. The Scottish Government's Marine Scotland issued four species control agreements for *Didemnum vexillum*. None of these bodies issued a species control order.

We would make the following points:

1. Use of SCAs: As highlighted above, SCAs are rarely used in Scotland and we don't believe that this reflects the scale and urgency of INNS control in Scotland. Experience of our members would strongly suggest that a wider suite of legislative and enforcement tools are required alongside appropriate and commensurate funding being offered to support control.
2. Use of SCOs: The absence of issued SCOs indicates either a reluctance to use compulsory measures or a belief that voluntary agreements are sufficient. We believe that there is a strong case for enforcement action to be taken, but we recognise, particularly in the case of invasive plant species, that such action would need to be applied systematically in recognition that the source of such plants may be upstream. It would not be fair for downstream landowners to be punished if there is a lack of action upstream.
3. Resource and Administrative Constraints: We suspect that the low number of issued SCAs and SCOs may be a reflection of limited resources within the relevant bodies to identify, negotiate, and enforce these measures effectively.

i) Are national policies in Scotland for INNS coherent across sectors (e.g. forestry, agriculture)? Is there efficient co-ordination among sectors on INNS control?

The Non-Native Species Code of Practice sets out guidance on how a wide range of stakeholders including individuals, businesses and public bodies across sectors should act responsibly within the law to ensure that non-native species under your ownership, care and management do not cause harm to our environment.

Despite this framework, managing INNS often requires landscape-scale or catchment-scale efforts, and there is a lack of mechanism in place to support this coordination. The forestry sector offers a Forestry Cooperation Grant under the Forestry Grant Scheme to encourage landscape-scale collaborative projects between two or more landowners. Similar public funding options for INNS management that allow for cross-sector collaboration would be beneficial to overcome issues of fragmentation.

Failure to comply with the Code of Practice is not itself an offence. In general, the onus of preventing spread is placed on the landowner on a voluntary basis. The amended Wildlife and Countryside Act 1981 includes a number of offences relating to the release, planting, keeping, and sale of invasives species. However, there are inexplicable exceptions made for certain industries.

Tree species used in commercial forestry are exempt from INNS regulations via ministerial order under current legislation. As highlighted by ScotLINK in a recent report, the "Polluter Pays" principle does not apply to the commercial forestry industry as it does to other businesses dealing with non-native species. Consequently, the responsibility of managing the invasive spread of species like Sitka spruce falls on the public purse and environmental organisations (including FMS members), straining limited conservation budgets.

j) How does the approach in Scotland compare internationally? Is Scotland keeping pace with the EU and the global community on these issues?

Not answered

k) What improvements are needed in current legislative/policy frameworks to enhance the prevention, detection and management of INNS?

First and foremost, in response to the Kunming-Montreal Global Biodiversity Framework, the Scottish Government should adopt the target to reduce the rates of introduction and establishment of INNS by at least 50% by 2030. This target should be incorporated into Nature Restoration Targets in the proposed 2024 Natural Environment Bill.

As highlighted above, we believe there is a need to review the suite of legislative and enforcement tools available for INNS management and control.

The list of invasive non-native species maintained by the UK Non-Native Species Secretariat should be complemented with species-specific management action plans developed at the Scottish level.

Finally, adequate resources should be put in place to fund either a Scottish or GB-wide INNS Inspectorate to promote and maximise effectiveness of national INNS biosecurity efforts, with a focus on pathways of introduction.

Impact of INNS

Not answered

a) What do you consider are the key environmental impacts of INNS in Scotland across freshwater, marine and terrestrial species? Please provide specific examples with evidence where possible.

b) Are there specific species for which more impact information is needed? How could further information be gathered on these species?

c) Is there sufficient evidence on the potential cumulative impacts or risks from the combined effects of INNS and pressures such as climate change and other anthropogenic activities?

e) How can these gaps be addressed, and what are the key challenges/barriers to filling these gaps?

f) How accessible and comprehensive are publicly available databases on known and potential invasive non-native species? What improvements could be made?

g) What challenges and opportunities exist in making more information publicly available and how might they be addressed?