

Management measures for widely spread Invasive Alien Species (IAS)

Defra consultation response by Wildlife and Countryside Link August 2019

Wildlife and Countryside Link (Link) is the largest environment and wildlife coalition in England, bringing together 52 organisations to use their strong joint voice for the protection of nature. Our members campaign to conserve, enhance and access our landscapes, animals, plants, habitats, rivers and seas. Together we have the support of over eight million people in the UK and directly protect over 750,000 hectares of land and 800 miles of coastline.

This response is supported by the following Link members:

- A Rocha UK
- Amphibian and Reptile Conservation
- Angling Trust
- British Canoeing
- Buglife
- Institute of Fisheries Management
- National Trust
- Plantlife

- RSPB
- Salmon and Trout Conservation
- The Mammal Society
- The Rivers Trust
- The Wildlife Trusts
- Woodland Trust
- Zoological Society of London

GENERAL COMMENTS

Link broadly supports the management measures proposed in the consultation. However, we feel that some detail is lacking on an overarching strategy for management, and processes for decision-making and prioritisation of management of widespread species by Government. With tight resources, we suggest this is an important omission.

Although coordination of management efforts is referred to under specific actions in Appendix B, we feel there should be explicit recognition of the need for planned, strategic, coordinated and sustained action at the appropriate scale and over sufficient periods to deliver sustained environmental and other benefits. If management measures are undertaken in an unplanned, sporadic, opportunistic or piecemeal way, and if sustained action is not secured, widespread species will in most cases simply re-invade the control areas, re-establish, and the funding and effort that went into the control will have been wasted in the longer term. This is important given that a high proportion of management measures will be funded by the public purse. In addition, a haphazard management approach risks exposing a greater number of animals of the species concerned to potential suffering due to repeated, ineffective management actions.

We fully support explicit reference to the INNS priority hierarchy Prevention; Early warning/rapid response; Management. We suggest that this could be helpfully further articulated for the purposes of this exercise by emphasising that *control measures should be undertaken at the earliest invasion stage possible*. Often the establishment of targeted INNS will not be at its potential maximum, and strategic control at the right places could protect significant areas of the country from invasion.

There is limited reference to processes for decision-making and prioritisation in the consultation beyond the recognition, in paragraph 18, that management measures "shall be prioritised based on the risk evaluation and their cost." We interpret this statement in the Principal Regulation as an onus



on Government to undertake risk evaluation and cost-benefit analysis of management measures at the national scale, which should then inform and shape priorities for action at the local level. We are concerned that the only subsequent references to prioritisation in the consultation relate to Local Action Groups prioritising management measures in their local area (paragraph 29, bullet point 1; Appendix B, table 3, bullet point 8). We seek clarity on how Government intends to ensure decisions taken on management at the local level reflect national priorities and represent a fair and effective use of limited resources. In undertaking prioritisation, we suggest that overall cost-benefit (not just financial cost) and long-term sustainability are factors that should be considered.

In a recent evidence session for the Environmental Audit Committee, Biosecurity Minister Lord Gardiner and Dr Niall Moore, Chief Invasive Species Officer, referred to a bid that Defra is making in the Comprehensive Spending Review 2019 for an invasive species inspectorate¹. We wholeheartedly support this bid, and we recommend that an inspectorate, should one be created, has responsibility for prioritisation and strategic coordination of management measures for widespread species. There are 25 established species in England and Wales (14 of which are addressed in this consultation), compared to zero and nine for animal and plant health respectively, so it is disproportionate that INNS receives just 0.9% of the biosecurity budget and does not have comparable capacity to other areas of biosecurity². As a matter of urgency, Government must bring resourcing for prevention and management of INNS in line with the scale of the threat they pose (INNS are one of the top five drivers of global biodiversity loss according to IPBES³).

We also recommend that the measures under this programme should work alongside and inform control of other INNS not covered by the Principal Regulation, such as American mink, to ensure a coherent approach to INNS policy in England and Wales.

RESPONSES TO CONSULTATION QUESTIONS

Q6. What are your views on the proposed aims for the management measures set out in Appendix A?

Link broadly supports the proposed aims for management measures set out in Appendix A.

Aims for management measures for widespread plant species

We support the aims for management measures for widespread plant species. We support the New Forest Non-Native Plants Project in its recommendation that the aim be extended to management of widespread species found **upstream** of Sites of Special Scientific Interest (SSSIs), and rare and **scarce** native flora, and would extend this more generally to be explicit that *all control operations will be planned and undertaken at a scale that minimises re-invasion probability*. Failure to operate at the right scale – for example whole-catchment for aquatic plants – has been a key shortcoming of INNS plant control efforts in the UK countries to date.

In addition, the plans should also consider the timing of management operations. Management of certain species, such as Himalayan Balsam, should be targeted at times of year to maximize clearing before the plants set seed. However, the complication is that often, the true extent of invasion can

¹ http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/environmental-audit-committee/invasive-species/oral/103706.html

² https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=2051

 $^{{\}color{red}^3} \, \underline{\text{https://www.ipbes.net/news/ipbes-global-assessment-summary-policymakers-pdf}}$



only be identified late in the season, due to the rapid growth and proliferation rate of this species in the summer. Control measures such as strimming or pulling should thus be based on the most up to date extents that have been mapped and focus on removal of the plants before seeding takes place.

Aims for management measures for widespread animal species

We broadly support the aims set out for management of widespread animal species. We make some recommendations on how the ultimate aim of management measures can be made more explicit, and therefore avoid ambiguity when communicating these aims to the public and other stakeholders.

For widespread vertebrate species (Egyptian goose, muntjac deer, grey squirrel, slider terrapins), a key aim is "to eradicate in the wild where possible." Whereas for invertebrate species (Chinese mitten crab, signal crayfish), the comparable aim reads: "to eradicate in areas where feasible and benefits are sustainable." As outlined in our general comments, it is of paramount importance that management measures, particularly eradications, are undertaken only: using humane measures; when the outcome is achievable; where benefits are demonstrably sustainable; and where there is a strategy in place to ensure this is the case. As such, we recommend that "using humane measures, and where outcomes are achievable and benefits are sustainable" is added to the management measure aims after "to eradicate in the wild where possible" for all widespread vertebrate and invertebrate species.

Furthermore, "mitigation of impacts" is only referred to for the invertebrate species, and even here these impacts are not specified. Without referencing what is being protected from harm, the aim for management of widespread animal species might be taken to mean management for management's sake. We recommend that the text from Appendix A, paragraph 1, be included directly in each aim to ensure there is no ambiguity on why management is being undertaken.

e.g. Egyptian goose:

"To control the current wild population of this species, to reduce its further spread and to eradicate in the wild where possible... therefore reducing its impact on native biodiversity and ecosystem services, and wider socio-economic impacts."

e.g. Chinese mitten crab

"To reduce further spread of the species and mitigate its impacts... on native biodiversity and ecosystem services, and wider socio-economic impacts."

Q7. What are your views on the general management measures set out in Appendix B?

In answering this question, we note the following statement in paragraph 1 of Appendix B: "General management measures are, when focused towards management aims, an integral part of how widely spread species of Union concern are being and will continue to be effectively managed in England and Wales."

Referring to the point made in our general comments, we feel there ought to be greater emphasis in the consultation on the overall strategy of widespread INNS management. We feel that the blanket assertion that existing and future management efforts are 'effective' is misguided. Although there



are some examples of effective management (e.g. eradication of Coypu from England⁴), there are many ineffective examples too (e.g. grey squirrel⁵, *Didemnum vexillum*⁶). In these instances, a lack of either sufficiently early action, strategic consideration and/or planning at the right scale resulted in resources being deployed to tackle the problem, but only succeeding in a temporary fix, or potentially making matters worse. We urge Government to provide a clearer indication of how it intends to ensure that management of widespread species is as effective, humane and resource-efficient as possible. This should include a transparent framework for prioritisation and allocation of resources from the national to local level, including clear definition of which government agencies/NDPBs are responsible for taking an overview of INNS control in different areas (as in the Scottish Government Non-native Species Code of Practice⁷) and provision for robust monitoring and evaluation of efforts.

General management measures for all species

We feel that bullet point 6, table 3 ("the maintenance of coordinated action against widely spread species through country groups") is misleading. It implies that the current level of coordinated action provided through country groups is sufficient. We cannot comment on the Wales Working Group's role or effectiveness in this area, but we would argue that, in its current form, the England Working Group plays little to no strategic role in coordination of action against widespread species. That is not to say it should not play this role in future, if deemed appropriate and adequate resources are provided, but we recommend that reference to coordination by country groups be removed until such time as those groups have coordination in their remit. We also refer to the point made in our general comments about the potential role for an INNS inspectorate in this area.

We applaud the work undertaken by Local Action Groups in managing widespread species at the local level, and we support its inclusion as a general management measure (bullet point 8, table 3). Our general comments simply aim to maximise the effectiveness and sustainability of these admirable and valuable efforts in future.

We strongly support the management measures which are aimed at prevention of arrival of a species (bullets 1, 2, 3 and 9, table 3), given that prevention is by far the most cost-effective and least ecologically damaging means of INNS control. However, we note that implementation of Pathway Action Plans (PAP) is referenced under bullet point 2. As far as we are aware, only one PAP is complete so far (Zoos and Aquaria) and we are unclear as to the status of its implementation. We urge that the remaining high priority PAPs, as identified in the Comprehensive Pathway Analysis⁸, be completed and implemented as soon as possible.

We strongly support the aims relating to raising public and stakeholder awareness of species of Union concern and their ecological and socio-economic impacts (bullets 4, 5 and 10, table 3), given that recent research shows public awareness and understanding of invasive species has declined⁹.

⁴ https://academic.oup.com/biolinnean/article-abstract/38/1/39/2661254

⁵ https://aphascience.blog.gov.uk/2018/10/09/red-squirrel/

⁶ http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.456.7685&rep=rep1&type=pdf

⁷ https://www.gov.scot/publications/non-native-species-code-practice/

⁸ https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=1980

⁹ https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=1709



General management measures for widespread plant species

We broadly support the proposed general management measures for plant species set out in Appendix B.

In particular, based on the effectiveness we are seeing with Himalayan Balsam rust fungus treatments (work being carried out by the Wildlife Trusts in partnership with CABI), we believe there is immense potential for biocontrol management measures, and for coupling these with existing mechanical control.

However, we have one comment in relation to the sale of widespread listed plant species. In Appendix B, Table 4, bullet points 4 states that "the further encouragement of private horticulturalists, retailers, landowners and public gardens to promote the use of native species, and to safely remove and dispose of widespread plant species so as to reduce their number over time". Under bullet point 5, retailers are also included in the "ongoing education of private horticulturalists, retailers, land owners and public gardens on the need to act responsibly and not allow or encourage the spread of widespread species into the environment."

Under the Principal Regulation, widespread species should already be banned from sale. We suggest that, for retailers, a more specific bullet point be added that addresses this. For example, "retailers should ban widespread species from sale in their stores and online, and safely remove and dispose of remaining plant species from their stocks."

We also note the comments made about the need to update the Be Plant Wise campaign by the New Forest Non-native Plants project in their response, and support this recommendation.

Management measures for widespread animal species

We broadly support the proposed general management measures for widespread animal species. However, it would be helpful to state explicitly under bullet point 1 ("the use of approved, humanely conducted, lethal control measures including targeted culls, trapping and shooting") that lethal control measures should only be used as part of a coordinated management approach, in pursuit of a defined objective where there are demonstrable and sustained benefits to native wildlife that outweigh the negative impacts on the welfare of the targeted species. For example, eradication of black rats from Lundy Island has led to a tenfold increase in Manx Shearwaters¹⁰, and similar conservation benefits for sea birds are developing following rat eradication in the Isles of Scilly¹¹. This approach would be consistent with the concept of systematic planning, set out in Dubois et al. 2017 'International consensus principles for ethical wildlife control', which states: "To prevent unnecessary harm, decisions to control animals should be integrated into a plan for systematic long-term maintenance of the desired outcome." We also suggest that ethical review be incorporated into the complex decision-making process around eradication of widespread animal species to ensure that the maximum benefits are obtained with the minimum amount of suffering for the target animals.

Bullet point 6, table 5, references "the encouragement of stakeholders involved in control efforts to establish and maintain coordinated management partnerships at the landscape-scale." While we agree that this is an essential management measure, we would argue that there is a role for

 $^{^{10}\,\}underline{\text{https://www.telegraph.co.uk/news/2019/05/28/seabird-numbers-soar-15-year-rspb-conservation-project-kill/}$

¹¹ https://www.rspb.org.uk/our-work/conservation/projects/isles-of-scilly-seabird-recovery-project/



Government in overseeing and guiding landscape-scale stakeholder partnerships, given that said partnerships will ultimately be delivering Government policy such as the GB Non-Native Species Strategy. As such, we recommend that this is stated more clearly in the above management measure.

We do not feel that the wording of bullet point 2, table 5 ("the ongoing encouragement of private collections and landowners to reduce or remove individuals over time") effectively conveys the spirit of the Principal Regulation. We suggest it be strengthened so it leaves no ambiguity around the need to reduce numbers of widespread animal species in captivity over time. For example, it could read: "the strict enforcement of regulations pertaining to the prevention of the spread of INNS through breeding programmes."

Q8. Are there any additional actions you think should be used as general management measures for particular widely spread species?

We recommend that, for agreed priority target species, Government seeks to bring stakeholders (including scientists and NGOs) to develop a national strategy for management. After which, the development and funding of operational programmes to deliver that strategy should be a shared priority. The successful Saving Scotland's Red Squirrels partnership embodies this approach and could be a useful model for other INNS control efforts¹².

In relation to the control of invasive plants, management plans should promote subsequent efforts to improve or enhance cleared areas, including through revegetation with native species. Large, bare areas will be particularly vulnerable to re-invasion so management efforts need to include site / habitat rehabilitation if control efforts are to be sustainable.

Q9. Are there any actions that you think should not be used as part of a general management measure for a particular widely spread species?

There are no proposed actions we think should not be used as part of general management measures for widespread species.

Q10. What are your views on the proposed licensable management measures set out in Appendices C & D?

Link will not comment on the proposed licensable management measures set out in Appendix D relating to Signal crayfish. Individual Link members will submit their own responses to this appendix.

We broadly support the licensable management measures proposed in Appendix C. We would recommend, however, that bullet points 2 and 6, table 7, need further consideration as they do not apply equally to all species included under these measures. Any measures need to consider the ecology and behaviour of the species in question.

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¹² https://scottishsquirrels.org.uk/



Bullet point 7 proposes "the removal of populations from the wild, and their subsequent keeping under licence at a facility as part of non-lethal eradication efforts, where the total removal of a small population from the environment could be assured." Terrapins, for example, are present in the wild in low numbers, and they do not breed, so it would be appropriate and feasible to remove small, isolated populations from the wild and subsequently keep them in a licenced, regulated facility. Muntjac deer and grey squirrel, on the other hand, are present in much greater numbers and they breed prolifically. It would be neither realistic nor humane to capture large numbers of these species and keep them in captivity. As such, we emphasise the importance of the latter part of bullet point 6 ("where the total removal of a small population from the environment could be assured") and note that this licensable management measure should not apply to muntjac deer or grey squirrel on mainland Britain due to their population size and ecology.

Furthermore, these species will continue to breed and it is inevitable that individuals, particularly juveniles, will continue to be admitted to rescue centres. Again, in this scenario it would be unrealistic, unsustainable and inhumane to keep all rescued muntjac deer or grey squirrel in captivity and we would not support the measure proposed in bullet point 2 ("the keeping of animals taken into captivity to prevent their release back into the environment") for these species. We understand and support the Principal Regulation's requirement that management measures must be aimed at population control, containment or eradication. We also believe that euthanasia should be a last resort that is employed only when an animal's welfare would be compromised were it not to be euthanised. Government should be transparent about the fact that, if enacted, the management measures proposed in bullet points 2 and 6 will lead to an increase in euthanasia of grey squirrel and muntjac deer, because they are not suited to being kept in captivity. Consequently, Government must ensure that facilities which will be required to undertake euthanasia are given the necessary guidance to do so humanely.

Animals that are kept in captivity must be kept only in appropriate facilities which provide for their welfare needs. As yet, this area is unregulated. We seek clarification on whether these establishments will be defined in law and subject to some form of regulation, in order to ensure that they not only comply with the Enforcement Order but also with the Animal Welfare Act. We also seek clarification under what circumstances a licence would be granted for an animal to be kept in captivity to prevent its release back into the environment.

Q11. Are there any additional actions you think should be allowed as a licensable management measure for a particular widely spread species?

We have no further suggestions for licensable management measures.

Q12. Are there any actions that you think should not be allowed to be used as part of a licensable management measure for a particular widely spread species?

A management measure that may be proposed by other stakeholders is the use of gene drive technologies such as CRISPR-Cas9. This would entail a number of genetically modified individuals being released into the environment to either control or eradicate a target population. We urge Government to exercise extreme caution with regard to use of this novel technology for control or eradication of any widespread species. Evidence of its safety to use in the natural environment is limited. It is essential that Government employs a precautionary approach to gene drive technology.