Written evidence submitted by the National Farmers Union

1. The NFU represents 55,000 members in England and Wales, involved in 46,000 farming businesses. In addition, we have 55,000 countryside members with an interest in farming and the countryside. We welcome the opportunity to respond to the Environmental Audit Committee inquiry on Invasive Species. Given our members interests, we have chosen to respond to the Committee’s questions from an agricultural perspective.

Summary

2. Invasive Alien Species (IAS) are species that are non-native to a specific geographic that they have managed to establish themselves in. These species are on the rise as a result of globalisation in trade and transport, often traveling in the ballast water of ships or even through other human activities such as tourism, for example, traveling on luggage. IAS introductions can be accidental or deliberate, once the species are prominent in the environment of the new location, they can have negative and even detrimental impacts on human and animal health, the economy and the environment.

3. IAS are widespread across the UK countryside and can cost the agricultural industry significantly either directly through their control or indirectly due to the impact on farming businesses each year. The total estimated cost to the British Economy of IAS, estimated in the CABI report1 is 1.7 billion per annum. Much of the costs of controlling IAS are picked up through the land manager and this can have a damaging impact on the ability to grow food. This is a disproportionate impact on the agricultural industry.

4. In the UK it is estimated there are nearly 2000 established non-native species2. This is predicted to increase with climate change and continuous increasing in world trade and global tourism. There is potential for any non-native species to become invasive if they cause nuisance. Future climate change poses even more risks to non-native species entering the UK.

5. IAS are globally one of the biggest threats to biodiversity, yet public awareness surrounding IAS is very limited. In the event the UK leaves the EU, there is scope to improve the IAS strategy, including species of concern list specific to the UK.

6. Future priority should be to ensure the correct funding and resource is allocated for predicting preventing and controlling invasive species. Crucially this should not financially burden the land managers whose land these species often end up establishing.

Full Response

Introduction

7. IAS are those that establish themselves in a location that they are not native to, if conditions in the new geographic are favourable certain species can thrive and this can lead to negative implications; IAS can provide a nuisance to human and animal health, the economy and the environment in the UK and globally. IAS arrive in the UK through various travel mechanisms, including trade and tourism, they may become established relatively quickly and cause an array of negative impacts including:

- Transmission of disease
- Out competition of native species
- Predation of native species
- Increase flood risks
- Infrastructure risks

8. The risk of new IAS increases with increased tourism and global trade, if the UK leaves the EU, and if global trade increases and opens up new trading partners then this risk is potentially heightened. It is also predicted that global climate change will increase the risk further with more favourable conditions driving species to live in locations they have previously struggled to thrive in. Often, IAS have no native predators and will thus rapidly establish, once they have reached this stage controlling and managing their impacts can be incredibly difficult and a huge financial burden. This should be prevented at all costs, and

the NFU supports the contention that early eradication is most cost effective and successful mechanism to
tackle IAS.

9. The NFU supports the announcement of the Invasive Alien Species (enforcement and permitting) Order
2019 and welcomes the introduction of more tight regulation surrounding releasing non-native species.
NFU believes every possible method to prevent or eradicate a species of concern early on should be
encouraged. This is a more cost effective and successful method of control.

How well is the UK and its overseas territories managing the impact of invasive species and controlling the
risks of further invasion?

10. EU regulation 1143/2014 on Invasive Alien Species was enforced in January 2015 which is still fairly
new in terms of examining its success. The regulation provided a set of measures to be taken across the
EU in order to manage the risk and threat posed by invasive species. Three major categories were
devised; prevention; early detection/rapid eradication and management. The work is ongoing and Natural
England are still to consult and agree action plans for many of the species of concern by October 2019.

11. Pre-2015, the UK was ahead of many other countries and has been referred to as a world leader with
regards to IAS, the UK has significant expertise in non-native species, which includes the area of risk
analysis and rapid response eradication. The 2015 regulations were in an attempt to bring all Member
States up to the same level of confidence in managing and preventing IAS and also to establish a
necessary communication platform to strengthen cross border knowledge exchange.

12. In the event that the UK leaves the EU, the UK must continue to engage with Member States. The threat
from various routes (tourism, trade and climate change) is increasing, so the UK and other overseas
territories must implement more stringent framework and resources into preventing and managing the
risks going forward in order to maintain the level of success that currently exists.

13. Public awareness is currently very low. More educational programmes and communication needs to be
delivered to ensure the public are aware of the implications IAS pose and the reasons for eradication
mechanisms. This will reduce negative public opinion in the case of an emergency eradication or rapid
response.

Of those that are already in the UK, which invasive species are posing the greatest harm to human, animal
and plant health?

14. Human, plant and animal health are threatened by invasive species both directly and indirectly. Many
species cause a significant impact on the countryside, amongst the worst are various species of non-native
deer including the Muntjac. Deer cause a nuisance to forestry and rural landscapes: they are often very
widespread and damage boundaries, crops, trees and can carry diseases (e.g. TB) that can affect livestock
and pose significant threats to farm businesses. Muntjac deer are an example of a non-native species that
have established widely without the presence of a natural predator, control of these species is expensive
and ongoing and often picked up by the agricultural industry, the muntjac deer is an example of where
control and monitoring is in place opposed to a national eradication plan due to the extent of the problem.
This level of establishment should be prevented at all costs for IAS that are currently not in the UK but
may be introduced in the future. An additional example of an animal IAS is the grey squirrel which
causes nuisance UK wide. Grey squirrels are particularly damaging to profitable cereal crops and semi
natural woodlands, again are too widespread and prominent that a national eradication plan is not in place.

15. Japanese knotweed is an example of a plant IAS that is widely established across rivers and streams in the
UK and causes a financial burden to land manager who often pick up the costs of controlling this
invasive. Floating pennywort is another example of an aquatic plant IAS. Floating pennywort establishes
easily in lakes, ponds and other water-based habitats and control is expensive and difficult due to its
ability to rapidly grow from a small fragment, damage is extensive as pennywort grows and quickly
spreads to dominate water bodies and may lead to significant drainage implications. This species is very
difficult to eradicate completely and instead, efforts are in controlling, similar to Japanese knotweed. An
example of a severe threat to UK agriculture would be if Asian hornet were to establish. The UK dealt
effectively and efficiently with the sightings of the Asian hornet in 2018 and there have been no further
sightings since October 2018, however the threat remains.

16. Native animal species may be directly predated by new invasive species or the invasive species may be
better competitors and out compete their native rivals in environments (e.g. grey squirrel). Invasive
species may be carriers of disease, such as certain deer populations can be carriers of TB which pose
threats to livestock and native species. Plant health can be threatened by invasive species, again through direct mechanisms for example, eating crops or through carrying diseases.

17. It is thought invasive alien species are one of the major threats to global biodiversity\(^3\). Any future biodiversity framework should be clear as to how the UK will continue to reduce the threat.

**What are the risks of invasive non-native species migrating to the UK from future climate change?**

18. Future climate change poses a high risk to UK food production through many routes, one being the spread of increased numbers of invasive non-native species. Climate change increases the threat of non-native species being able to establish is the UK. Said species may migrate over to the UK independently or may travel in the various travel mechanisms outlined previously but the change in weather may mean the climate is suitable when it previously may have been unfavourable. This poses a risk to livestock through new diseases potentially entering and thriving the UK- the appearance of the Bluetongue disease (which is spread from animal to animal through midges) in the UK is clearly related to a warming climate – spreading more rapidly in a warmer climate.

19. Plants are also at risk; UK arable and horticultural farming may also suffer if new diseases enter the UK. It is important there is funding available to monitor, predict, prevent and tackle the future threat of invasives through climate change. UK must ensure there is a robust framework in place to prevent the entry of non-native species and in the instance that a species does enter the UK accidentally, all efforts should be made to tackle this on arrival. This will require good monitoring, trained professionals with a robust understanding of what to look out for and financial resources.

**What actions should the UK take to mitigate the risk, or adapt to, climate migrations of invasive species?**

20. The UK should ensure appropriate funding is allocated to the various stages of invasive species prevention and control. In the first instance, border control should be robust. They should be alert to the fact that some species that may in the past have not survived UK climate may be better suited to a slight shift in climate. Appropriate resources should be invested in to train and maintain expertise at the borders especially.

21. There needs to be increased public (farmers and growers included) awareness of what an invasive species is and the risk and consequences. There is little general knowledge as it stands and yet this is one of the major threats to global biodiversity.

22. The UK should develop a robust deliverable strategy and work in close collaboration and partnership with EU Member States and international trade partners. This should include predictions and modelling mechanisms to determine risks and prevent the impact as much as possible, as well as including robust procedure to be followed in the instance of the preventive measures failing.

23. The UK should establish a reporting framework where farmers and growers can report an incident free of risk and inform the appropriate body of the presence of an invasive in a given location.

**Where should the four nations prioritise resources to tackle invasive species?**

24. Strong common regulation will be required from all four nations to ensure the risk of IAS is kept under control. NFU believes that rapid response plans for early eradication or control mechanisms are the most cost effective. For this to be successful, early warning systems must be established, that focus on key identified areas. Contingency plans should also be prepared. Funds should be easily available for rapid response plans and trained staff should be prepared in the case of an emergency rapid eradication project.

25. On occasions, if a species is not eradicated early, the cost can increase to such an extent that eradication is no longer feasible- Japanese Knotweed is an ongoing issue and an example of an invasive alien species that will unlikely be eradicated. In such instances, control becomes priority over eradication. This must be prevented at all costs.

26. However, whilst prevention should be the priority and focus, this should not come at the detriment of strong control mechanisms to tackle those species that are already established.

**How can the risk of trade and future trading relationships bringing non-native invasive species to the UK be mitigated?**

27. International trade is the most common way invasive non-native species travel globally, either directly as traded goods or through unintentional transportation by travelling with other traded goods. Little is currently confirmed around what trade will look like in the event of EU exit, however it is predicted that

\(^3\) https://www.iucn.org/theme/species/our-work/invasive-species
our current smaller trading partners are likely to increase in scale, increasing the risk of an array of new non-native species reaching and establishing in the UK.

28. Import and export controls in post Brexit trade should be strong. In the event the UK leaves the EU and establishes increased new global trading partners, for example with CPCTT (Comprehensive and Progressive Agreement for Trans-Pacific Partnership) countries, this could pose increased threats of IAS establishment.

29. Border inspections must be robust and detailed and should take into account the potential threat of packaging material (e.g. any wood-based material that could transport invasive species such as pallets, boxes or crates).

30. The UK must ensure trade regulation is strong to reduce risk of non-natives entering the UK to a minimum. Resources need to be available to ensure border inspections are robust and investment in expertise that understand the potential threats and the various pathways for the introduction of IAS. The UK has significant expertise already in IAS, especially in risk assessments and this should be continued and enhanced.

31. The NFU supports the new legislation to be implemented from October of this year but encourages strong enforcement and monitoring to ensure the regulations are being adhered to and species are not intentionally (or unintentionally) being introduced to this country.

How effective have the European Union’s Invasive Alien Species Regulations been at addressing and tackling invasive species?

32. The EU invasive alien species regulations came into force in January 2015. The list of species of concern have only been agreed and devised within the last few years, the initial being agreed in 2016 and the revised list in 2017 thus it is hard to comment how effective said regulations have been.

33. The area of risk assessments (RA’s), with regards to the EU regulations on IAS has significant flaws. RA’s are sometimes based on literature analysis and even grey literature if the evidence is lacking. More robust scientific evidence should be required and used to ensure the correct species of concern are identified. Any risk assessment must balance the interests of ecological and socio-economic factors and this should be achieved by a diverse panel of experts sitting on the scientific forum representing all impacted industries. The EU commissions scientific panel is predominantly biologists with expertise and interests in ecology and minimal knowledge of socio-economic importance. Additionally, the EU commissions scientific panel lacks fair representation from practical land managers who have real experience controlling these species on the ground.

34. Creating a common approach across various countries and a communication platform and not boundary restricted regulations for dealing with IAS is invaluable. Potential gains can be had through the collective endeavour, and should the UK leave the EU this is something that should continue.

35. Challenges arise by having to balance cross border interests- the division of the species list is an ongoing example of this, with conflicts of interest between Member States. A challenge for the EU scientific forum has been and continues to be to listen to conflicting interests and make an informed decision when Member States disagree over a certain species inclusion, (for example the American mink. Some species are financially beneficial to certain countries yet provide a nuisance to others. The inclusion of said species on the species of concern list restricts the growing/keeping of said species in controlled environments and becomes a burden to the countries that are economically supported by the species.

36. This is something going forward the UK could devise alone, with respect to immediate and most threatening species specific to the UK whilst still maintaining communication and involvement in a cross-border strategy.

In the event of EU exit, how should the UK establish its replacement for the European Commission’s scientific forum to update the species list of concern?

37. In the event of the UK leaving the EU, the UK should work quickly to establish an independent body of experts to ensure the UK has a strong collective of individuals that draw on knowledge cross industry. Economic impacts need to be considered in the decision making.

38. The EU regulations have been weak on considering economic impacts posed by invasive species.

39. The European Union is a very large diverse geographical landscape encompassing a huge range of economic activities and interests. Consequently, the effect and prioritisation of IAS differ significantly depending on the geographic. This has posed significant challenges for the scientific forum in devising both the initial and revised species of concern list as part of the EU regulations.
40. These challenges could be reduced if the UK is able to independently devise a list of species of specific concern to the UK as the conflicts of interest depending on Member State will be diminished. However, it is important to ensure the correct, industry wide expertise and skillset sit on the forum which should ensure all socio-economic interests are represented.

41. The socio-economic benefits of species need to be fully considered by qualified experts.

42. The EU’s scientific forum is predominantly biologists who have extensive scientific research experience and knowledge but there is a gap in experts representing socio-economic impacts, for example ecological economists. The forum should be equally represented so that any data and information should be considered in a balanced way to consider both ecological and economical impact in order to fully understand the impacts of a species. In the event the UK leaves the EU and a new UK specific scientific forum is formed, this should consist of individuals informed and with experience in risk analysis assessments, the EU risk assessment (RA) structure and process has significant downfalls. The EU RA often lacks robust scientific evidence which is fundamental going forward, for example, literature analysis of studies in locations differing to the location in question is often inadequate.

43. As previously stated, it is preferred and necessary to act early before an IAS is established which could lead to insufficient evidence being available for the RA. In this case, other methods of data collection should be used, such as those referred to in Art 2 (3) (other publications, expert opinions, information collected by Member States’ authorities, official notifications and information from databases, including information collected through citizen science). In this case, the RA should clearly indicate that the evidence is not peer-reviewed, and this should be considered in the balance of evidence.

44. Additionally, with regards to species that may feature on a future UK list of concern, thorough information should be readily available as to why these species have been included, the threat and concerns and what this means to industry. The EU species list of concern lacks sufficient information as to the basis for the inclusion of certain species. It is also important to understand the criteria of a species being included on the list and the management changes as a result of this.

How should the UK work with the European Commission and others internationally to reduce the risk of invasive species?

45. Collaboration between the UK and the EU and any other trade partner globally is fundamental and a priority when developing an IAS strategy. The early warning provided by species arriving and establishing in neighbouring territories is invaluable. Engagement must be continuous, and partnerships established working nationally and internationally sharing information on the species of concern list and proposed action plans. Should the UK leave the EU, there is potential opportunity to further enhance and improve the EU regulations to fit UK conditions. Certain non-native species may be economically beneficial to the UK, but not so in various other countries and thus the UK should establish a specific approach to IAS and, with input from industry wide specialists (including economists) develop a UK specific species list of concern.

Additional Comments:

46. The ornamental sector is at particular risk to the threats of invasive species. The UK should establish and implement safeguards to protect the sector from the introduction of novel plants that may become a nuisance if unintentionally allowed to spread, Rhododendron is an example of this.

47. Where invasive species are already established and there is no national eradication plan in place, they should be controlled at a local level, with sufficient funding to ease the unfair burden being carried by land managers.

48. The future of Plant Protection Products poses a threat to the eradication as current control mechanisms for many invasive alien plant species are reliant on the use of plant protection products. If future regulation restricts the use of certain chemicals without replacement the issue of IAS will only increase, with current species and future species that may be introduced. Product development to tackle IAS is not an option as products take many years to reach authorisation, in which time a species may become out of control. As an example of the challenge faced, the herbicide glyphosate is an extremely useful tool in the control of weeds and IAS, yet its future is under debate despite regulatory bodies around the world having looked at the scientific evidence and concluded that glyphosate poses no risk to people when used correctly. Glyphosate reduces the need to use other herbicides, helps to protect soil and cuts greenhouse gas emissions by reducing the need for ploughing.
49. IAS is a concern for our industry through the issues outlined in this response. A strong framework and strategy to deal with both the threat of IAS before and after their establishment is fundamental should the UK leave the EU. Adequate funding must be allocated to tackle every stage of IAS, prevention and early eradication are favourable and far more cost effective but there should exist a funding resource for species that, beyond these stages do establish themselves, individual businesses should not pick up the burden and cost of failures earlier in the process of detection and prevention.

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