

iCASP Response to Environmental Audit Committee inquiry: Sustainable tourism

September 2019

About iCASP

1. Yorkshire Integrated Catchment Solutions Programme (iCASP) is a five-year (2017-2022) Natural Environment Research Council-funded partnership established to support the UK Industrial Strategy. iCASP aims to generate £50 million+ of benefits to Yorkshire's economy by influencing investments, informing policies and strategies, identifying cost savings, and creating new products and jobs. It will do this through projects that support the use of environmental science in catchment management. As well as regional impact, iCASP is aspiring for national and international influence through sharing the experience of regional projects at the national level, and by exporting catchment management expertise and products internationally.
2. iCASP partners are: University of Leeds, University of Sheffield, University of York, National Centre for Atmospheric Science, Arup, Bradford Metropolitan Borough Council, City of York Council, Dales to Vales River Network-Yorkshire Dales Rivers Trust, Environment Agency, IUCN UK Peatland Programme, JBA Trust, Leeds City Council, Linking Environment and Farming, Met Office, Natural England, National Farmers' Union, Pennine Prospects, Yorkshire Water, Yorkshire West Local Nature Partnership, and Yorkshire Wildlife Trust. iCASP also works with additional organisations through its projects.
3. iCASP is based out of water@leeds at the University of Leeds, one of the largest interdisciplinary centres for water research in any university in the world.
4. iCASP has already had success in providing evidence for major flood risk mitigation business cases in Yorkshire, and supporting the development of the Leeds City Region Green and Blue Infrastructure Strategy.
5. Further information about iCASP can be found on the [iCASP website](#)

Response to Inquiry

How should the UK tourism industry balance the need to encourage tourism whilst protecting fragile environments?

6. Tourism (be it tourists from overseas or tourists within the UK) and tourism related activities in the environment pose a risk of spreading Invasive Non Native Species¹. It is important that we work to reduce such risks, by embedding good surveillance and biosecurity at entry to the country as well as at environmental sites where tourism activities take place.
7. An invasive non-native species is any non-native animal or plant that has the ability to spread causing damage to the environment, the economy, our health and the way we live². Invasive Non Native Species (INNS) cost the UK over £2bn pa and are an increasing threat to biodiversity and ecosystem services. The main driver of the introduction (introduction to the UK) and secondary spread (spread of INNS from one region to another within the UK) is human activity such as trade, agriculture, transport, and recreation including tourism^{1,3}. This is because invasive species can be moved around by people, vehicles and equipment used out in the environment. For example, just a few animals or plant seeds can become lodged in equipment/on a vehicle and be inadvertently transferred to a new habitat where they can form a new infestation of nuisance invaders.
8. Tourism is a major pathway for the spread of non-native species¹. Tourism and outdoor tourism activities can result in the movement of large numbers of people, vehicles and vessels from geographically diverse areas, often fragile environments. A meta-analysis of the literature showed that the abundance and richness of non-native species are significantly higher in sites where tourist activities take place than in control sites¹. This pattern was seen in terrestrial, freshwater and marine environments. Tourism was associated with the introduction of invasive species from a range of taxonomic groups (plants, animals and pathogens). For example, recreational boating is a key driver of the introduction of invasive species as well as their spread to new waterways. Similarly, a range of other activities in the environment can spread INNS.
9. In addition, infestations of INNS can also impede recreation and tourism. For example, aquatic plant INNS can block recreational boating and angling. Giant hogweed can cause serious skin burns, hence infestation of riverbanks makes sections of our waterways inaccessible to the public.

¹ Anderson LG, Rocliffe S, Haddaway NR, Dunn AM (2015) [The Role of Tourism and Recreation in the Spread of Non-Native Species: A Systematic Review and Meta-Analysis](#). PLoS ONE 10(10): e0140833. doi:10.1371/journal.pone.0140833.

² [GB Non Native Species Strategy](#)

³ Seebens H, Blackburn TM, Dyer EE, et al (2018) [Global rise in emerging alien species results from increased accessibility of new source pools](#). Proc Natl Acad Sci U S A 115:E2264–E2273. doi: 10.1073/pnas.1719429115

10. Managing the pathways by which non-native species are introduced and spread is considered the most effective way of preventing species invasions and is key to the EU Invasive Alien Species regulation⁴ and the GB Non-Native Species Strategy². It is important to reduce the introduction and spread of INNS as a result of tourism and tourism activities. This is important both to guard against the introduction of new species, but also to slow the spread of invasive species established in some UK regions to new regions, and so guard against increasing environmental damage and the economic costs of infestation and of controls.
11. Introduction of invasive species as a result of tourism can be reduced through surveillance and biosecurity at borders, taking New Zealand as an exemplar of good practice, and through legislation to ensure that any equipment and vehicles to be used in the environment is free of contamination.
12. Spread of invasive species by tourism activities can be reduced by ensuring that good biosecurity practice is in place in the environment and at outdoor events. Guidance is available from the GB Non Native Species Secretariat⁵. An example of the application of this is the Cumbria Freshwater Invasive Non Native Species Initiative⁶ which developed resources and guidelines for outdoor events in the Lake District National Park.

Should the UK Government take more responsibility for the impacts of outbound tourism, for example waste and resource management, protecting habitats and species and community and cultural impacts?

13. Outbound tourists similarly pose a risk of spreading animals and plants (be they native or invasive in the UK) to their destination where they may become a nuisance. Animals and plants that are well adapted to one habitat may nonetheless become a pest when moved to a novel environment. Similar attention should be given to reducing the risk of spreading potential invaders by ensuring that tourists who intend to undertake outdoor activities in other countries follow good biosecurity practice with their equipment and vehicles.

Future work to support this Inquiry

14. iCASP has just started a project to support local authorities in Yorkshire to develop biosecurity practice to reduce the spread of aquatic invasive non-native species. iCASP would be happy to provide the Committee with further information on this project and/or to elaborate further on the responses provided above - please contact the [iCASP office](#)

⁴ [EU Invasive Alien Species regulation](#) 1143/2014

⁵ [Biosecurity and Prevention](#)

⁶ [Cumbria Freshwater Invasive Non Native Species Initiative](#)