

IWT response to wild boar/hybrid/feral pig risk assessment

# **Organism Information**

The IWT agree that any reintroduction carried out should use genetically pure wild boar and not wild boar/domestic pig hybrids or feral pigs.

The IWT takes issue with the following paragraph "The species has been designated as an invasive species in Ireland (refer to Question 10), which is seen as controversial by some because of uncertainties about the historic status of the species in Ireland (McDevitt et al., 2013). Regardless of whether the species was at one time native to Ireland or not, the current population found on the island are not genetically pure wild boar and are majority are best described as feral (domestic) pigs and a few may be hybrids. This makes the controversial debate on restoration of the species as a native largely redundant."

The fact that to date the only animals that have been recorded have been genetically identified as hybrid or predominantly feral pig does not make the debate surrounding the restoration of wild boar redundant. If the species continues to be classified as an invasive species then how could a reintroduction be justified? Why would you reintroduce an "invasive species"? At the very least pure wild boar could be declassified and the designation of hybrids as invasive could be justified as being a threat to a future reintroduced pure population. The debate is also far from redundant as currently animals with a similar history of colonisation to wild boar (red deer, pine marten, pygmy shrew, red squirrel) are not currently classed as invasive but are instead classified as native, even though it is likely they were also ancient introductions (Searle, 2008). Using the fact that wild boar are an ancient introduction as a justification for designation as an invasive species is in the IWT's mind a redundant argument as you would then have to classify the majority of the terrestrial mammal fauna as such.

The document cites evidence from other parts of the world where wild boar are a serious invasive species and states "Because of concerns about further releases, disease transmission and unspecified ecological risks, wild boar have been classified as an invasive species in Ireland". It is scientifically inaccurate to use information from parts of the world where wild boar were never native to assess the impacts of wild boar in Ireland where they historically occurred. If you are to assess the ecological

impact of wild boar here, then data from its' native range in Europe, the biogeographical region that Ireland belongs to, should be used.

# **Detailed Assessment: Section A – Entry**

In relation to the statement that "There is no reliable data that exists to allow a reasonable assessment to be made of the number of animals that may, or may not, be brought into Ireland." Data should exist in the Dept. of Agriculture as to how many captive populations of wild boar/hybrids occur in ireland. It is also stated that "It is likely that this species can enter Ireland without the knowledge of the competent authorities. This is substantiated by the records of animals recorded in Ireland that indicate successful introductions have taken place without the knowledge of the competent authorities." Given that the genetic results from animals shot in the wild in Ireland indicate that animals are hybrid and are often quite tame it is most likely that the animals being illegally released into Ireland are being purchased from wild boar farms, rather than genuine wild animals being imported from Britain or the continent.

### **Detailed Assessment: Section B – Establishment**

It is stated that "They (wild boar) may also compete with wild deer on wild resources within woodlands/forests". Could the authors please provide evidence of negative competition between European deer and wild boar?

### **Detailed Assessment: Section C – Spread**

No comment

# **Detailed Assessment: Section D – Impact**

This document cites data from the introduced range of wild boar in relation to the negative impacts of rooting on native ecosystems. Data from North America, South America and Australasia is not relevant to European ecosystems that have evolved with wild boar over millions of years. To assess the impact of roosting activity on ecosystems in Ireland then data from Europe, where wild boar interact with plants and animals extant in Ireland, would be more appropriate. Studies from Britain and Sweden have shown that rooting activities of wild boar have a positive impact on the species diversity of the ground flora of forests, particularly small seeded species like orchids and trees like pine and birch (Welander, 1995; Sims, 2005). Wild boar has also been shown to effectively control bracken, which is considered to be an "invasive native" in some habitats

(http://www.treesforlife.org.uk/forest/missing/guisachan200805.html). It could be argued that bracken is a problem due to the extinction of wild boar in the British and Irish environment. It is also stated that "It may also significantly impact on priority ground flora of woodlands and forests that do not occur in Great Britain but may be found within Ireland." Given that all Ireland's native ground flora occurs in Europe and is sympatric with wild boar (including the Lusitanian flora) this concern is debatable but certainly worthy of study. This assessment also cites the impact of wild boar rooting activities facilitating the spread of invasive plant species. While data from the non-native range of wild boar rooting aids or hinders the survival and dispersal of invasive plants. Research in Europe has shown that wild boar is an important disperser of native plants (Schmidt et al. 2004).

While it has also been shown that wild boar can cause both economic and environmental damage in Europe when at high densities (due to a lack of predators, supplementary feeding, consumption of agricultural crops and forced enclosure), this is also the case for red deer, which is currently classified as a "native" species, is legally protected and is not being assessed as an invasive species in an Irish context.

### **General Comments**

Any assessment of the environmental impacts of wild boar in Ireland should only use data from Europe as Ireland lies within this biogeographical region. It would be incorrect to use data from the introduced range of wild boar/feral pigs such as North America, Australia and New Zealand as these ecosystems have no ecological history with this species and have a very different floral and faunal assemblage. The Irish Wildlife trust objects to the classification of wild boar in Ireland as an invasive species in Ireland for two reasons.

- 1) We do not believe that the fact that this species is likely an ancient introduction justifies this classification as the introduction occurred very early (around 8,000 years ago) in the temperate history of the island after the last glacial maximum and occurs at the same time as the species naturally colonised Britain (Yalden, 1999). Therefore the Irish environment and in particular the forest environment developed over time with wild boar and the associated keystone environmental impacts of the species that have been reported in other parts of Europe. In addition, the colonization history of wild boar in Ireland is shared by other species in Ireland including the red deer, which was introduced during the Neolitic period (Carden et al 2012) and yet is protected under the Wildlife Act and is regarded as a "native species". In fact even fallow deer and sika deer, known introductions, are legally protected in Ireland and it would be strange that wild boar would be designated an invasive and unprotected by law when these species, particularly the Japanese sika deer, are protected.
- 2) The use of economic impacts as a justification for designating wild boar as an invasive species contradicts the Convention on Biological Diversity's definition of an invasive species which is "an alien species which becomes established in natural or semi-natural ecosystems or habitat, is an agent of change, and threatens native biological diversity". Economic impacts cannot be considered as native species can also have negative economic impacts. For the wild boar to be classified as an invasive species in Ireland it would need to be proven that there would be negative impacts on native habitats and species.

The IWT is against the illegal release of wild boar/hybrid/feral pigs. Any reintroduction of wild boar would have to be preceded by a detailed feasibility study and consultation process and if deemed feasible and acceptable by members of the public then only genetically pure wild boar should be selected for release. The reintroduction of wild boar could have a positive impact on Irish forest ecosystems by restoring the natural disturbance regime caused by wild boar rooting which encourages tree regeneration, increases ground flora species diversity and controls bracken and bramble based on data from Britain and Europe (see above). However, given the length of time that boar have been extinct here, studies should be conducted in a controlled situation to investigate the impacts this species would have on Irish ecosystems, particularly their interactions with woodland flora and invasive species, before a reintroduction is even considered. This would be in agreement with the precautionary principle.

We also accept that wild boar can have negative economic impacts on human activities through crop damage, rooting of amenity areas, diseases and road traffic accidents and that management of a reintroduced population would be required to minimize these impacts.

### References

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