

## **Invasiveness: the construction of a category and its impact for conservation and recreation practices**

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The category of invasiveness generally comes with negative connotations, referring to an unwanted subset of biodiversity that threatens the other – benign (or wanted) – subset. Invasive species have been declared as one of the major causes of biodiversity loss together with climate change and habitat destruction (Simberloff 2003; Bremner and Park 2007). According to the International Union for Conservation of Nature (IUCN) Red List, invasive species have caused more than half of the known extinctions of animal species and create billions of management costs (including damages) annually (Clavero and García-Berthou 2005). Consequently, the issue of invasive species is high on political and scientific agendas, also on the global level. For example, the Convention on Biological Diversity has a technical working group dealing especially with this issue and features it on collective meeting agendas. On the other hand, some invasive species are at the same time positively perceived by recreationists. Subsequently, a contradiction seems to appear.

Defining species as invasive has important implications for how they are treated; attributing the label 'invasive' to a species can result in its eradication or denial of access to a certain territory (Bowker and Star 2000, Jones 2009). This will be made clear by the example of the wild boar. The wild boar is nominated as one of the 100 "World's Worst" invaders according to the Global Invasive Species Database (GISD) (2007). This database is developed and managed by the Invasive Species Specialist Group (ISSG) of the IUCN. The IUCN states that the wild boars cause serious impacts on biological diversity and/or human activities. From this perspective, the wild boar is seen as an unwanted species which causes all kinds of negative effects. To prevent these effects, programs have been setup to eradicate or control wild boar populations (National Invasive Species Council 2001; Global Invasive Species Database 2007). Its presence in the GISD implies that the wild boar is considered to be an 'invasive alien species'. This means, according to the IUCN, that it is introduced and (thus) non-native or alien to an area and has a serious impact on, otherwise intact, pre-existing native ecosystems and on human activities (Invasive Species Specialist Group 2008). This definition shows that for a species to be listed in the GISD, both the issue of origin or nativity and the issue of impact or damage are relevant. However, apart from the relative clarity of the IUCN definition, a lot of confusion is involved in classifying species as invasive. For example, the term 'invasive alien species' implies that also 'invasive native species' exist. This is indeed being argued. Recently, scientists have started to speak about native species becoming invasive and even call them pest species (Valéry et al. 2008), (Farquharson et al. 2009). This is part of a lively discussion in scientific literature about what is actually meant by the category 'invasive'. As said, in leisure practices some invasive species are positively perceived. For example the invasive wild boar in the U.S.A. is positively perceived for hunting practices. But also wild boar spotting is one of those positive identified activities.

This makes clear that invasiveness is a contested category. However, as the example of the wild boar makes clear, classifying a species as invasive can have serious consequences for how it is treated in different practices. How invasiveness is interpreted by an actor, like a scientist, policymaker, wildlife-manager, journalist or recreationist, has a direct or indirect impact on the management of the species involved. Because of these implications, it is crucial to understand how a species gets classified as invasive, who is doing the classifying, and what kinds of knowledge and considerations are used to legitimise this classificatory act.

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For example in the case of the manageability of invasiveness, which categories are used for the management of the wild boar, how are they interpreted and what are the implications for the wild boar? Together with the different meanings and definitions of invasiveness that are currently present in debates about conservation science, policy, management and in society, the different positions and dynamics in the debate of invasiveness are clarified in this research.

At a later stage in this PhD- research, detailed case studies will be performed in the Netherlands and the USA, in which an invasive wildlife species is at the centre of a human-wildlife-conflict situation, to reveal the interpretations of the category invasive and the impact of categorisation on actual wildlife-management. Indeed, in managing the species, categories play an important role: How do wildlife-managers use and interpret them in the local context? And what are the implications for wildlife?

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