Bewertung von Umweltschäden am Beispiel von Neobiota

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Abstract

The study attends to the definition and assessment of environmental damages illustrated by the examples of non-native species and genetically modified crops. Based on an analysis of existing damage concepts and assessment approaches a definition of the damage term is developed and its further operationalization is exemplified by a concrete assessment approach.

Here, an environmental damage is defined as a significant negative impact (i.e. adverse impact) on a biotic or an abiotic conservation resource in terms of its value or sustainable use. This definition includes three major normative settings: (i) only impacts on relevant resources can be damages, (ii) mere changes must be differed from negative impacts and (iii) only significant negative impacts are damages. The assessment approach being proposed here illustrates the context-related operationalization of these normative settings referring to four widespread non-native plant species in the county Görlitz (Germany). The approach aims at the identification of those non-native plant populations that shall be managed in the first place from the viewpoint of nature conservation and addresses the following questions: (i) Which populations (potentially) cause damages to biodiversity? (ii) Which of those detrimental populations can be managed successfully at reasonable expenses?