

Early Warning in Belgium – Waarnemingen.be as an Early-Detection Tool

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Rapid detection of potentially harmful invasive alien species (IAS) is essential to avoid future invasions and management costs. Until recently, the Flemish region (Flanders, Northern Belgium) - and by extension Belgium - had no dedicated portal for reporting observations of such species, despite the high political priority and ongoing current (inter) national initiatives. In 2011, the Agency for Nature and Forest and the Institute for Nature and Forest Research initiated a pilot. For some notorious IAS, an early warning system was launched through the widely used online recording platform www.waarnemingen.be. The system is primarily targeted towards naturalist observers. This was done in cooperation with all Belgian regions and the major non-governmental organisations in the field of nature conservation. The system allows for reporting sightings, consulting fact sheets and setting up user-driven automated e-mail alerts. The aim of the pilot phase (March-November 2012) was to examine how the system could work (which species are picked up, potential reporting bias, data quality). Apart from testing the reporting tool as an early warning system, the project had several spin-offs. In the longer run, we aimed at mobilizing volunteers for monitoring IAS. We also wanted to provide information and raise awareness amongst field workers and the public. Eventually, we hope to streamline the process from reporting to management intervention. The ultimate goal is to have an early warning system for IAS in Flanders (northern Belgium) that connects with federal initiatives and anticipates developments of a trans-European system. The current system is already being used for various rapid response projects in Flanders, including control of invasive aquatic plants such as floating pennywort *Hydrocotyle ranunculoides*, water primrose *Ludwigia grandiflora*, Parrot's feather *Myriophyllum aquaticum*, ruddy duck *Oxyura jamaicensis*, Pallas' squirrel *Callosciurus erythraeus*, quarantine insects, American bullfrog *Lithobates catesbeianus*, giant hogweed *Heracleum mantegazzianum* and Chinese muntjac *Muntiacus reevesi*.

Keywords: prevention; early warning; rapid response; citizen science