

# An Automated Early Warning Biosecurity Alert System for Finland

William K Morris<sup>‡</sup>, Esko Piirainen<sup>‡</sup>

<sup>‡</sup> Biodiversity Informatics Unit, Finnish Museum of Natural History, Helsinki, Finland

Corresponding author: William K Morris ([william.morris@helsinki.fi](mailto:william.morris@helsinki.fi))

## Abstract

Effective and timely pest plant and animal control necessitates access to relevant biodiversity data as quickly as possible. For Finland, on Europe's frontier, biosecurity is of particular importance. The [Natural Resources Institute Finland](#) and the [Finnish Food Authority](#) are the organisations responsible for biosecurity in Finland. The Finnish Biodiversity Information Facility ([FinBIF](#)) is a data repository for researchers, government and the public. FinBIF consolidates datasets of living Finland from many providers at a single online source. The data held in FinBIF's data warehouse include the results of national monitoring programs, museum collections and citizen science platforms. On average, over the last five years more than 10,000 occurrence records have been collated by FinBIF per day. These records often include invasive taxa or pest plants and animals that require control. FinBIF acts as bridge between biodiversity data collectors, researchers, other government agencies and the two organisations responsible for Finnish biosecurity. An automated early warning system has been established to alert biosecurity coordinators at the Natural Resources Institute Finland and the Finnish Food Authority as soon an occurrence record of biosecurity concern enters the FinBIF data warehouse. We outline the development of the alert system, its implementation to date, and present some of the lessons learned so far and prospects for the future.

## Keywords

invasive species, pests, weeds, citizen science, data accessibility

## Presenting author

William K Morris

## **Presented at**

TDWG 2023

## **Conflicts of interest**

The authors have declared that no competing interests exist.