

INVASIVE SPECIES DATA

Locations	United States
Dates	01/12/2012 - 29/09/2018

Summary

Invasive species are causing species extinction. We are trying to address this problem by providing sound scientific information that will be used by endangered species managers to improve their efforts to recover listed and candidate species affected by invasive species. The information will also be used by invasive species managers to control invasive species that are causing species extinction in the USA.

The problem

Invasive species are the biggest driving force of species extinction after habitat loss, overexploitation and pollution. Currently there is little easily accessible knowledge on the role of invasive species and their management in order to prevent or slow the decline of species. Taking the USA as an example, little is known about how species that are listed, or identified as candidates for listing as endangered species under the Endangered Species Act (ESA) are affected by invasive species.

What we are doing

The ultimate goal of this project is to provide sound scientific information that will be used by endangered species managers, improving their efforts to recover listed and candidate species affected by invasive species. The information we provide will also be used by invasive species managers to control invasive

species that are causing species extinction in the USA.

The project will identify sources of information that may demonstrate causal relationships between federally listed species and invasive species (such as ESA listing packages, Status Reviews, Recovery Plans and 5-Year Reviews; The Nature Conservancy's Natural Heritage Programmes; and other relevant scientific information).

We will then analyse those information sources and extract the relevant data where impacts of invasive species on listed or candidate species are identified, capturing for each of these relationships, the correct scientific name of each species, the mechanism of the impact and linking these data back to the source documentation.

CABI's specific role is to compile detailed datasheets on each of the invasive species identified in this work. Each datasheet is compiled by an expert, it is then peer reviewed before being published in the Invasive Species Compendium (or ISC – www.cabi.org/isc). Each datasheet contains authoritative information on invasive species identification, distribution, biology and ecology, management and control; as well as references and links to further sources of information.

Results so far

So far, we have produced and published over 300 new datasheets in the ISC on invasive species that are detrimental to threatened species in the USA. Most of these species are plants but insects and other arthropods are the second most common group. We have also included a significant number of freshwater fishes, birds, mammals, other vertebrates and a number of other groups are represented such as molluscs, pathogens, algae, etc.

The team has indexed and uploaded more than 200 US Fish and Wildlife Service Recovery Plans to the Compendium, which can also be found using the ISC's basic search interface or by clicking on links from related invasive species datasheets.

To ensure all the appropriate data collected are made fully available, we need to publish them in our Invasive Species Compendium which is open access.

This will improve our coverage of over 640 threatened species that have been identified as affected by invasive species of relevance to the work.

We also need to check and publish 3,500 records in the ISC of invasive-threatened species relationships, impact mechanisms etc.

In addition to recording invasive-threatened species relationships in the 300 new invasive species datasheets published through this project, we have reviewed a further 2,470 relationships, also identified within information sources on federally listed species, so that these are made accessible and viewable in the Compendium on pre-existing invasive species datasheets. Information includes invasive and threatened species, and impact mechanisms.

We very much hope that the success of this work could be replicated to address the paucity of data on invasive species impacting on vulnerable species in other parts of the world.

Donors

USDA-APHIS

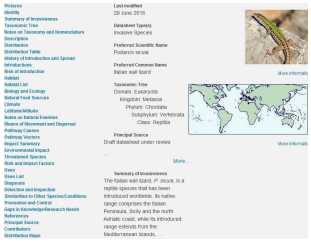
Partners

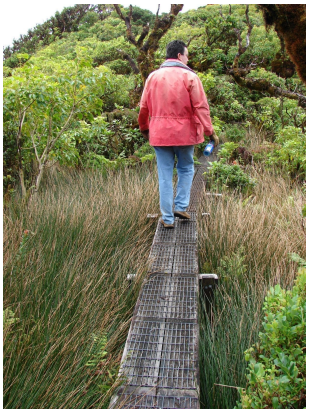
IUCN SSC Conservation Breeding Specialist Group, US Fish and Wildlife Service, National Marine Fisheries Service, USDA's Invasive Species Coordination Program

CABI Project Manager

Gareth Richards







https://www.cabi.org/what-we-do/cabi-projects/