

# Biologist provides framework for national invasive species policy, implementation

January 24 2020

---



Credit: CC0 Public Domain

A special issue of the journal *Biological Invasions*, co-edited by University of Rhode Island ecologist Laura Meyerson and University of Tennessee biologist Daniel Simberloff, provides a pathway to

strengthening national policies and implementing strategies for addressing a growing threat to national security—invasive species.

The issue, published Jan. 17, is an output of the 2016-2018 National Invasive Species Council Management Plan. It reflects more than three years of work coordinated by the council's secretariat, with contributions from hundreds of experts.

"This comprehensive special issue has been published at a critical time," said Meyerson, URI professor of natural resources science, who has studied [invasive species](#) for 25 years. "The United States is at greater risk for [biological invasions](#) and biosecurity breaches because the Trump administration has recently taken steps to weaken U.S. defenses against invasions."

The council's former executive director, Jamie K. Reaser, who oversaw the work and authored most of the papers, said: "Invasive species are a threat to national security, a threat that the U.S. and many other countries are not adequately responding to despite the warnings by experts. This collection of papers is thus a strategic plan for national defense—the defense of our economies, food and water supplies, ecological systems, even our lives."

Meyerson noted that the already meager budget for the National Invasive Species Council was cut by half, and the multi-stakeholder Invasive Species Advisory Committee terminated, making it increasingly difficult for [federal agencies](#) to effectively collaborate or garner input on the issue from outside experts.

"It also hamstring the ability of the federal government to work holistically with non-federal stakeholders to address invasive species," she said. "Invasive species cost the United States hundreds of billions of dollars annually. We need a coordinated federal effort to strengthen our

national biosecurity."

The special issue of *Biological Invasions* features 12 complementary papers intended to inform the development and implementation of a national program for the early detection of and rapid response to invasive species.

"The lack of a comprehensive, coordinated, early-warning rapid-response system is the weakest link in our woefully inadequate response to the economic and ecological devastation wrought by biological invasions," said Simberloff.

"These papers finally show how the United States can fashion a strong, efficient system to defend the nation against this scourge—a long overdue step."

The papers include a new comprehensive framework and blueprint for a national early detection and rapid response program, as well as technical guidance for implementation, including information management, taxonomic identification, technology advancement, risk screening, target analysis, watch lists, legal frameworks and incident command systems.

"The technology paper is especially exciting because of its great ideas for really neat technologies—like acoustic technologies and genetic technologies—that we should be exploiting and investing in to address invasives," Meyerson said.

According to Meyerson and Simberloff, invasive species pose a significant threat to national security by adversely impacting a wide range of critical services, from food and water supplies to infrastructure stability, human health and military readiness. No [national security](#) issue poses a greater, more comprehensive national threat yet garners so little preparedness and response than the issue of invasive species, they said.

The biologists note that the federal government is primarily responsible for keeping invasive species from entering the U.S. by providing sufficient border protection. Border security failures result in the burden of invasive species management being passed on to state, tribal and local governments, as well as to industry, private landowners and individual citizens.

"Every sector of the economy is impacted by invasive species, directly or indirectly," Meyerson said. "The costs and seriousness of the issue are underrecognized in this country."

Meyerson and Simberloff are the editors-in-chief of *Biological Invasions*, and at different times they served on the Invasive Species Advisory Committee. They have also worked on federal invasive [species](#) policy issues since President Bill Clinton issued the first executive order on the subject in 1999.

"My goal is to keep a major focus on this issue because it's one of the most important issues of our day, right up there with climate change," concluded Meyerson. "It's an issue that's really costing the United States in terms of dollars, health, and biodiversity, so we need to pay attention and strengthen rather than weaken our actions."

Provided by University of Rhode Island

Citation: Biologist provides framework for national invasive species policy, implementation (2020, January 24) retrieved 27 April 2024 from <https://phys.org/news/2020-01-biologist-framework-national-invasive-species.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.