

Letter from the Executive Director

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Letter from the Executive Director

Lisa Smith, Executive Director

As we know, next to habitat destruction and alteration of disturbance regimes, invasive species are the number one threat to the health and viability of natural areas. The threat posed by invasive species is exacerbated by a changing climate. Natural areas practitioners are on the front lines of identifying, monitoring, managing, and strategizing to eliminate or minimize impacts that these species have on our native flora and fauna. During the last 50 years, the natural areas management community has learned a tremendous amount about invasive species management, and more specifically what is working and what is not.

The Natural Areas Association invited on-the-ground land management practitioners to participate in a roundtable discussion, *Advances in Invasive Species Management: Where Are We 50 Years Later?* during the **2024 Natural Areas Conference: Where Science Meets Stewardship** in Manhattan, KS (October 7–10, 2024). The discussion was highly interactive and resulted in some common themes: invasive species management requires not only action but also greater collaboration, targeted funding, and increased education, particularly within the private landowner community.

Agency and Landowner Coordination: A Missed Opportunity

Interagency cooperation is a significant obstacle, and many conservationists expressed frustration with the lack of collaboration between federal, state, and nonprofit organizations. Invasive species do not adhere to property lines, and yet, the agencies responsible for managing them often operate in silos.

Compounding the issue is the lack of outreach and educational opportunities for private landowners, who may unknowingly contribute to the problem. Misguided but well-intentioned actions, like planting nonnative plants or altering landscapes to suit aesthetic preferences, can create unintended ecological consequences. For example, in Kansas, out-of-state hunting clubs have purchased land and, in an effort to create dense forests for game, have inadvertently caused the spread of invasive plants which are harming the region's native grasslands. Expanding education for landowners about native plants and landscape ecology could prevent these types of issues from worsening.

Prioritization and Funding: New Projects vs. Critical Maintenance

Another concern echoed among the roundtable: prioritization of invasive species management, which is often eclipsed in favor of high-visibility projects. Funding streams tend to support new development and construction, leaving critical maintenance work underfunded and reliant on limited resources. One participant said they spend up to 80% of their time managing established areas with existing infestations—essential work—but hardly the kind that attracts fresh funding. As they put it, “maintaining old remnants isn’t ‘sexy,’ but it’s necessary.”

Innovative Solutions and the Importance of Early Detection

Despite these challenges, innovative strategies and tools have shown promise. Digital platforms such as GIS maps and

iNaturalist allow experts to monitor and report invasive species sightings, creating a valuable database for early detection and rapid response. Early detection saves significant time and resources, underscoring the importance of integrating technology into conservation work.

However, as one speaker observed, even the most effective early detection and reporting strategies rely on strong relationships and open communication. In some regions, like rural Texas, ranchers still rely heavily on word-of-mouth to share information about invasive species. These informal networks demonstrate the importance of building and maintaining trust with landowners, especially those in close-knit communities.

Chemical vs. Non-Chemical Treatment (e.g., biological control, mechanical treatments): A Pragmatic but Contentious Choice

The choice between chemical and non-chemical treatments for invasive species was another central theme of the roundtable. Due to limited budgets and staffing, many agencies rely on herbicides for quick and efficient treatment of invasive species. However, for many, this approach continues to be controversial. Some people expressed concerns over the unintended consequences of herbicides in connection to the environment and public health; however, others point out that the urgency of invasive control necessitates such methods.

Looking Forward: A Call for Collaboration

All that said, participants agreed that land managers must think creatively and act strategically to tackle this problem in spite of the challenges. Invasive species know no boundaries, are increasingly problematic and will continue to require “all hands on deck.” The work of invasive species management must be a shared, continuous effort.

Increased awareness and new technology are helping to slow the spread of invasive species, but challenges persist. To truly make progress, we must increase communication and education to bridge the gaps between agencies, integrate all landowners into the process, and secure sustainable funding for long-term management across landscapes.