



THE INVASIVE SPECIES LANGUAGE WORKSHOP: AN OVERVIEW

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Michigan Sea Grant | 2025

GLANSIS
GREAT LAKES
AQUATIC NONINDIGENOUS SPECIES
INFORMATION SYSTEM

THE INVASIVE SPECIES LANGUAGE WORKSHOP

- Held during National Invasive Species Awareness Week 2024 (February 27-28)
- 16 in-person participants, 400+ virtual attendees, and a peer-reviewed publication + multiple affiliated products!



NOAA

WHY HOST THIS WORKSHOP?

- In response to identified communications needs!
- Some rhetorical issues in AIS communication:
 - Military and nativist metaphors – and better alternatives
 - Species naming conventions – and the challenge of changing them
 - Lots of interest in this topic – but no standardized guidelines for language change among government, environmental managers, researchers, and other interested parties



NISAW 2024, WASHINGTON DC

- National Sea Grant Office special project grant
- Partnership with NAISMA
- 11 presenters, 15 in-person participants
- Hybrid webinar + in-person discussion



DAY 1: PRESENTATIONS

- 11 presentations shared in a hybrid webinar format

- Themes:

1. **Efforts in Renaming Species:**

- More inclusive names (spongy moth, goliath grouper) and place-based names (European green crab vs. invasive green crab, Asian carp vs. invasive carp)

2. **Standardizing Terminology:**

- Public conflation of invasive/nonindigenous/other terms, multiple common names for a given species, contradictions between agencies

3. **Emotional Considerations and Framing:**

- Message testing on social media, eco-anxiety and successful message framing

4. **Social Context and Inclusivity:**

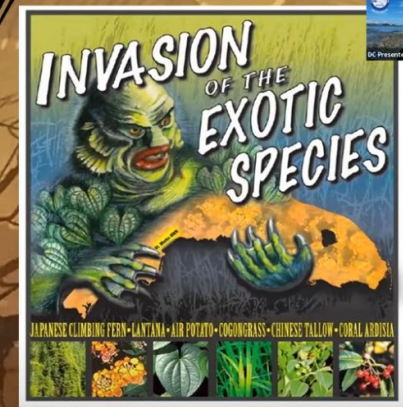
- Just Language project, ESA's Better Common Names project, bi-directional communication and co-production

5. **Interventions and Collaboration:**

- Problematic Jargon in STEM Workshop (2022), Invasive Species Council, and other communities of practice

Words have power: Paths to More Effective AIS Common Names

- Samuel Chan, Oregon State University, Sea Grant, Oregon Invasive Species Council
- Cat DeRivera and Mark Sytsma, Portland State University, Oregon Invasive Species Council
- Angela McMellen and Stanley Burgiel, National Invasive Species Council, US Dept. of Interior
- Leigh Greenwood, The Natural Conservancy, ESA
- Tim Campbell, Wisconsin Sea Grant, NSGO Liaison
- El Lower, Michigan Sea Grant
- Christine Moffitt, Oregon Invasive Species Council, AFS
- Wei-Ying Wong, Alaska Sea Life, AZA
- Wesley Daniel and Cayla Morningstar, USGS



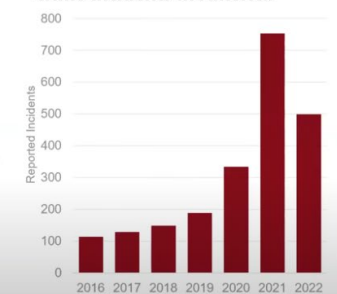
The Invasive Species Language Workshop.
February 27-28, 2024. Washington DC

Disclaimer: Perspectives presented are those of the authors and may not be the official positions of the organizations listed

Consider the implications of the language we use in invasive species messaging.



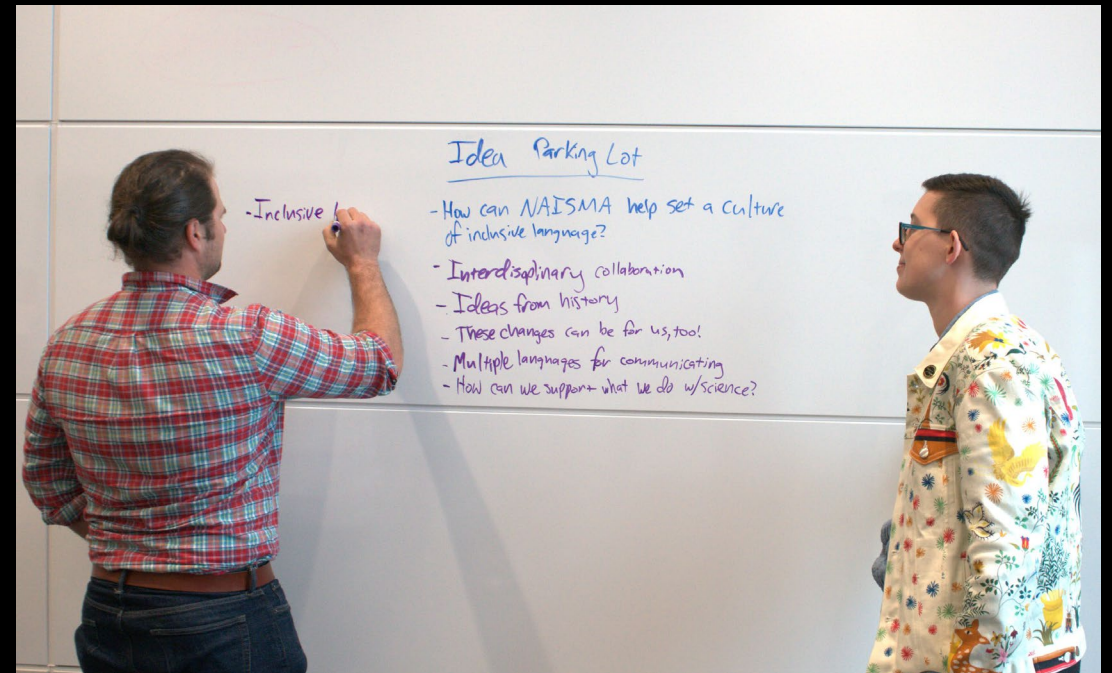
Troubling trends in Anti-Asian hate crime incidents in America



Hate crime data from the FBI Crime Data Explorer

DAY 2: PARTICIPATORY WORKSHOP DISCUSSION

- Guided discussion
 - Participant background and topic interest
 - Map understanding of inclusive language
 - Specific examples from participants' work
- Development of priority research areas:
 - Building evidence
 - Co-production
 - Networks for change
 - Operationalizing interventions



PRIORITY RESEARCH AREAS

1) Building Evidence

- We have anecdotes, but we need more qualitative and quantitative data
- Learn from other disciplines
- Interdisciplinary collaboration is going to be key!

2) Co-Production

- Engage impacted and marginalized communities
- Avoid tokenization, hierarchies and silos
- Make results public

Evidence Building

- Empirical evidence of harm/impact of current language ^{efficacy}
- Documentation of anecdotal evidence ^{↳ gothic robot-scientist inquiry} ^{↳ interviews, ethnographies}
- Importance of employing coproduction methods

→ Intent + effectiveness is context specific.

- Is language leading to intended outcomes?
- 'Connection to nature' ^(non-prescriptive) distinct goal from management objectives

→ Successes + failures from other disciplines/fields

→ evaluation of language Δ efforts ^{↳ looking outside of English-language publications}

- "Peer" review, sensitivity readers
- Need to facilitate opportunity for research collaboration

Evidence Building

- Importance of qualitative methods
- Experimental approaches to test concepts/frames
- Network of researchers capable of doing this work
- The figure →
- What evidence would be most useful?
- Review of existing literature
 - draw from other fields
 - other evidence of change/reasons

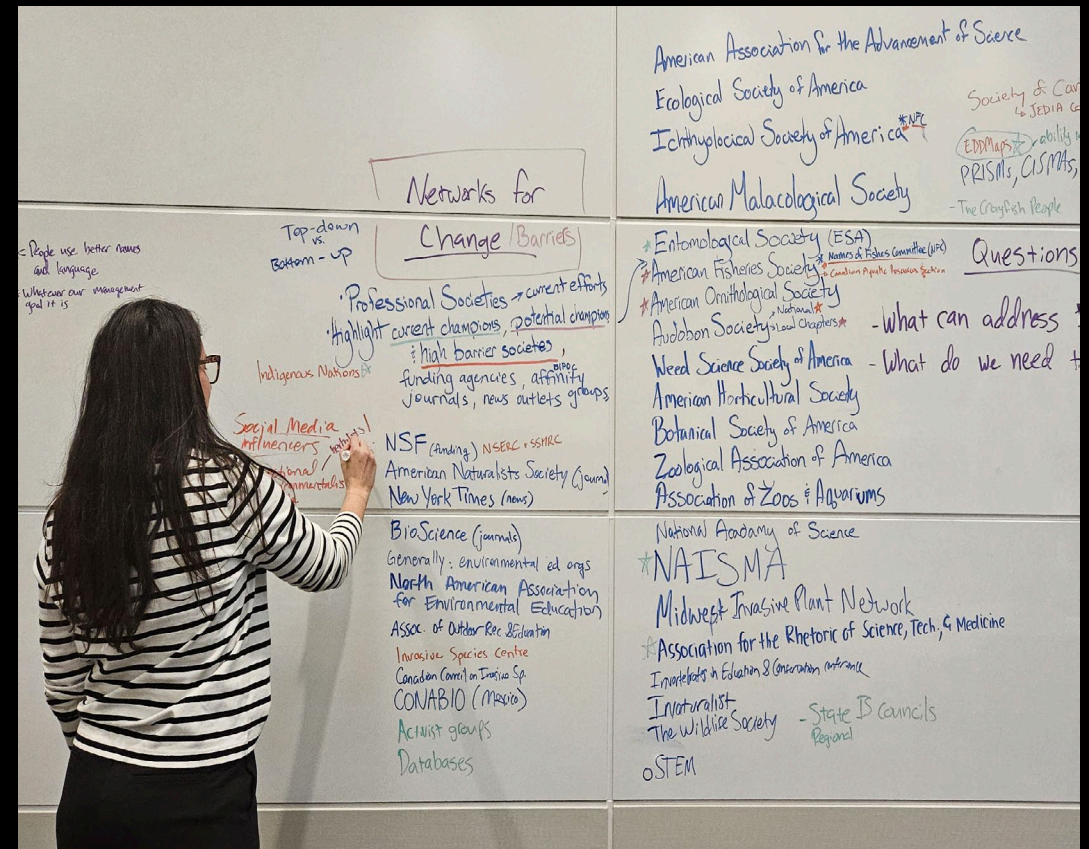
PRIORITY RESEARCH AREAS

3) Networks for Change

- Professional societies are most important for naming
- Other players: Local and regional organizations, databases, activist groups, Indigenous nations, funding agencies, journals, and even social media influencers
- Change can occur both top-down and bottom-up

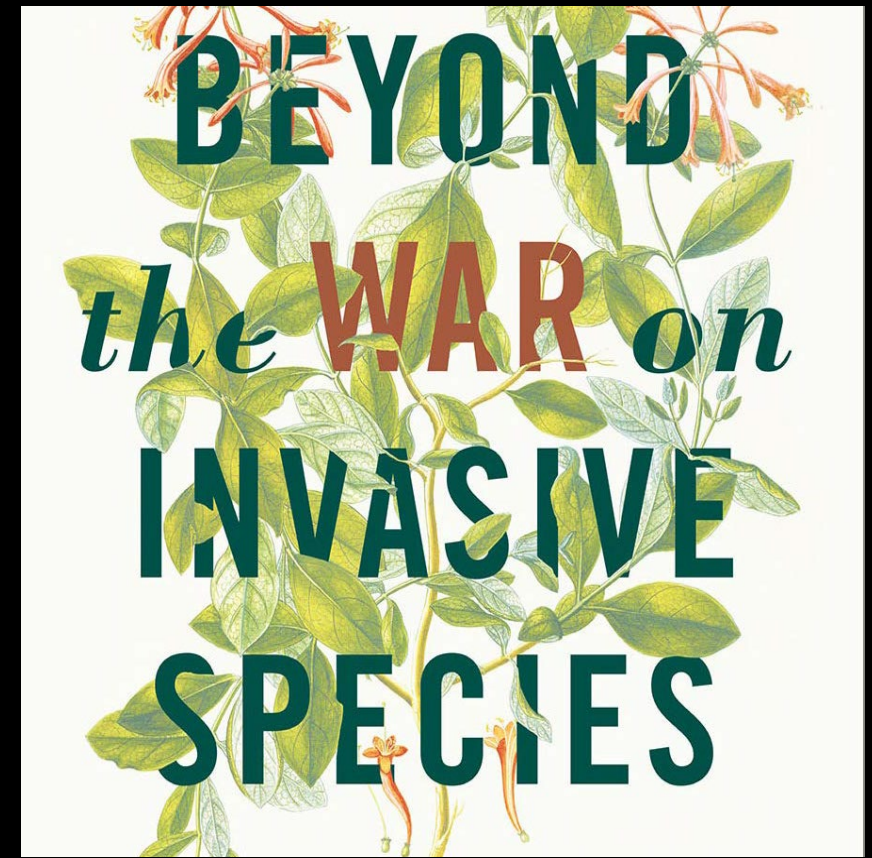
4) Operationalizing Interventions

- Products: trainings, model language guidelines, reference libraries or LibGuides, bidirectional communicator engagement
- Strategies: Get professional societies and regional panels/task forces on board, identify capacity, and keep the conversation going



WORKSHOP EVALUATION

- 413 unique logins (some of which were lab watch parties!)
 - NAISMA webinars tend to average 200 attendees, so that's more than double!
- We engaged a lot of people that don't often think about naming and framing issues.
 - About 50-50 between "never/rarely/occasionally" and "a moderate amount/a great deal."
- People learned between a moderate amount and a great deal (3.71), even though less of the content (3.17) was new to them.
 - Even if they'd seen it before, we presented it in a different way or there was a new aspect that contributed to learning.
- People that completed the evaluation are between somewhat and extremely supportive (4.52) of future efforts in this space
 - Caveats of non-response bias -- people that don't like this work might not have responded.



RESULTING PRODUCTS

- Peer-reviewed publications!
 - Workshop Report (“Recommendations from the Sea Grant-Led Invasive Species Language Workshop”, Lower et al, 2025), Management of Biological Invasions
 - Alien Language (Lower and Campbell, 2024), Sea Grant special issue of Oceanography
- Invasive Species Naming Survey
 - Collaboration between PSU and Oregon/Wisconsin/Michigan Sea Grant
 - In progress (draft publications underway, coding ongoing!)
- Other Forthcoming Publications
 - Words Have Power (Chan et al)



Management of Biological Invasions (2025) Volume 16, Issue 3: 865–878

Special Issue: Proceedings of the 23rd International Conference on Aquatic Invasive Species
Guest editor: Mattias Johansson

Education and outreach

Recommendations from the Sea Grant-Led Invasive Species Language Workshop

El Lower¹, Tim Campbell², Sam Chan³, Leigh Greenwood⁴, Neha Savant⁵, Gadfly Stratton⁶, Brendon Larson⁷, Megan Weber⁸, Virginia Rhodes⁹, Lindsey Cathcart¹⁰, Jillian Naveh⁵ and Nichole Angell¹¹

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LET'S KEEP THE CONVERSATION GOING!

- View the Day 1 presentations here:
<https://www.youtube.com/watch?v=-lOm1XgeQH0>
- Drop me a line at ellower@umich.edu
- Check out the reading list through the QR code here for further information!



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