



# The Language of Invasive Species

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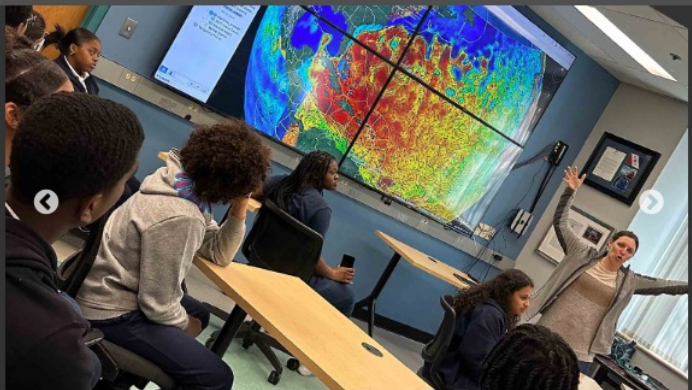
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## Outline

- Intro to Rutgers Cooperative Extension
- Xenophobic and culturally insensitive language in invasion ecology- names, metaphors, and imagery
- Institutions taking action
- Best practices, examples, and guidelines
- How can we be more inclusive with our communication?



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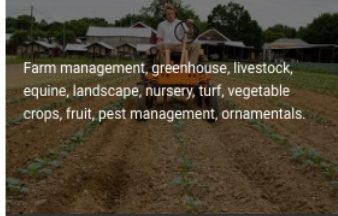


### Rutgers 4-H STEM Ambassadors Program

The 4-H youth development program connects New Jersey youths, ages 13-18, with working scientists, helping to change their perceptions and making them insiders in science, technology, engineering and mathematics. [Read more »](#)

- Outreach arm of the university
- Part of the New Jersey Agricultural Experiment Station
- Collaboration between the counties and university
- Mission: RCE helps the diverse population of New Jersey adapt to a rapidly changing society and improve their lives and communities through an educational process that uses science-based knowledge.

#### Commercial Agriculture



Farm management, greenhouse, livestock, equine, landscape, nursery, turf, vegetable crops, fruit, pest management, ornamentals.

#### Environment and Natural Resources



#### Fisheries and Aquaculture



#### Food, Nutrition, and Health



#### Home, Lawn, and Garden



#### Youth and Community Development



#### Cooperative Extension County Offices



Rutgers New Jersey Agricultural Experiment Station (NJAES) Cooperative Extension county offices, found in all 21 New Jersey counties, work to meet the needs of New Jersey residents with all kinds of information and assistance regarding 4-H, agriculture, family and community health sciences, marine science, and natural resources and the environment. They are a partnership between Rutgers Cooperative Extension, Boards of County Commissioners, and the U.S. Department of Agriculture.

Before visiting your county office, please call ahead or check your county extension office website for up-to-date information on office operating status, visitor policies, and county office closures due to holiday observances.

Visitors to our county extension offices must abide by posted COVID-19 safety protocols. If you're looking for a specific person in any given county, please visit our [Personnel Directory](#).

#### Find Your County

- Atlantic County
- Bergen County
- Burlington County
- Camden County
- Cape May County
- Cumberland County
- Essex County
- Gloucester County
- Hudson County
- Hunterdon County
- Mercer County
- Middlesex County
- Monmouth County
- Morris County
- Ocean County
- Passaic County
- Salem County
- Somerset County
- Sussex County
- Union County
- Warren County





**The Rutgers Environmental Steward program** trains volunteers on important environmental issues in New Jersey and how they can make a difference in their community. Stewards learn how to help advance sustainable climate change solutions, not just in their own lives, but in their communities.

Environmental Stewards is a certificate program offered through Cooperative Extension, a unit of Rutgers New Jersey Agricultural Experiment Station.

Make a difference in your community! Become a Rutgers Environmental Steward.




- Watchung Reservation Strike Team
- Invasive Species of the Month- 6 editions so far
- Education and Trainings- public, volunteers, landscapers, nurseries

ARCHIVES FOR INVASIVE SPECIES

## Invasive Species

**April Invasive Species of the Month: Jetbead**  
 MARCH 28, 2024 BY MICHELE BAKACS


Jetbead, *Rhodotypos scandens* Jetbead is an invasive spring flowering, deciduous shrub. It is available as an ornamental and spreads into understory forests and roadsides. Its attractive white flower starts blooming in April making it easy to identify this time of year. Jetbead can grow in both full sun and shade. Due to its tolerance of [...]



Filed Under: [Science](#)  
 Tagged With: [Invasive plants](#), [Invasive Species](#)

**December Invasive Plant of the Month: Angelica tree**  
 DECEMBER 21, 2023 BY MICHELE BAKACS AND JEAN EPIPHAN


December Angelica Tree *Aralia elata* Japanese angelica tree (*Aralia elata*) is an extremely aggressive, fast growing, deciduous tree that invades forest canopy gaps, forest edges, and right of ways. It is a heavy seed producer and once this tree invades an area it takes over quickly, forming dense stands (Figure 1) and suppressing native vegetation [...]



Filed Under: [Science](#)  
 Tagged With: [aralia](#), [Invasive plants](#), [Invasive Species](#)

**October Invasive Plant of the Month: English ivy**  
 OCTOBER 23, 2023 BY MICHELE BAKACS

October English ivy (*Hedera helix*) Invasive vines such as English ivy can kill healthy, mature trees. Simple actions like controlling invasive vines can help save trees which are vital for capturing greenhouse gases and reducing the impact of climate change. Ecological threat: English ivy (*Hedera helix*) is an ornamental vine commonly planted in landscapes as a [...]




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 Environmental Stewards

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SCIENCE INVASIVE SPECIES OF THE MONTH: LINDEN VIBURNUM

## Invasive Species of the Month: Linden Viburnum

September 21, 2023 by Michele Bakacs



*Linden viburnum (Viburnum dilatatum) spring flowers and late summer fruit that persists through early winter. Image source: Michele Bakacs*



*Linden viburnum seedlings sprouting on a forest floor. Winter berries on stem showing opposite branching pattern. Image source: Michele Bakacs*

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GENERAL PUBLICATIONS



Cooperative Extension Fact Sheet FS1303

## Invasive Plants and Native Alternatives for Landscapes

Michele Bakacs, Environmental and Resource Management Agent, Middlesex and Union Counties  
 William Erickson, Agriculture and Natural Resources Agent, Monmouth County

*"Note that some historically used common names may be considered culturally insensitive. Where possible, we have listed alternative names or, in some cases, eliminated references to a country of origin. The part of the name that refers to the country of origin has been replaced with the term "invasive."*

**Summary**

Many of the familiar plants we see in our woodlands, along roadsides, and in fields are not native to New Jersey and cause ecological harm. These "invasive species" grow out of control because they have no diseases or predators controlling their spread, but deer generally don't eat them. It's tempting to think that all green plants are good, but that would be a mistake when it comes to invasive plants. We can all help stop the spread of invasive plants by not planting them in our landscapes and by replacing existing invasives with native plant species. This fact sheet focuses on invasive plants that cause ecological harm to New Jersey's natural areas and native alternatives for landscaping and gardening. [Tables 1-4](#) include lists of invasive plant species and suggested native alternatives.

**Native Plant Names: Is It a Weed or Not?**

Native plants are those that occur historically in an ecosystem and have thrived without help from humans. Native plant names can be confusing. Sometimes the common name may include the term "weed" in it. For example, "Joe-Pye Weed" or "Butterfly Weed." Even though they have "weed" in their name, they are still essential for providing habitat and food for migratory birds, butterflies, pollinators, and other wildlife. New Jersey has more than 2,000 native plants that are a beautiful addition to any landscape.

**What Are Invasive Plants and Why Are They a Problem?**



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## Middlesex

- White- 58%
- Black or African American- 13%
- Asian- 26%
- Hispanic/ Latino- 23%
- American Indian/ Alaskan native- 0.1%

July, 2023. US Census

## Union

- White- 66%
- Black or African American- 24%
- Asian- 6%
- Hispanic/ Latino- 34%
- American Indian/ Alaskan native- 1%



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# A word about language....

Note that some historically used common names may be considered culturally insensitive. Where possible we have listed alternative names or, in some cases, eliminated references to a country of origin .

Lower, El and Sturtevant Rochelle 2022. Alien Language: What's In A (Species) Name? Michigan Sea Grant; Michigan State University Extension. Available at <https://www.canr.msu.edu/news/alien-language-what-s-in-a-species-name-msg22-sturtevant22>





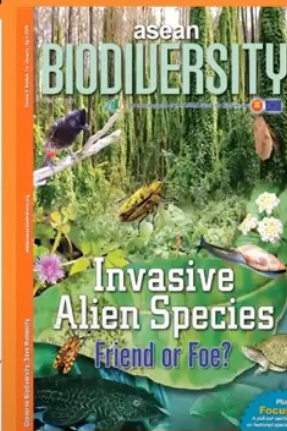
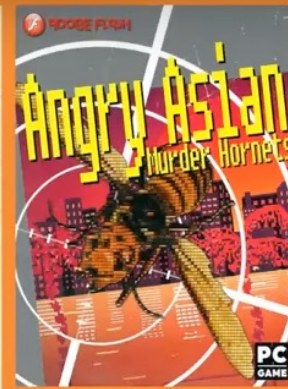
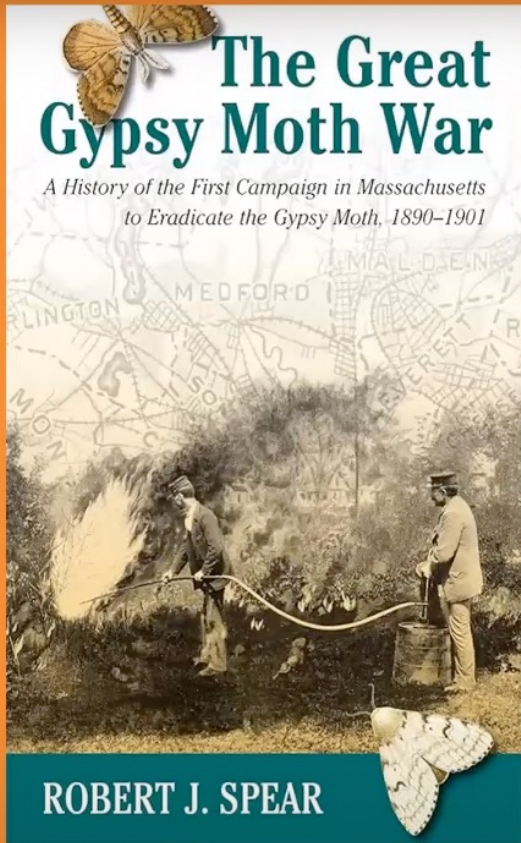
# National Invasive Species Management Association

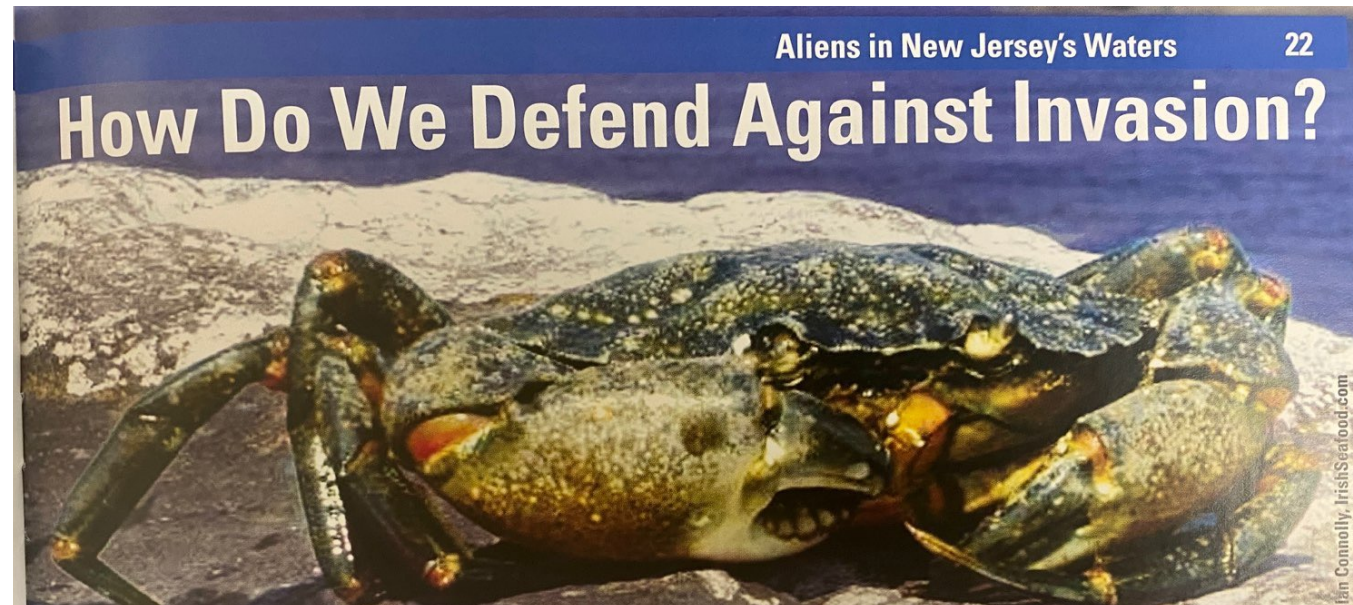
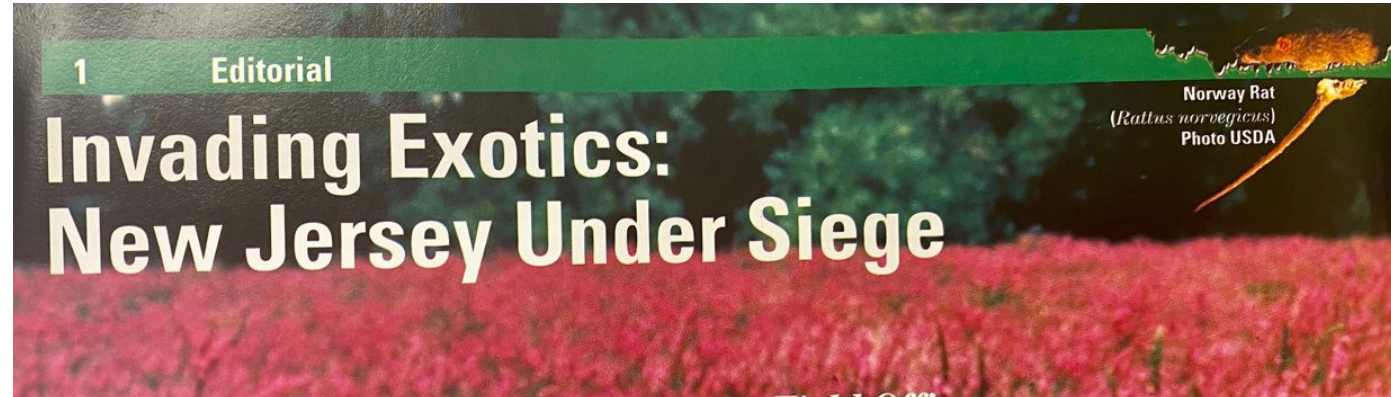
- <https://naisma.org/>
- February 27, 2024- The Invasive Species Language Workshop
- NAISMA and Sea Grant hosted a webinar on communications issues in invasion biology, including inclusive language, effective use of metaphors, changes to species names, and more.
  - El Lower, Michigan State University, Communication Specialist, Great Lakes Aquatic Indigenous Species Information System
  - Samuel Chan, Oregon State University, Sea Grant Oregon Invasive Species Council



# Problematic imagery

NISAW 2024: The Invasive Species Language Workshop







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# BETTER COMMON NAMES PROJECT



ENTOMOLOGICAL  
SOCIETY OF AMERICA  
SHARING INSECT SCIENCE GLOBALLY



*Bird Names For Birds*

The names we use in invasion biology can be problematic.

- Culturally insensitive names
  - spongy moth, *Lymantria dispar*
- Place-based names
  - japanese knotweed, *Reynoutria japonica*
  - chinese wisteria, *Wisteria sinensis*
  - asian carp- 4 different species (grass, black, bighead, and silver carp)
- Eponymous, honorific names that perpetuate colonialism/racism
  - Bachman's sparrow





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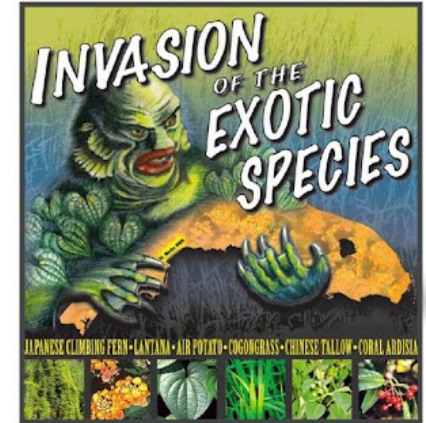
## Why the change to spongy moth (*Lymantria dispar*)?

- Ethnic slur
- Romani/ Roma people- ethnic group who lived a nomadic lifestyle. Current Rajasthan (northern India).
- 1 million Roma in the US
- 2022 name change. Sponge-like egg masses and is derived from translations of common names used for the insect in its native range and French-speaking Canada.
- [entoc.org/publications/common-names/spongy-moth](https://entoc.org/publications/common-names/spongy-moth)



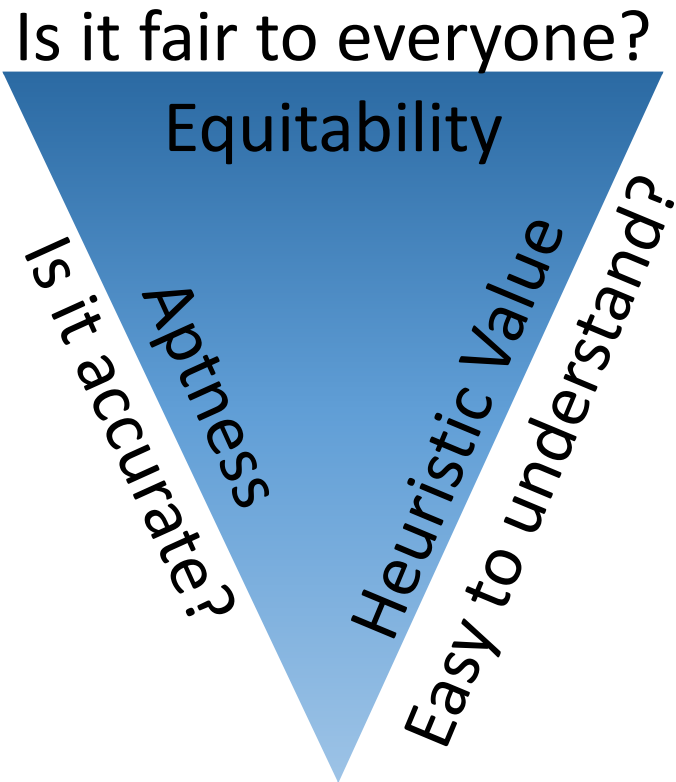
Metaphors- make complex concepts easy to understand

- Military metaphors- "The war on X", "Help fight X", "Battling X"
  - Human actions are responsible, not the species itself
  - Harms morale. Are we fighting a losing battle?
- Nativist metaphors- "Alien invasion" "Exotic species"
  - Long history of conflating immigrants with biological invasions
  - Xenophobic, racist language
  - Can backfire, immigrants can identify with the invasive species





## Framework for appropriate metaphors

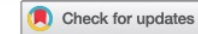


## Alternative Metaphors


Invasive species as

- Hitchhikers- process
- Ecological bullies- process
- An illness- natural resource managers as healers
- Others?





## Testing How Militaristic and Xenophobic Language Affects Engagement with Facebook Posts about Invasive Species

Sedona Chinn <sup>a</sup>, Dan Hiaeshutter-Rice<sup>b</sup>, P. Sol Hart<sup>c</sup> and Brendon M.H. Larson<sup>d</sup>

<sup>a</sup>Department of Life Sciences Communication, University of Wisconsin-Madison, Madison, WI, USA; <sup>b</sup>Department of Advertising and Public Relations, College of Communication Arts and Sciences, Michigan State University, East Lansing, MI, USA; <sup>c</sup>Department of Communication and Media, University of Michigan, Ann Arbor, MI, USA; <sup>d</sup>School of Environment, Resources and Sustainability, University of Waterloo, Waterloo, ON, USA

### ABSTRACT

Invasive species are considered a significant threat to biodiversity and economic activities. Concerned stakeholders have adopted militaristic metaphors and xenophobic language to raise public awareness about the issue, yet communication theory provides conflicting guidance on whether this is likely to be effective. This research insight analyzes over 400,000 Facebook posts from North American stakeholders to find that stakeholder Facebook pages discuss invasive species infrequently, sometimes using militaristic and rarely xenophobic language, but that neither militaristic nor xenophobic language is associated with online engagement.

### ARTICLE HISTORY

Received 29 September 2022  
Accepted 21 September 2023

### KEYWORDS

Invasive species; metaphor; public engagement; social media

Invasive species are organisms which have been introduced by humans to new regions where they spread and have a negative impact on native species and/or economic activities (Mack et al., 2000). In light of the negative consequences of invasive species, governmental, non-governmental, and

## Previous Name Changes

- Jewfish to Goliath Grouper, 1998

*Epinephelus itajara*

- Northern Squafish to Northern Pikeminnow, 2001

*Ptychocheilus oregonensis*

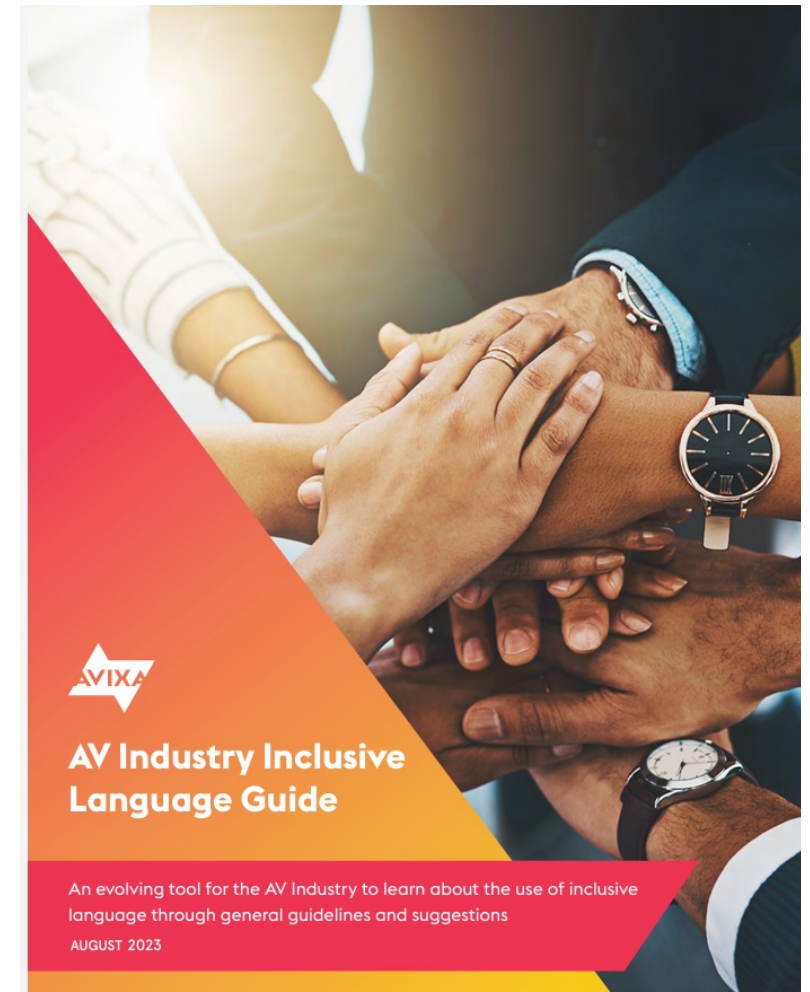
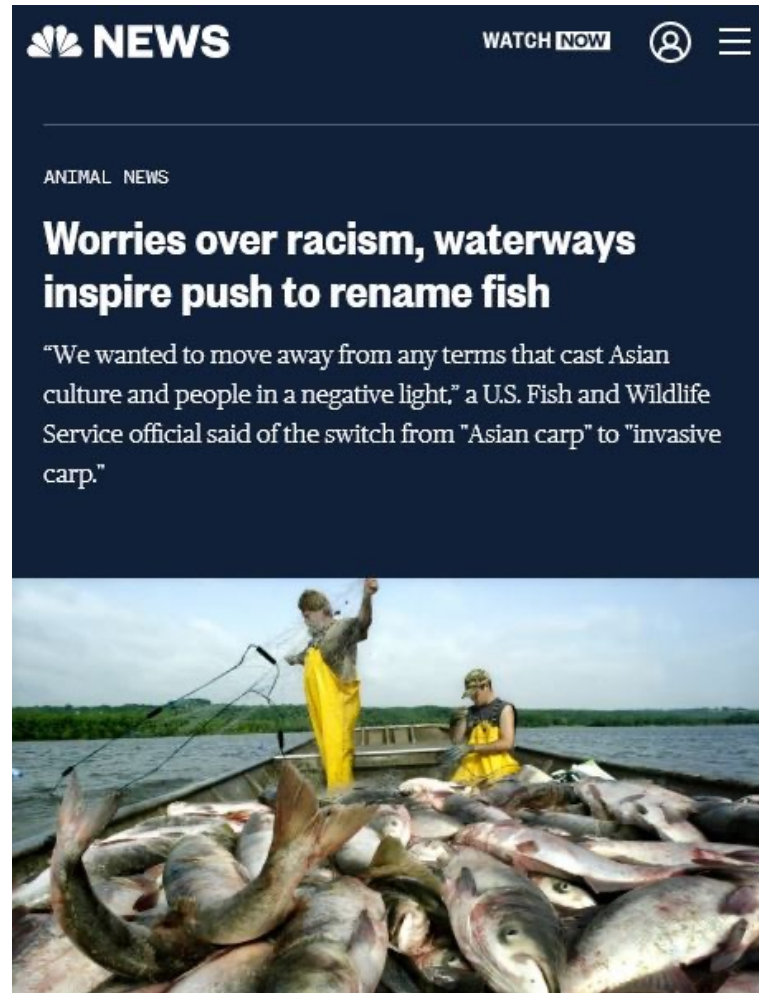
- Asian Carp to Invasive Carp, 2014

University of Minnesota legislation- 4 species of carp



## Other industries considering gendered and archaic language

- US Fish and Wildlife switching from "Asian carp" to "invasive carp"
- Bureau of Land Management- rename geographic features that contain racial slurs
- Audio Visual Industry
- Plumbing industry- connector naming



# New Jersey Aquatic Invasive Species Management Plan

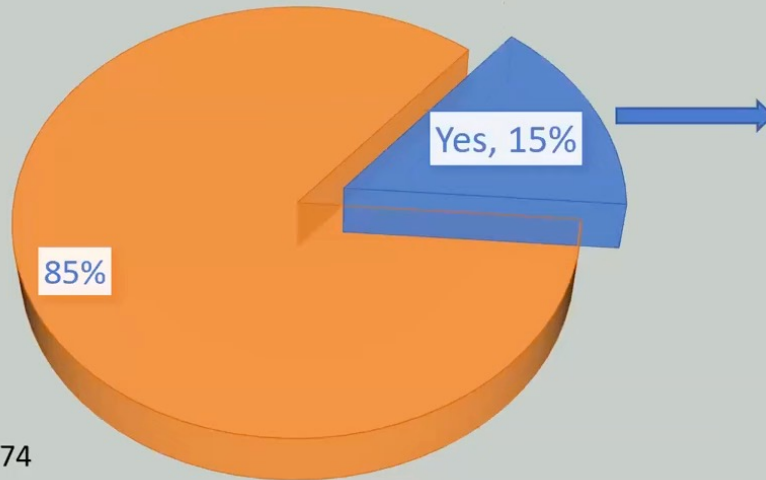
- Updated names to remove all place-based and/or culturally insensitive names in the aquatic species lists.
- Conferred with other lists that had recently updated names, including the Mid-Atlantic Panel on Aquatic Invasive Species
- Replaced with more visually descriptive names.





# Common Names in the USDA Invasive Species Profile List with Ethnic or Place-Based Identifiers

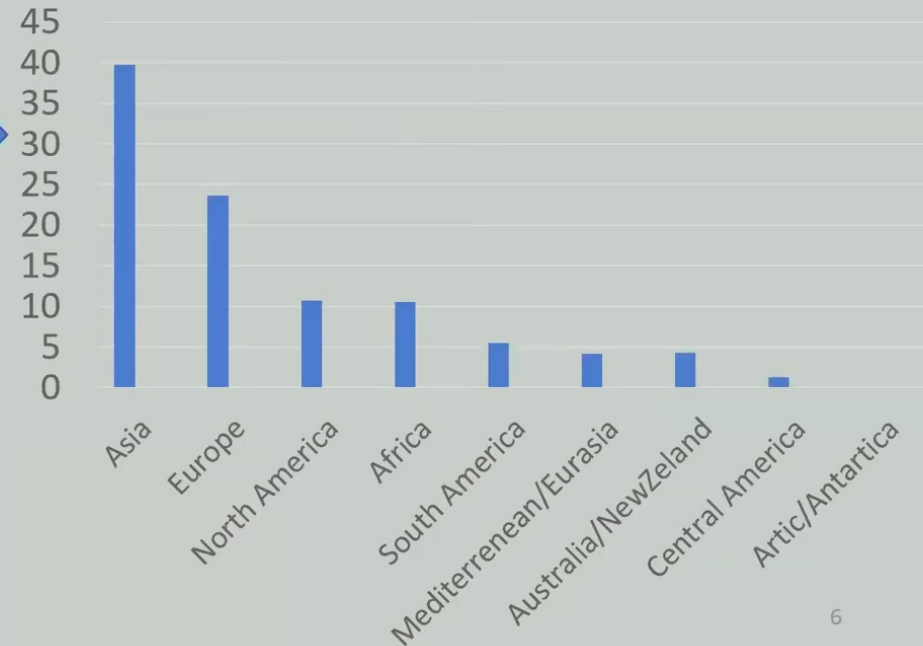
COMMON NAMES WITH ETHNIC OR PLACE-BASED IDENTIFIERS



N = 1574



RELATIVE PROPORTION OF COMMON NAMES WITH ETHNIC OR PLACE-BASED IDENTIFIERS, GROUPED BY CONTINENT





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## Better Common Names Project 2024 priority species for renaming:

- Japanese beetle (*Popillia japonica*)
- Japanese broadwinged katydid (*Holochlora japonica*)
- Asian longhorned beetle (*Anoplophora glabripennis*)
- Asian longhorned tick (*Haemaphysalis longicornis*)
- Asian citrus psyllid (*Diaphorina citri*)
- Asian subterranean termite (*Coptotermes gestroi*)
- Oriental stink bug (*Plautia stali*)
- Asiatic rice borer (*Chilo suppressalis*)
- African mole cricket (*Gryllotalpa africana*)

### Criteria for renaming:

- Inadvertently create associations between invasives and groups of people
- Have significant public usage
- Are used in federal regulatory documents
- Among most frequently cited by entomologists and the public as needing reconsideration



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Language + misconceptions= lack of public buy in and support

## How does a name change happen?

- Professional association in lead who can facilitate collaboration especially among regulatory agencies.
  - I.e. Entomological Society of America
- Need an inclusive process with diverse perspectives
- Opportunities to stay anonymous when giving input
- Research the name in its native range





Photo credit: <https://extension.umn.edu/identify-invasive-species/red-hailstone>

# Best Practices for Choosing Common Names

University of Minnesota Invasive Species Community of Practice

18 improved names

Promote the use of scientific names

Evaluate other common names in use

- Avoid using place-based and derogatory names.
- Avoid militaristic language
- Avoid common names that can cause confusion across other species

New common names if no options meet above criteria

- Focus on descriptive words- features that help lead to invasion success, host species, important identification features, characteristic symptoms, etc.

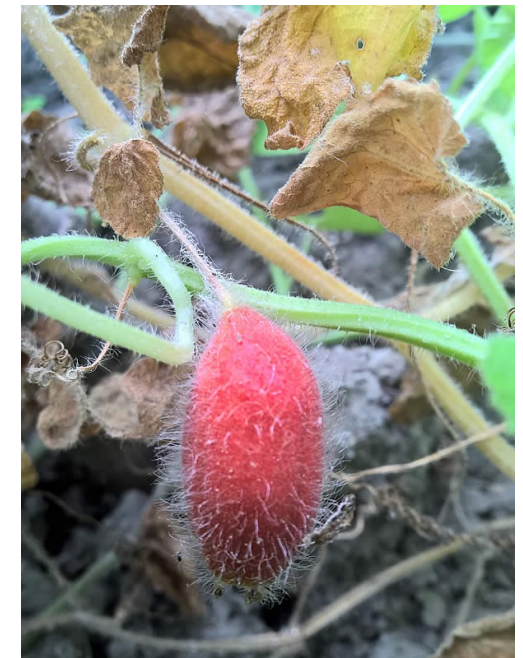


Photo credit: <https://liisma.org/red-hailstone-thladiantha-dubia/>



## Some of my favorite common names....

- Stiltgrass
- Mile a Minute
- Garlic mustard
- Rock snot
- Zebra mussel
- Spotted Lanternfly
- Emerald ash borer





## Actions to Identify and Replace Harmful Terminology in EEB



Cheng, S. J. *et al.* (2023) Championing Inclusive Terminology In Ecology and Evolution. *Trends in Ecology & Evolution.*



## Standardized Invasive Species Terminology for Effective Outreach Education<sup>1</sup>

Basil V. Iannone III, Emily C. Bell, Shannon Carnevale, Jeff E. Hill, Julie McConnell, Martin Main, Stephen F. Enloe, Steven A. Johnson, James P. Cuda, Shirley M. Baker, and Michael Andreu<sup>2</sup>

7 terms compiled by UF | IFAS  
Invasive Species Council

Goal: common language to improve invasive species education and limit confusion caused by the excessive jargon

- Use: native, nonnative, introduced, established, invasive, nuisance, and range change
- Avoid: native invasive, invasive exotic, invasive weed, alien, foreign, and nonindigenous.

## Resources for Learning More...



## Suggest a new name based on best practices:

- Oriental bittersweet
- Japanese honeysuckle
- Japanese barberry
- Chinese wisteria
- Norway maple
- European green crab
- Chinese mitten crab
- European periwinkle

Photo credit: Invasive Green Crab. Photo: Linda Shaw, NOAA Fisheries



Photo credit: [https://www.exoticsguide.org/littorina\\_littorea](https://www.exoticsguide.org/littorina_littorea)



Photo credit: USGS

## New common name

- Focus on descriptive words- features that help lead to invasion success, host species, important identification features, characteristic symptoms, etc.



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Thank you

Questions?

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