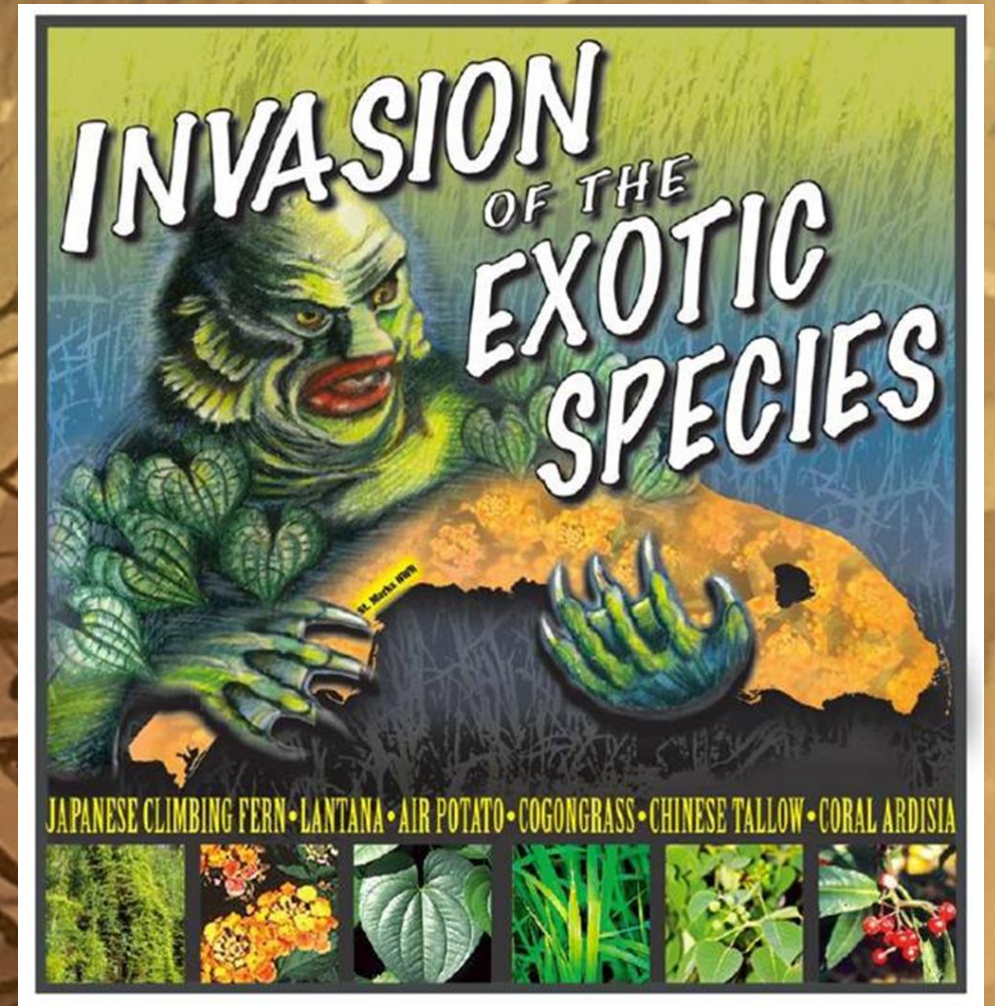


Words have power: Paths to More Effective AIS Common Names

- 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
- Christine Moffitt, Oregon Invasive Species Council, AFS
- Wei-Ying Wong, Alaska Sea Life, AZA
- Wesley Daniel and Cayla Morningstar, USGS
- Todd Murray, WSU, Washington ISC, ESA
- Jennifer Grentz, University of British Columbia
- Tim Campbell, Wisconsin Sea Grant
- El Lower, Michigan Sea Grant



Great Lakes Regional Panel.
November 2, 2022

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

Common names are important for outreach by science-based professions with the public. Yet some names can unintended consequences that may lead to prejudice and harm towards people

Apis mellifera scutellata Lepeletier

(“African honeybee”, “Africanized Bees”, “Africanized Honey Bee”, “Killer Bee”, “African Killer Bee”,)



Vespa mandarinia (Northern Giant Hornet)

(2020 → 2022 “Giant Hornet” “Asian Giant Hornet”, “Japanese Giant Hornet”, “Murder Hornet”, “Asian Murder Hornet”, Northern Giant Hornet)



Name Changes are not a New Phenomena: As Early as 1998,
the American Fisheries Society Changed Two Culturally
Insensitive (derogatory) Names

Jewfish

renamed **Goliath Grouper** in 1998.

Four species of *Ptychocheilus* the USA.



<https://www.saltstrong.com/articles/how-did-jewfish-get-its-name/>

1/5/2023

Northern Squawfish

renamed **Northern Pikeminnow** in 2001.

Ptychocheilus oregonensis



University of Washington

Case Study: The “Red Rock Crab” (*Cancer productus*) native to estuaries of western North America. Misnamed as the “Japanese Crab”

- Mistaken place-based name leads to **public attitudes that red rock crabs are non-native thus, should be caught and removed.**
- The crab’s **mistaken Japanese origin has persisted** in minds of older residents who regard the crab as non-native and competing with native commercially fished *Metacarcinus magister* “Dungeness crab”)



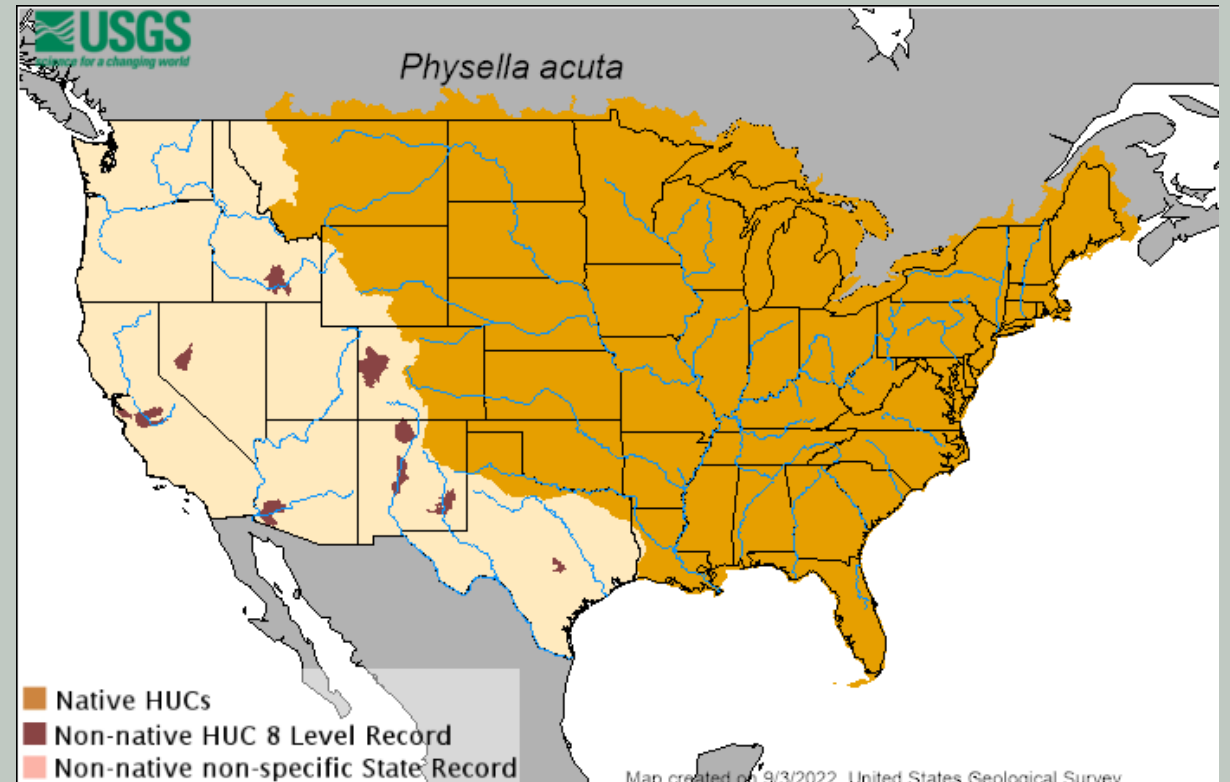
Red Rock Crab are native in the eastern Pacific, North America, not Japan!
wainvasivespecies.gov



European Bladder Snail's (*Physa acuta*) Origin is the Eastern USA.

Recently renamed the Acute Bladder Snail

- Introduced from USA via the cotton trade to France in the 1800s where it was first identified and named
- Genetic studies suggest the snail is native to the eastern USA and originally introduced and spread from the USA. Later re-introduced from within and outside the USA



American Fisheries Society's and Ichthyology's Joint Committee on Fish Names recently decided "Sharpbellies" as the common name for fish in the Xenocyprididae family

- Grass carp is a Xenocyprididae
- A German scientist in 1868 coined the family Xenocyprididae – historical bias of being foreign from a European context
- Species of minnows native to east Asia
- Xeno in Greek/ Latin means "foreign" in nature.
- Shares a root with Xenophobia – dislike or prejudice of people from other countries





PLATE XXXVI. Men at work on the Dexter elm, Malden. From a photograph.



1896, Pennsylvania, USA. Early Responses to Spongy Moth (*Lymnatria dispar dispar*—formerly the “Gypsy Moth”) Outbreak, Detection and Sanitation.

Complete the task! Renaming one variant without renaming other variants becomes problematic

Lymantria dispar dispar

Gypsy moth → Spongy moth



Lymantria dispar asiatica

Asian gypsy moth → Asian Spongy Moth

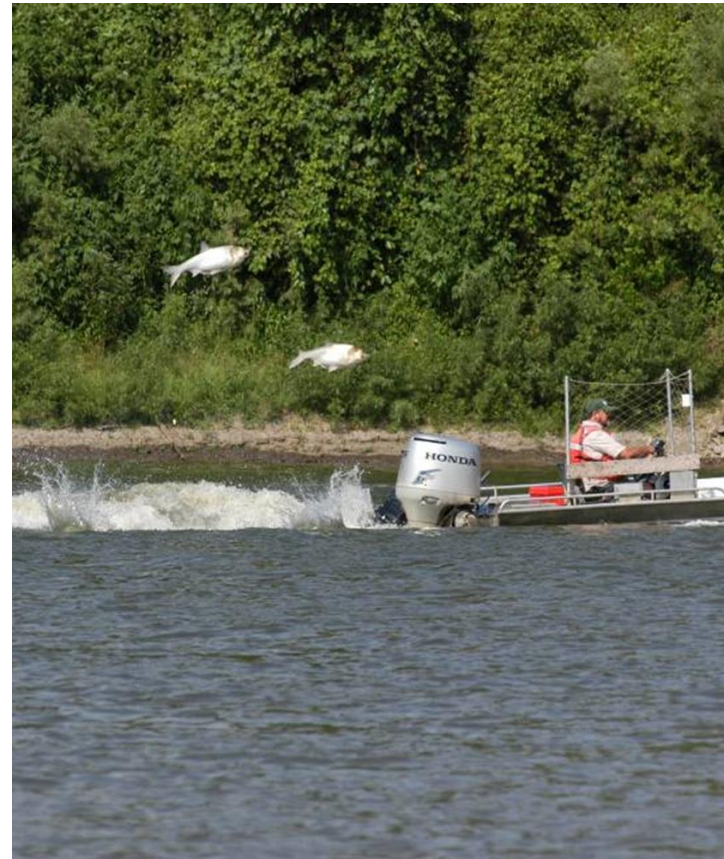


Lymantria dispar japonica

Hokkaido Gypsy moth → Hokkaido Spongy moth

"We see European gypsy moths every year, but these Asian moths are more dangerous because they can fly up to 20 miles and their caterpillars can eat a broader range of host plants," Salp said. Spokesperson, Washington Department of Agriculture

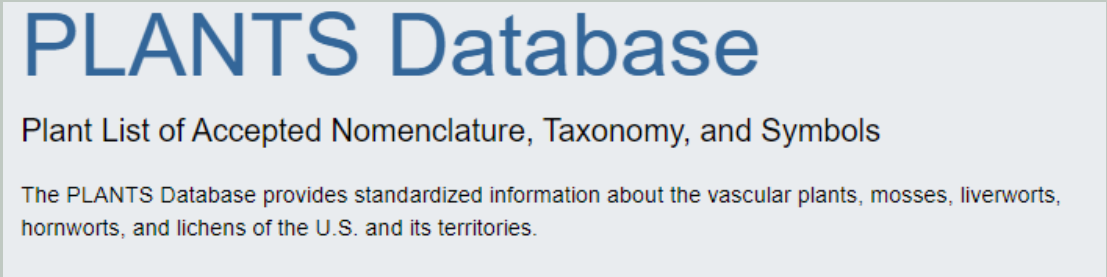
Case Study: The State of Minnesota, USGS, USFWS and USEPA Rename “Asian carps” to “Invasive Carps”. Illinois uses “Copi” for marketing



- **2014.** US State of Minnesota passed a state law prohibiting the use of the name “Asian Carp” in any “...official document.”
- Asian business delegations saw the airport signage “Kill Asian Carp” to be offensive.
- **January 2021.** USA President Biden signed a Memorandum directing all Federal agencies to take steps to ensure official actions mitigate anti-Asian bias and xenophobia, especially during COVID-19 pandemic.
- **February 2021,** US Geological Survey transitioned to use of the name **Invasive Carps.**
- **April 2021,** US Fish and Wildlife Service (USFWS).
- **August 2021,** the Invasive Carp Regional Coordinating Committee (co-chaired by EPA and USFWS)
- *The grass carp (*Ctenopharyngodon idella*),*
- *bighead carp (*Hypophthalmichthys nobilis*),*
- *black carp (*Mylopharyngodon piceus*),*
- *silver carp (*Hypophthalmichthys molitrix*)*

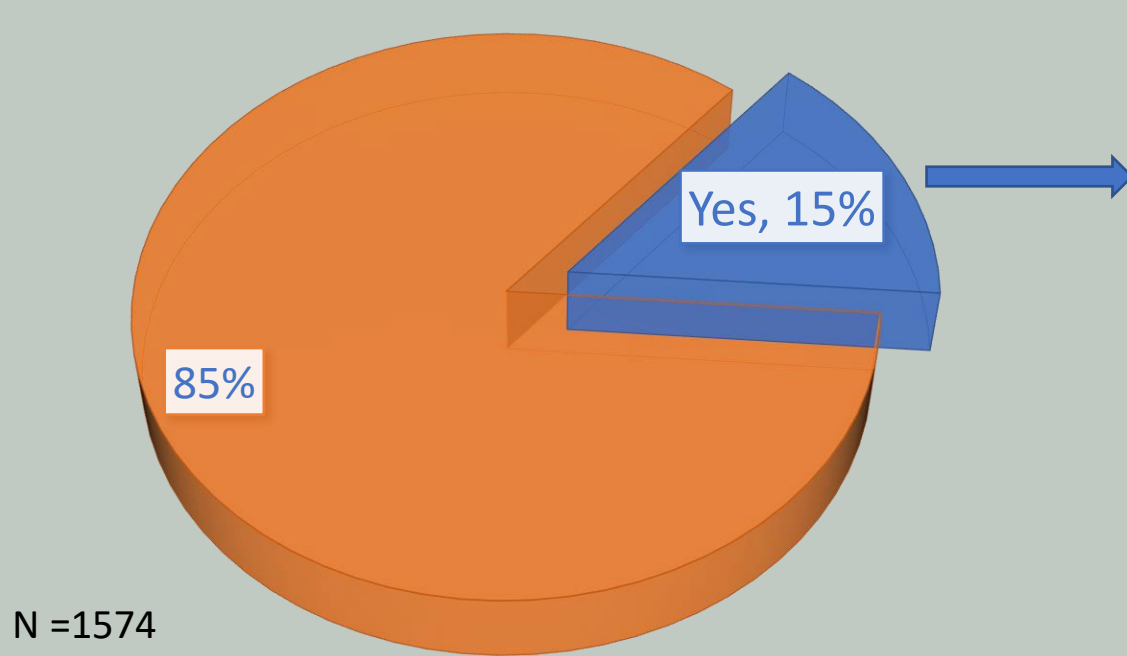
How frequent are common names with place or ethnicity listed in invasive species databases?

- IUCN 100 worst list
- USDA PLANTS Database
- USDA National Invasive Species Information Center (NISIC)
- USGS NAS- Non-indigenous Aquatic Invasive Species

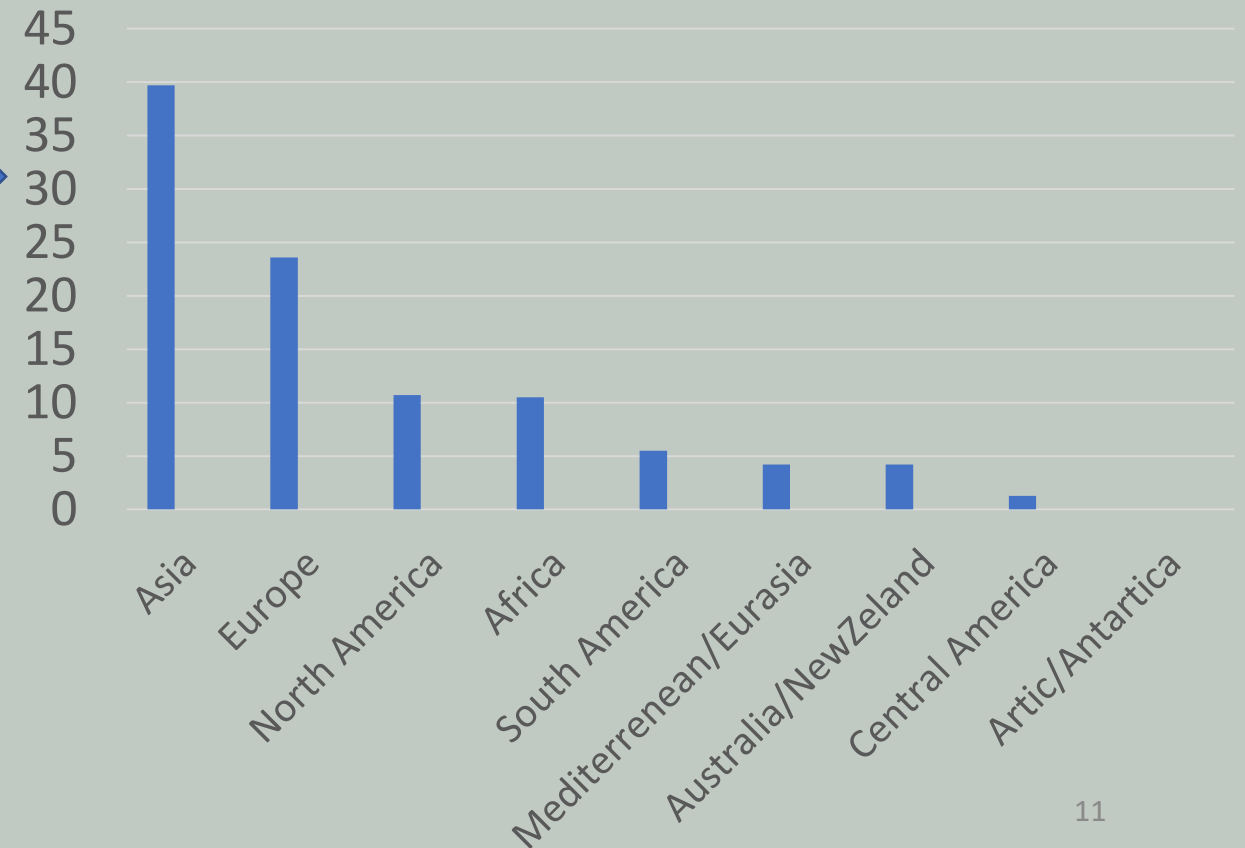


Common Names in the USDA Invasive Species Profile List with Ethnic or Place-Based Identifiers

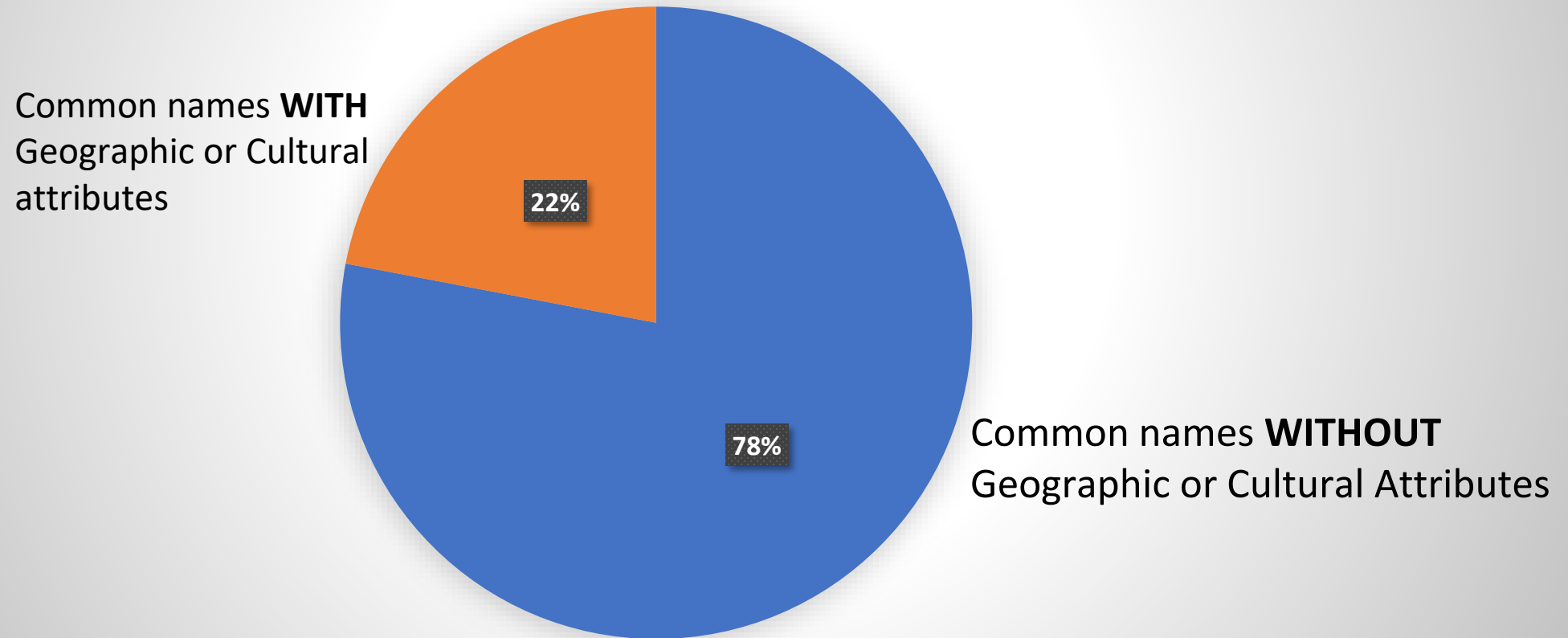
COMMON NAMES WITH ETHNIC OR PLACE-BASED IDENTIFIERS



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

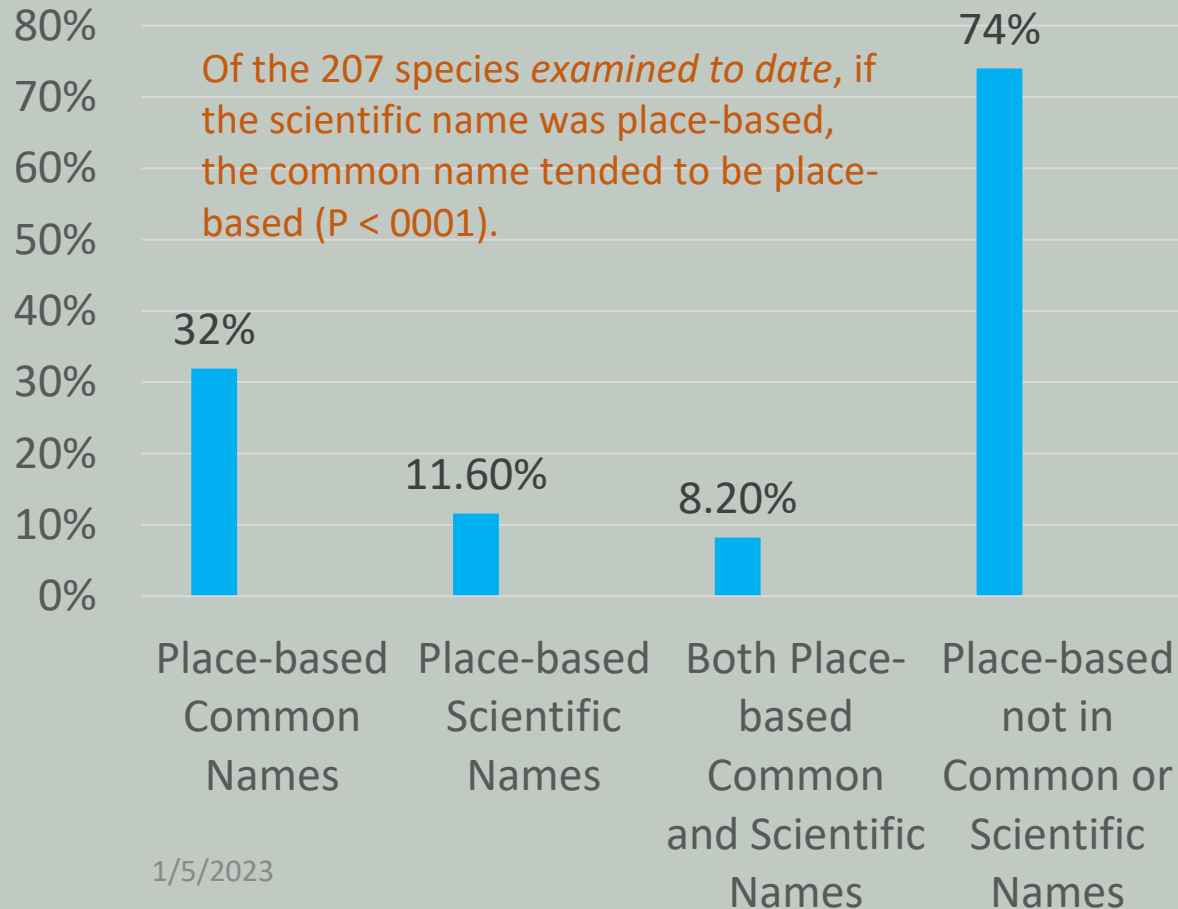


Proportion of Common Names **With** and **Without** Geographic or Cultural Origin in the USGS Nonindigenous Aquatic Species (NAS) Database

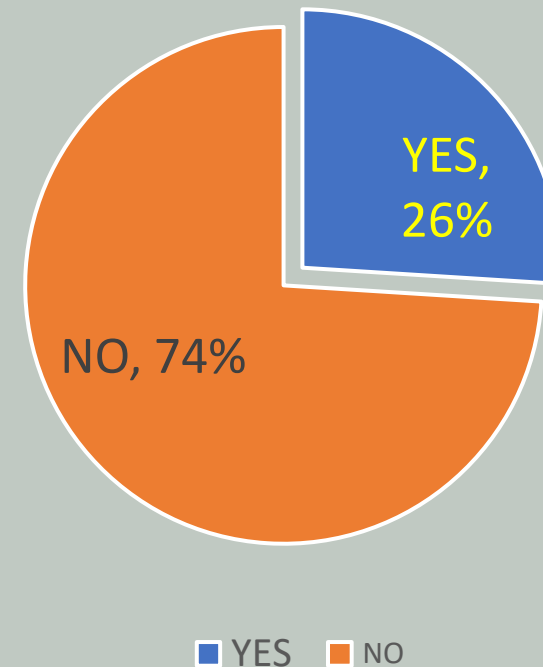


Most Place-based Common Names of Invasive Species¹ are Independent of their Scientific Name

Do Place-based Scientific Names of Invasives Species Determine Common Names?



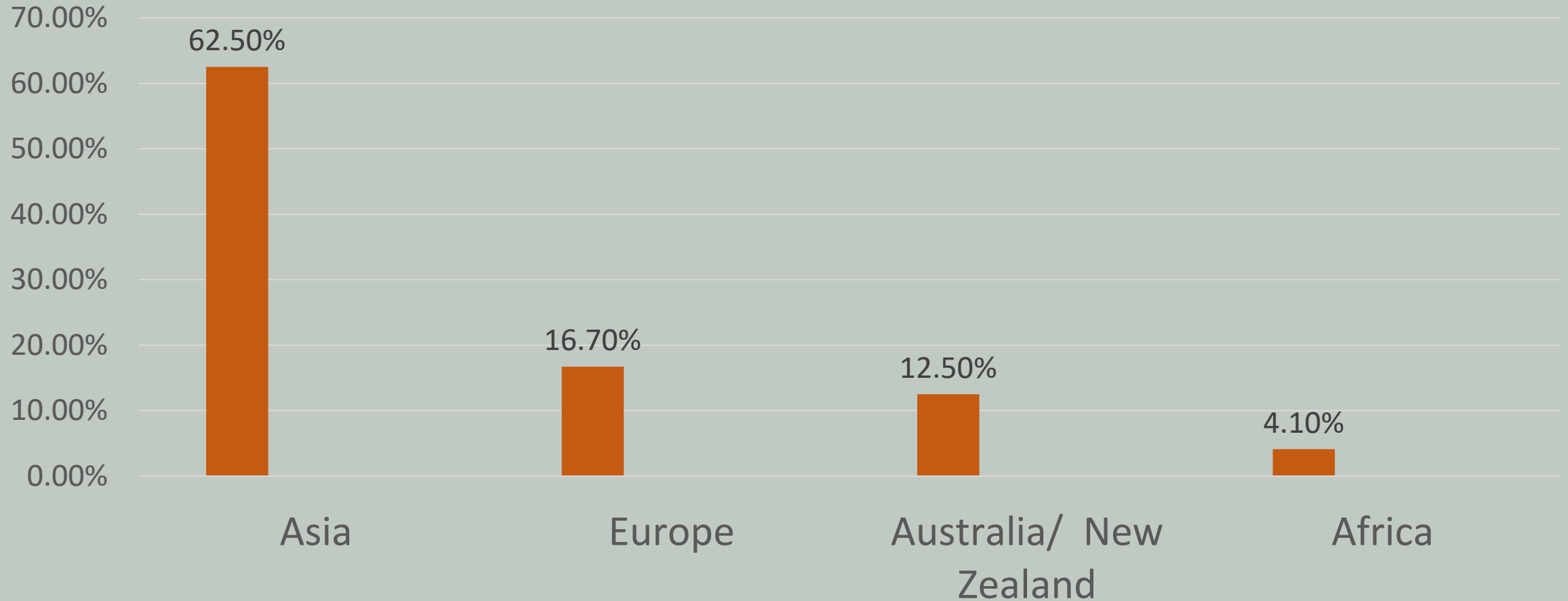
Do Place-based Common Names Have Geographically Specified Scientific Names?



Yet, 74% of common names with place, do not have placed-based scientific names!

Of the Place-based Scientific Names...

Percent by Continent



What's in a Fish Species Name and When to Change It?

Bryn H. Tracy | American Fisheries Society and AFS North Carolina Chapter
Member, Apex, NC 27502. E-mail: bryntracy12558@att.net



The Waccamaw killifish
Fundulus waccamensis

Fisheries, August 2022



Might “Five-Spined Shore Crab” or “Five-spined Green Crab, be more descriptive?”

wainvasivespecies.gov

Case Study: Challenges in re-naming European Green Crab -EGC (Carinus maenus)

- European is not typically thought to be a placed-based name that would cause offense
- Managers and professional societies typically do not have authority to change a name listed in government statute or regulations
- Agencies need resources and *the will* to make name changes
- Some argue that problematic names, being rather uncommon are a dilemma not worth the investment and tradeoffs.
- Changing names can confuse the public
- There is outreach value in describing a species origin
- Removing European causes backlash as being “politically correct” and may slow progress for changing more inflammatory names
- Western Regional Panel –currently using scientific name pending proposal for ANSTF network discussion and action
- Have clear agreed-upon guidance for common names

Examples of invasive species common names that enhance public identification and awareness

Codium fragile

Oyster thief
("Dead man's fingers")

Cassiopea medusa

Upside-down jellyfish

Pacifastacus leniusculus

Signal crayfish

Didymosphenia geminata

Didymo (Rock snot)

Pterois volitans

Lionfish

Lycorma delicatula

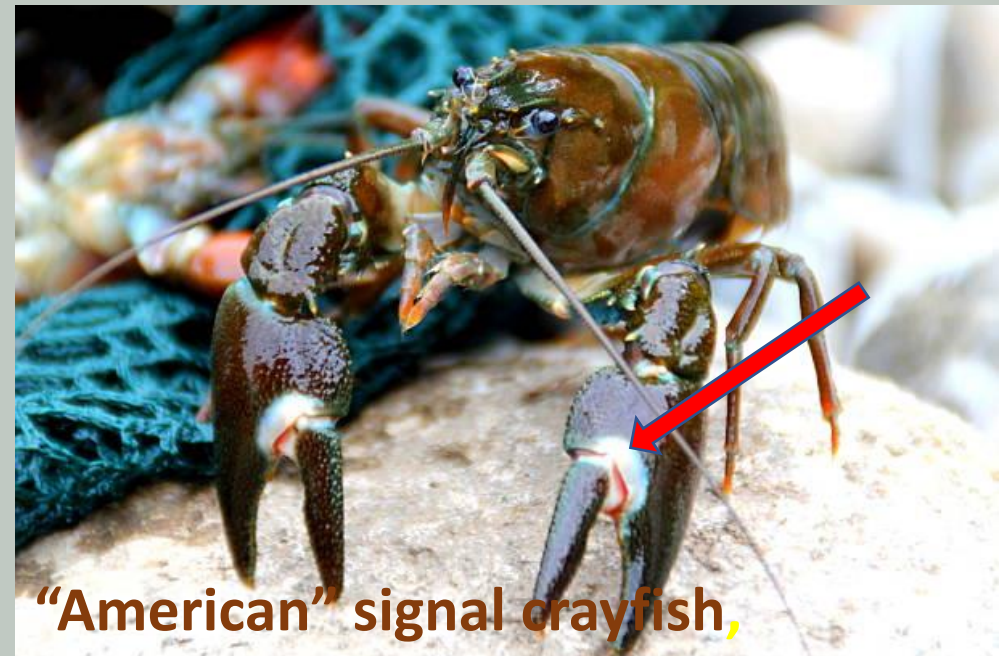
Spotted Lanternfly



Conclusions and Paths Forward

01

- Common names for organisms are used in the professional and scientific communities to bridge communication between those who study and manage organisms as a profession with those that don't.
- Not all common names serve to foster better communication.
 - A minority (15-30%) of common names in invasive databases have human ethnicity, place and lifestyle references.
 - The often-militaristic context used in AIS management may steer the public into unintended beliefs and actions towards people rather than invasive organisms.
- Advance our profession and mission to conservation, natural resources and society by examining how we can more effectively name invasive species.
- Avoid place-based and ethnic names for invasive species. Can unintentionally lead to discrimination and harm towards people. Especially when invasive species management is framed in militaristic terms
- New names should aid public awareness in identification and impacts.
- Use scientific names in regulations. Though scientific names may not always be neutral.
- Agencies can benefit from model policy language on the source and use of scientific and common names



“American” signal crayfish,

Africanized “Killer” Bees

QUICK STATS:

 **Color:**
Golden-yellow with darker bands of brown

 **Shape:**
Oval

 **Size:**
½ inch long

 **Region:**
Found in Arizona, California, Florida, Texas, Nevada, New Mexico and Oklahoma



Sincere thanks!

Email:
sam.chan@oregonstate.edu

