

Words have power: time to revisit invasive species nomenclature?

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

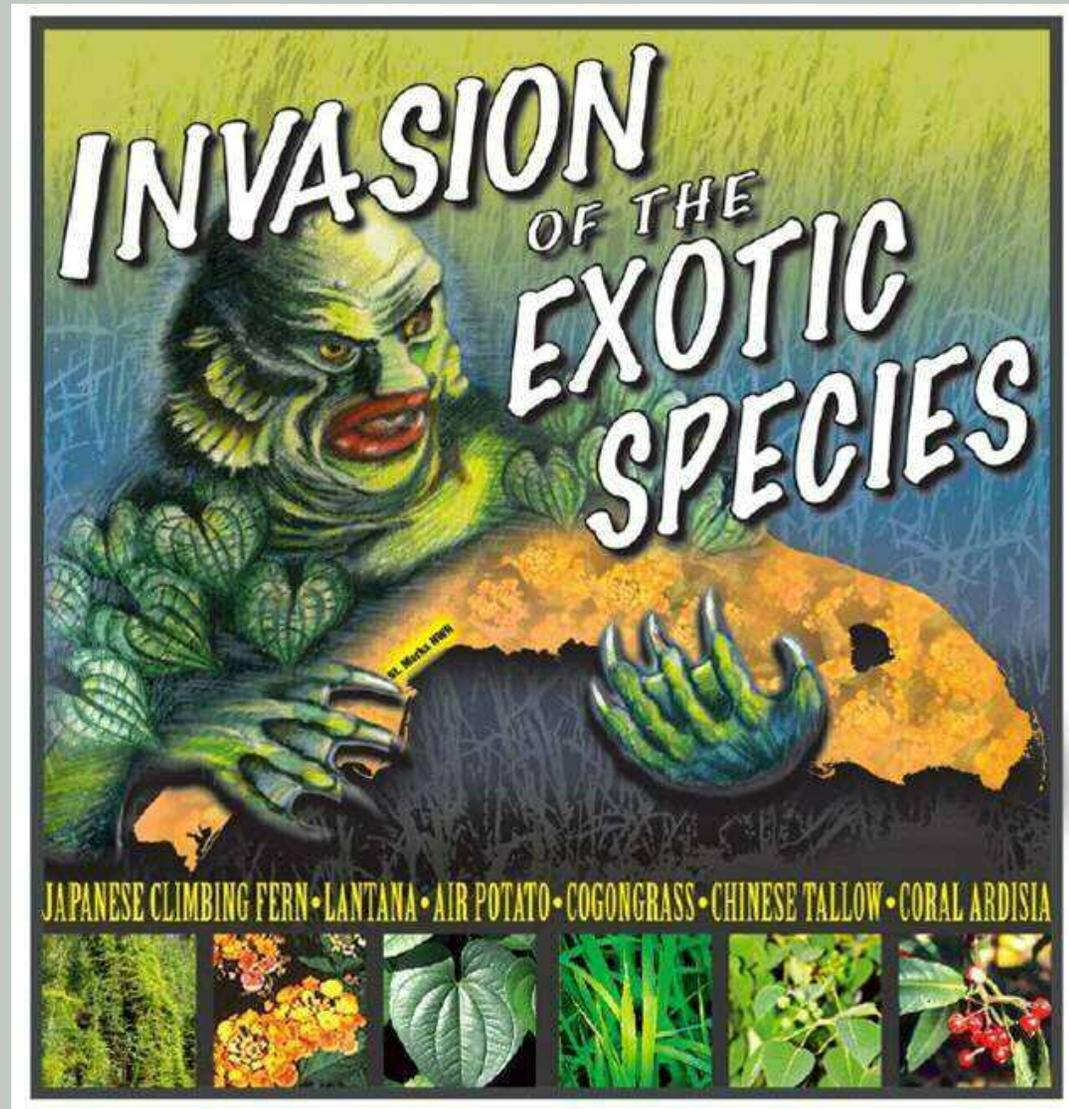
www.Oregon.gov/ODA/program

01 Introduction

- 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 NIS 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.
- Opportunities for invasives species professionals to consider and use names that are more effective for science, management and public engagement



- Militaristic and nationalistic parallels (“invader, dangerous, kill, eradicate, defend) are often applied to invasive species management.
- When combined with a place-based, ethnic, lifestyle names, these same connections could unintentionally foster bias, prejudice and hate.
- When COVID-19 was called “Kung Flu” and “Chinese Virus” – Rise in anti-Asian sentiments across the US.
- Advance our profession and mission to conservation, natural resources and society by examining how we can more effectively name invasive species.



Common names are important for outreach, yet at times have unintended consequences that may lead to prejudice and harm towards people

Apis mellifera scutellata Lepelletier

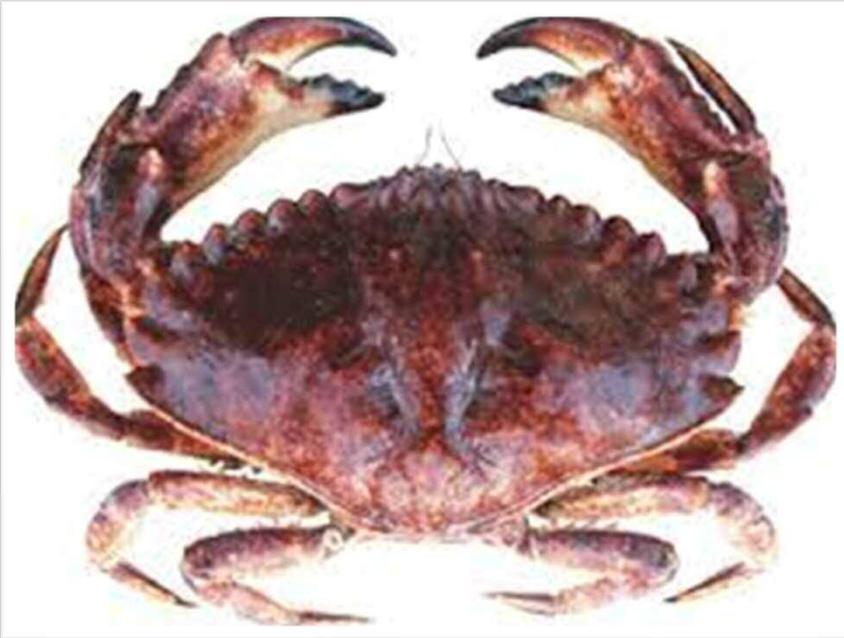
("African honeybee", "Africanized Bees", "Africanized Honey Bee", "Killer Bee", "African Killer Bee",)



Vespa mandarinia

"Giant Hornet" "Asian Giant Hornet", "Japanese Giant Hornet", "Murder Hornet", "Asian Murder Hornet"





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

wainvasivespecies.gov

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”)



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

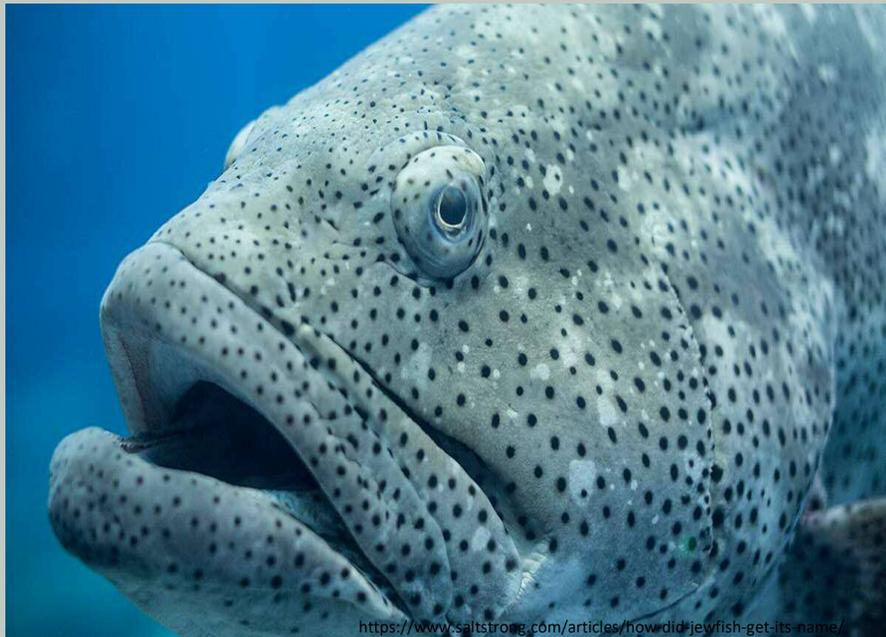


As Early as 1998, the American Fisheries Society
Changed Two Culturally Insensitive (derogatory) Names

Jewfish

renamed **Goliath Grouper** in 1998.

Four species of *Ptychocheilus* the USA.



5/10/2022

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

Northern Squawfish

renamed **Northern Pikeminnow** in 2001.

Ptychocheilus oregonensis



University of Washington

Case Study: The State of Minnesota, USGS, USFWS and USEPA Rename “Asian carps” to “Invasive Carps”



- **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*)*



Might “Five-Spined Shore 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 place-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

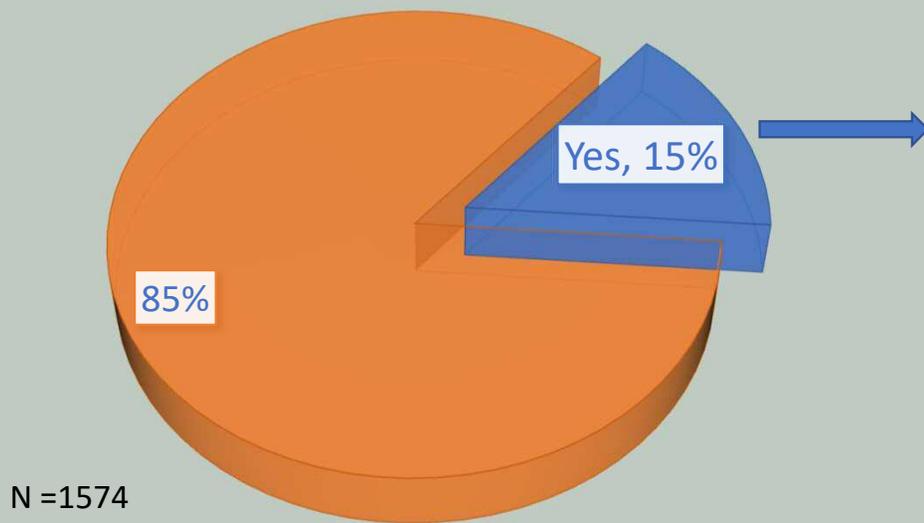
How frequent are common names with place or ethnicity listed in invasive species databases?

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

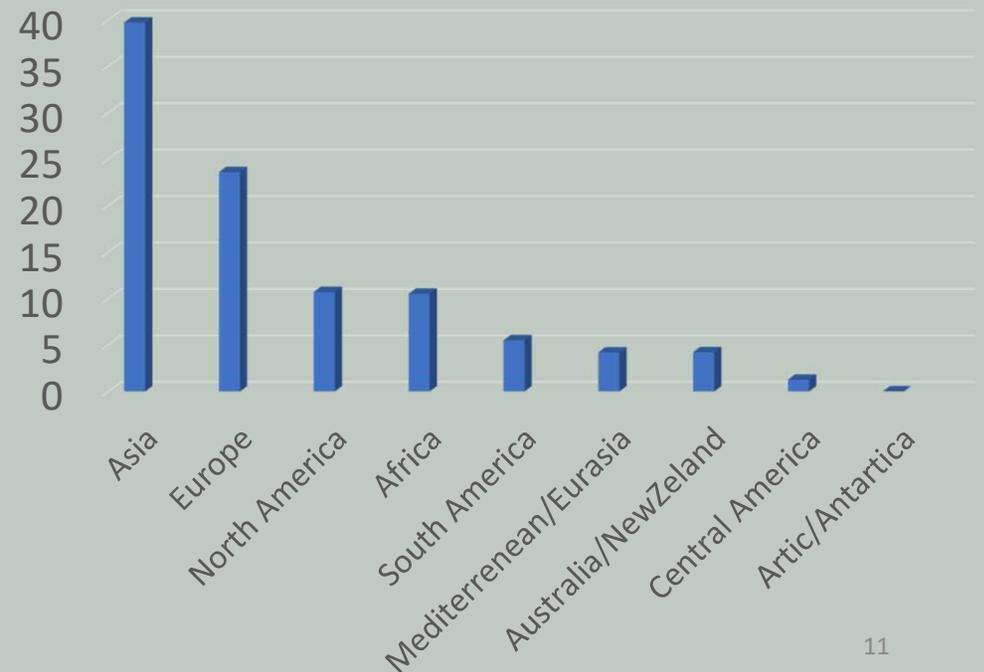


Common Names in the USDA Invasive Species Profile List with Ethnic or Place-Based Identifiers

COMMON NAMES WITH ETHNIC OR PLACE-BASED IDENTIFIERS



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





Online Guide to ANS

HOME / ONLINE GUIDE TO ANS



Species List

Asian Clam

Asian Shore Crab

Brazilian Elodea

Brittle Naiad

Chinese Mitten Crab

Club Tunicate

Didymo (a.k.a. Rock Snot)

Eurasian Watermilfoil

European Frog-bit

Fanwort

Fishhook Water Flea

Green Crab

Online Guide to Aquatic Invasive Species in Northeastern North America

Northeastern North America's waters are being invaded. Not by a foreign army or terrorists; this is an invasion by non-native aquatic plants and animals transplanted from around the world. These organisms, introduced both intentionally and accidentally, are causing dramatic changes to the region's native ecosystems. Aquatic invasive species threaten our native plants and animals, reduce biodiversity, harm important ecosystems and degrade water quality, and cause significant economic losses.

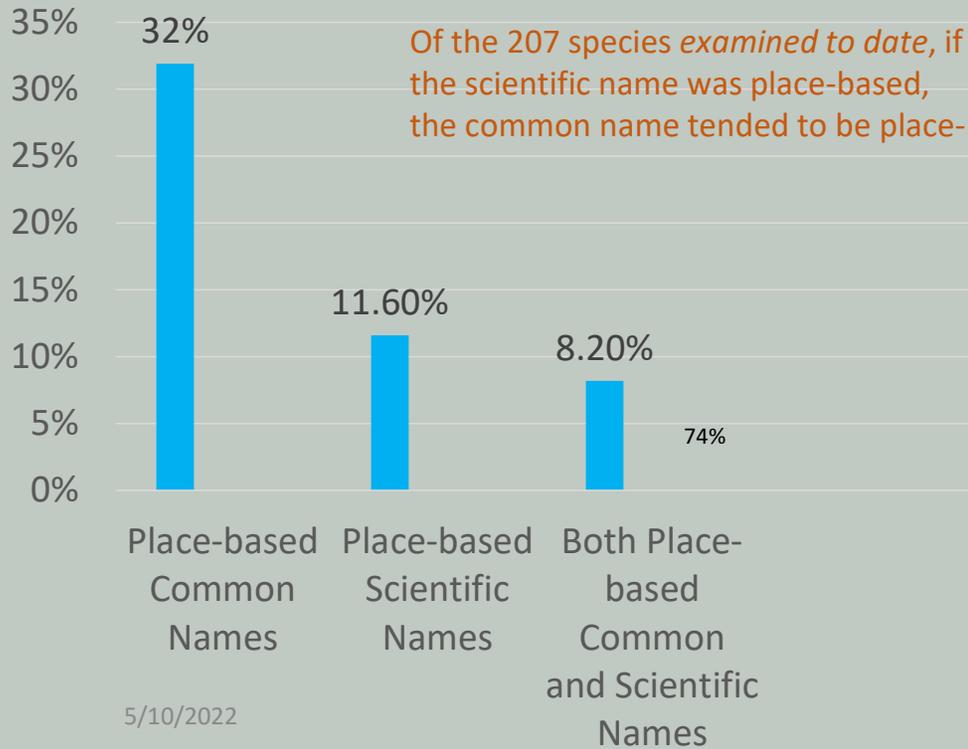
The best defense against invasive species is spread prevention: stemming the tide of new introductions to specific waterbodies and our region as a whole. The next best defense is early detection: in many cases, new invasions detected before they become well established can be effectively controlled or even eradicated.

The NEANS Online Guide provides information about invasive species that threaten northeastern North America and allows you and your organization to create customized field guides. Browse the site and learn about a wide variety of marine and freshwater invasive species and how to identify them. Then head to the water with your customized field guide and help stem the tide of invasive species by participating in spread prevention and early detection efforts to detect and prevent new invasions.

<https://www.northeastans.org/index.php/home/online-guide-to-ans/>

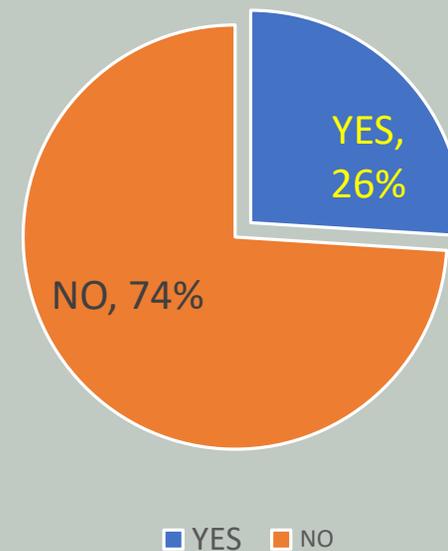
Most Place-based Common Names of Invasive Species¹ are Independent of their Scientific Name

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



5/10/2022

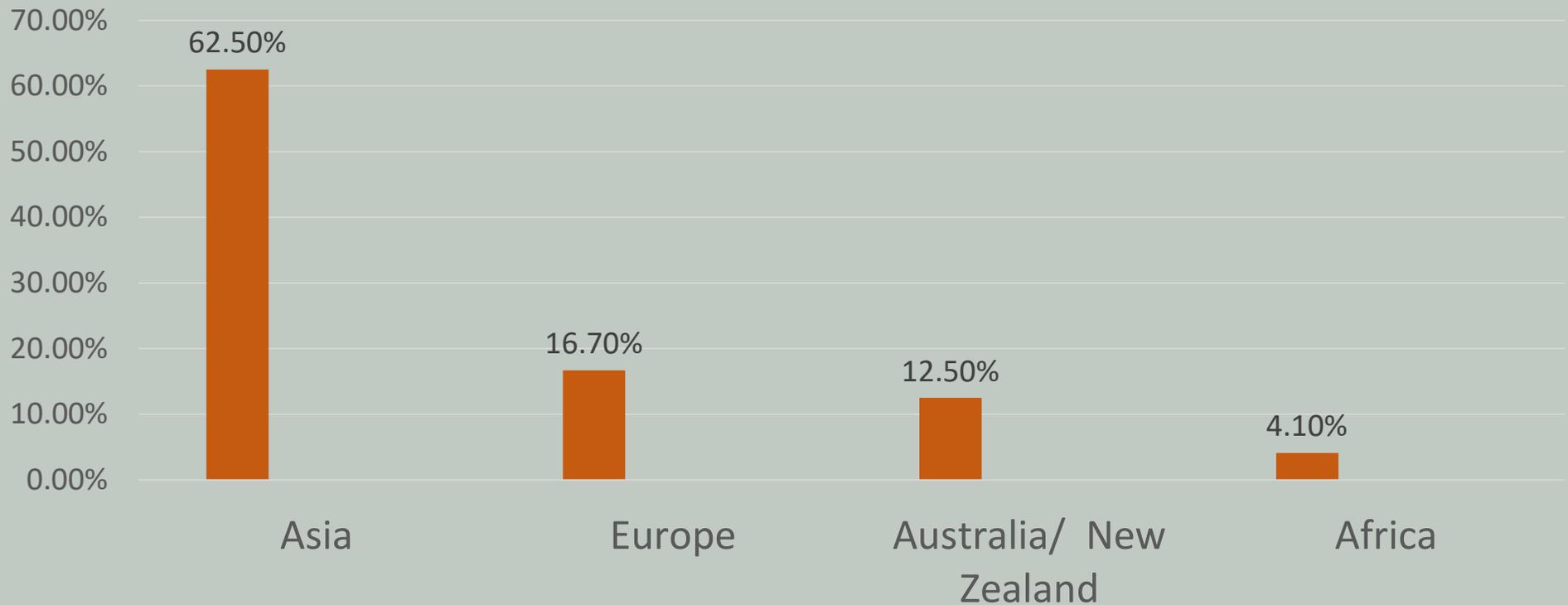
Do Place-based Common Names Have Geographically Specified Scientific Names?



¹USDA, PLANTS, ISSG, USGS-NISC

Of the Place-based Scientific Names...

Percent by Continent



Case study: *Lymantria Dispar*, The Spongy Moth ("Gypsy Moth -Introduced in the early 1890's into USA for breeding towards a silk production program)



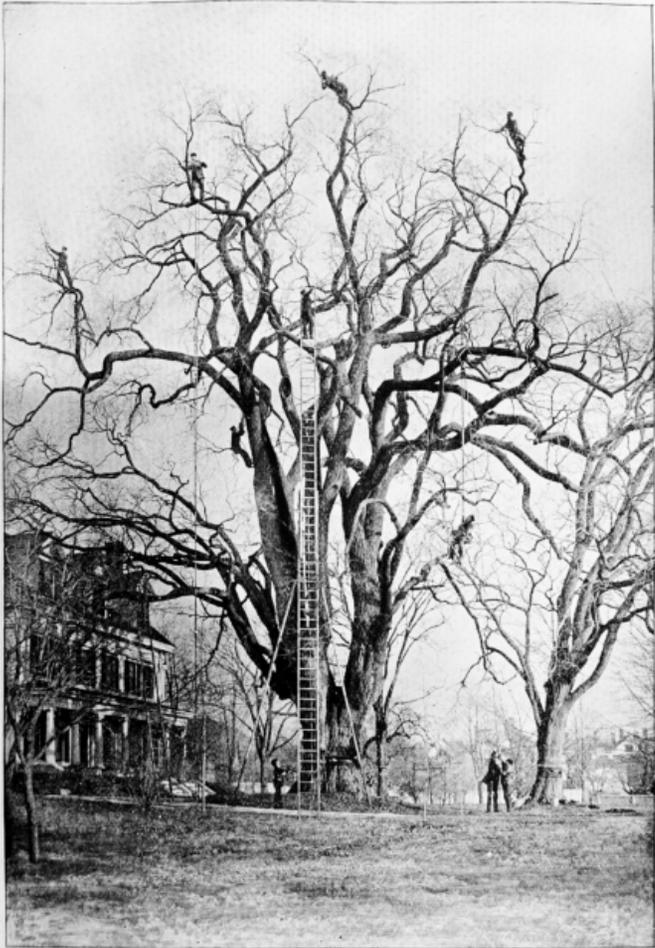


PLATE XXXVI. Men at work on the Dexter elm, Malden. From a photograph.



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

The word “gypsy” is a widely acknowledged ethnic slur

- Slur for people from the Roma (Romani) ethnic group
- Association with transience, uncleanness, dishonesty (e.g., “to get ‘gypped’”), occult (fortunetelling, curses), low socioeconomic status
- Some people and groups have positive associations, that tend to be based in misunderstandings, stereotypes, and idealizations
- **ESA’s structure and process for renaming *Lymantria dispar* acknowledges that professional societies can provide leadership for better common names**



Gypsy Moth' *Lymantria dispar*

City of Toronto, Canada



*Photo credit: R.
Lindroth*



**ENTOMOLOGICAL
SOCIETY OF AMERICA**
SHARING INSECT SCIENCE GLOBALLY

"The purpose of common names is to make communication easier between scientists and the public audiences they serve. By and large, ESA's list of recognized insect common names succeeds in this regard, but **names that are unwelcoming to marginalized communities run directly counter to that goal.**"

- ESA President Michelle S. Smith, BCE.

The ESA's Better Common Names Project

BETTER COMMON NAMES PROJECT



- Identify and change common names of insects that are offensive, derogatory, exclusionary and/or dehumanizing through professional participatory process.
- Use names that are descriptive of appearance or natural history or impact, in commonly understood language
- Do not refer to ethnic groups or geography
- Not named for a person
- Does not contain Latin/Greek/scientific name
- No cultural references, no overtly negative descriptors

ESA's Better Common Names Project Leads to Change

SAME MOTH, NEW NAME

Lymantria dispar has a new common name: spongy moth.

WHY DID THIS NAME CHANGE?

"Spongy moth" replaces the old common name, "gypsy moth," because it used a derogatory term for Romani people.

"Spongy moth" also better describes an identifying characteristic: the moth's sponge-like egg masses, an important target for management efforts of this invasive forest pest.

HOW WAS "SPONGY MOTH" CHOSEN?

The name was selected by a group of more than 50 entomologists and foresters in the United States and Canada, as well as Romani scholars working on human rights issues. Convened by the Entomological Society of America, the group gathered input from a wide audience of interested individuals and organizations.

More than 200 names were evaluated before "spongy moth" was selected. The name is derived from the common name used in France and French-speaking Canada, "spongieuse."

WHY IS IT IMPORTANT TO BE AWARE OF THE SPONGY MOTH?

Lymantria dispar is an invasive forest pest that can defoliate hundreds of tree and shrub species. A primary way spongy moth spreads is via egg masses transported on firewood, outdoor equipment, and vehicles. By keeping an eye out for these spongy-looking egg masses, you can play an important role in slowing the spread of this pest.

And, by using its new name, "spongy moth," you can also help put the old name—and its harmful connotations—in the past.

Photos: *Lymantria dispar* adult by Gyorgy Csoka, Hungary Forest Research Institute, Bugwood.org.
Lymantria dispar egg masses by Karla Salp, Washington State Department of Agriculture, Bugwood.org.



LEARN
MORE



New name, same destructive habits: Meet the Spongy Moth

March 3, 2022 - 5:00 PM ET
Heard on All Things Considered

JANE LINDHOLM

FROM 

 2-Minute Listen

 PLAYLIST   



AFS Joint Committee on Fish Names recently decided to not use “Xenocarps” as a common name for fish in the Xenocyprididae family

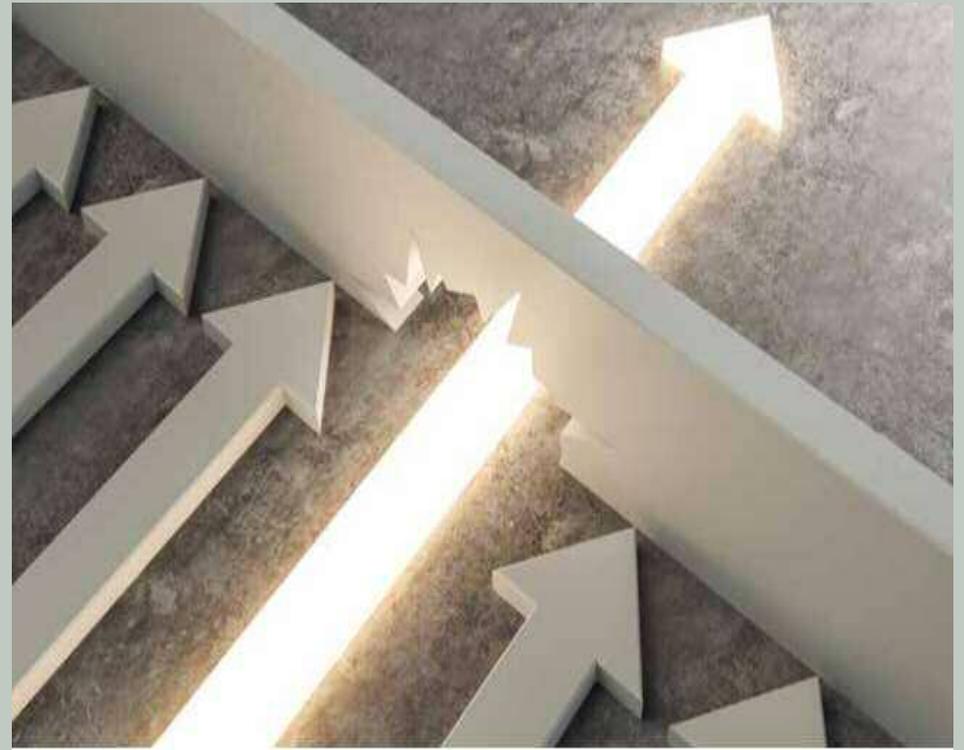
May 1, 2022, letter from NAISMA to AFS

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



Forward steps to advance our profession, invasive species management and public engagement

- Place-based names may bias us against organisms and unintentionally lead to discrimination and harm towards people, especially when invasive species management is framed in militaristic terms,
- Use scientific names in regulations. Though scientific names may not be neutral, and the name change will likely be uneven, not gradual
- New names can be more accurate and descriptive of the physical or behavioral characteristics.
- **As a profession, assess, develop and use names that better serve us for outreach, early detection, and education on invasive species.**



*Sincere thanks
to you and
my co-authors!*

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