

Putting into Practice the Principles of Effective Climate Change Communication

Scott Hershberger

Forestry Communications Specialist

University of Wisconsin-Madison Extension Forestry & Wildlife Program

M.S. in science communication

Lake Superior Collaborative Symposium, Ashland, WI

January 26, 2026



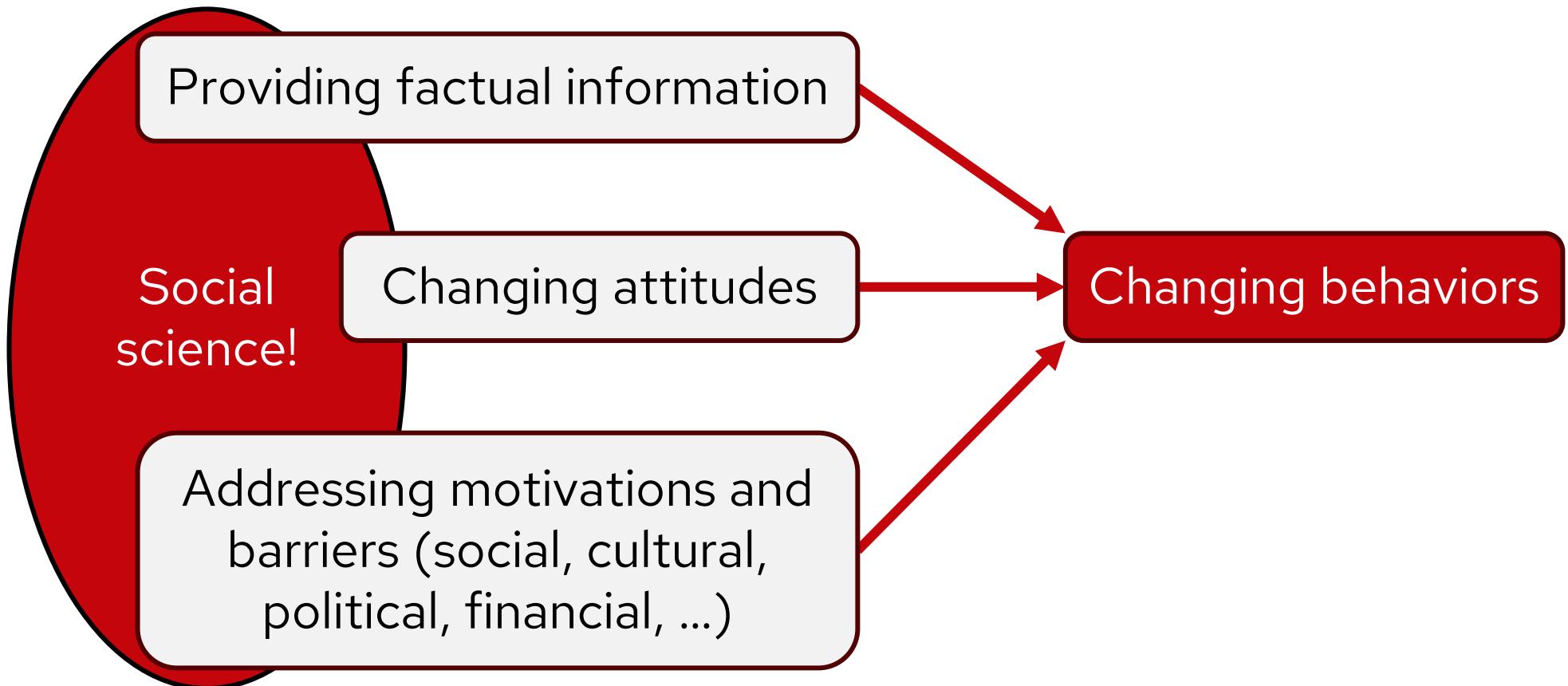
What are your communication goals?

Providing factual information

Changing attitudes

Changing behaviors

What are your communication goals?



OUTLINE

Audience segmentation

Word choice

Values and agency

Social norms

Misinformation and disinformation

Putting the pieces together

KEEP IN THE BACK OF YOUR MIND

Who is the right messenger?

What communication channels will you use?

Audience Segmentation

The “general public” does not exist

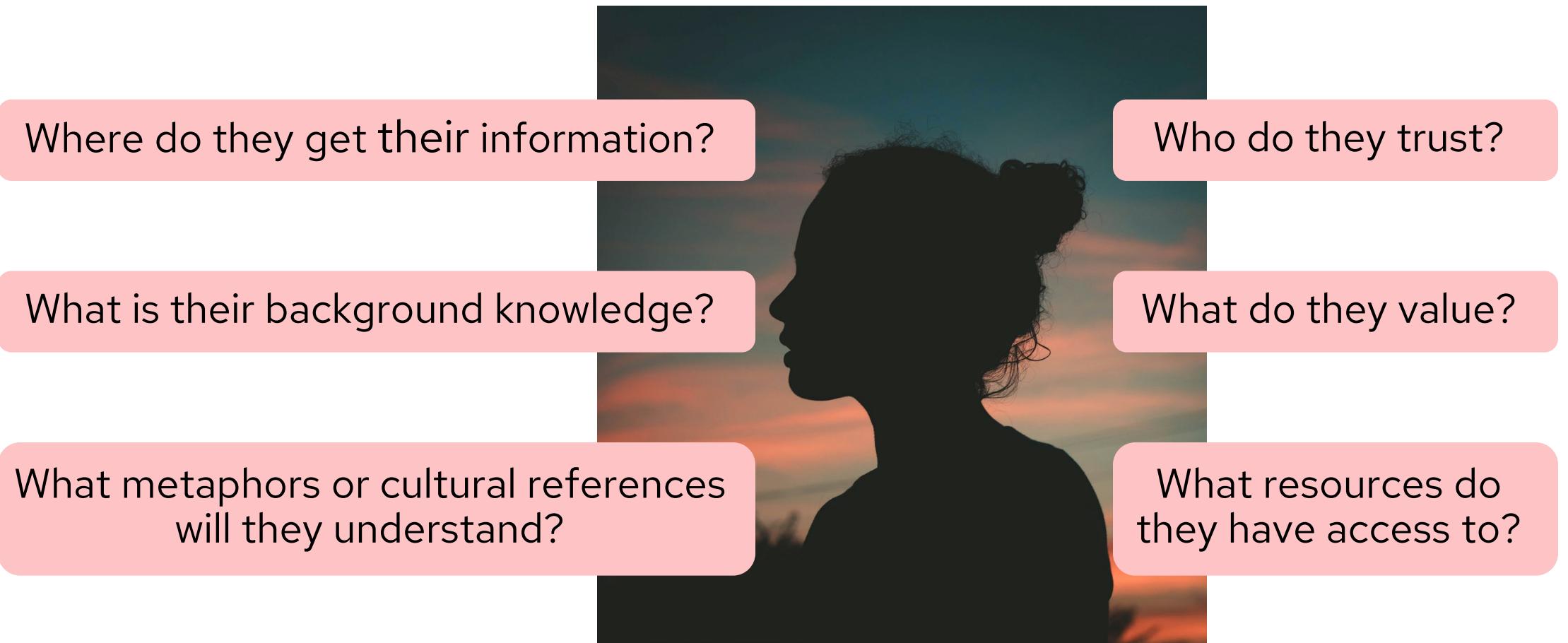
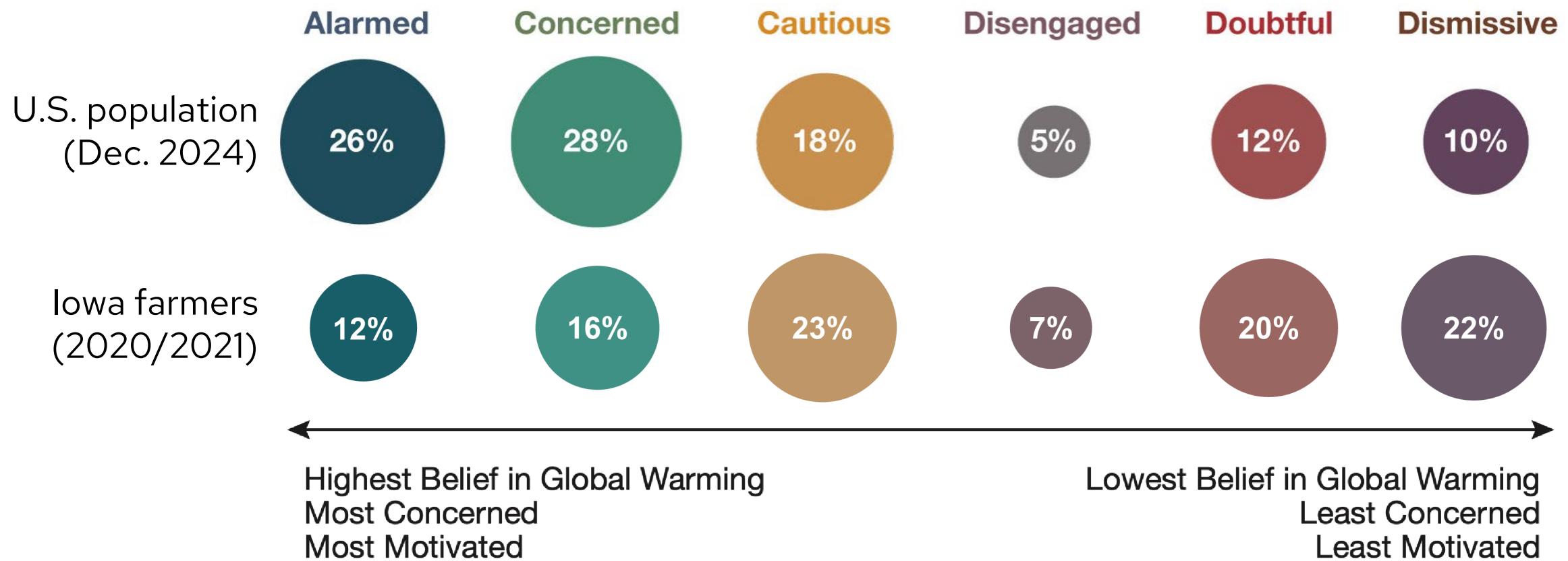


Image: mododeolhar

Global Warming's Six Americas



Leiserowitz et al., 2025; Nowatzke & Arbuckle, 2024

One size does not fit all

- Three basic audience categories:

Actively want
to address
climate change

Hershberger & Newman, in press

One size does not fit all

- Three basic audience categories:

Actively want
to address
climate change

Acknowledge climate
change but don't
prioritize it

Hershberger & Newman, in press

One size does not fit all

- Three basic audience categories:

Actively want
to address
climate change

Acknowledge climate
change but don't
prioritize it

Are opposed to
the phrase
"climate change"

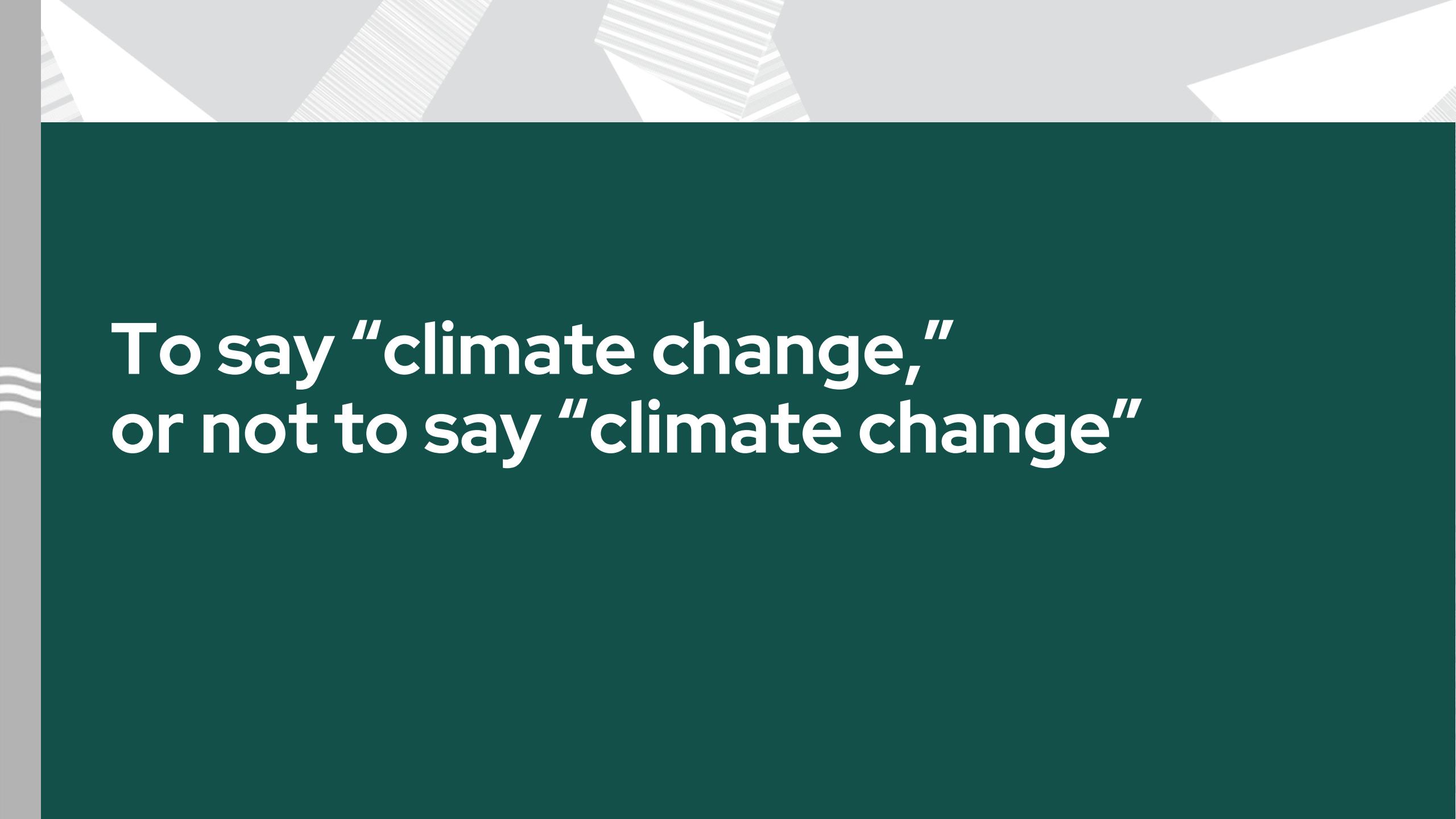
Hershberger & Newman, in press

Choose your scope strategically

	Audience size	Usefulness to audience
Broad scope	Large	Low
Narrow scope	Small	High

YOUR TURN

Pick your specific **audience segment**
and desired **behavioral outcome**



To say “climate change,”
or not to say “climate change”

The elephant and donkey in the room

- Political ideology is the strongest demographic predictor of climate change attitudes
- People engage in *motivated reasoning*—facts are not enough!
- BUT be careful to not stereotype or overgeneralize

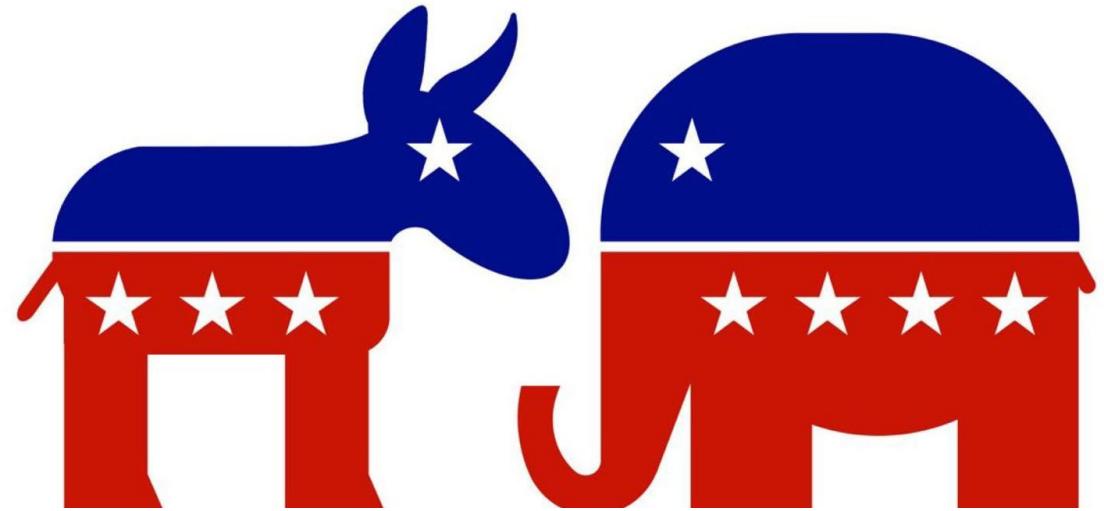


Image: CNN
Hornsey et al., 2016; Kahan et al., 2012

Overcoming polarization

“Climate change” 

“The words are what they object to, not necessarily to the activities that are being done under those words.”

—UW-Madison Extension Community Economic Development educator

“Changing weather patterns” 

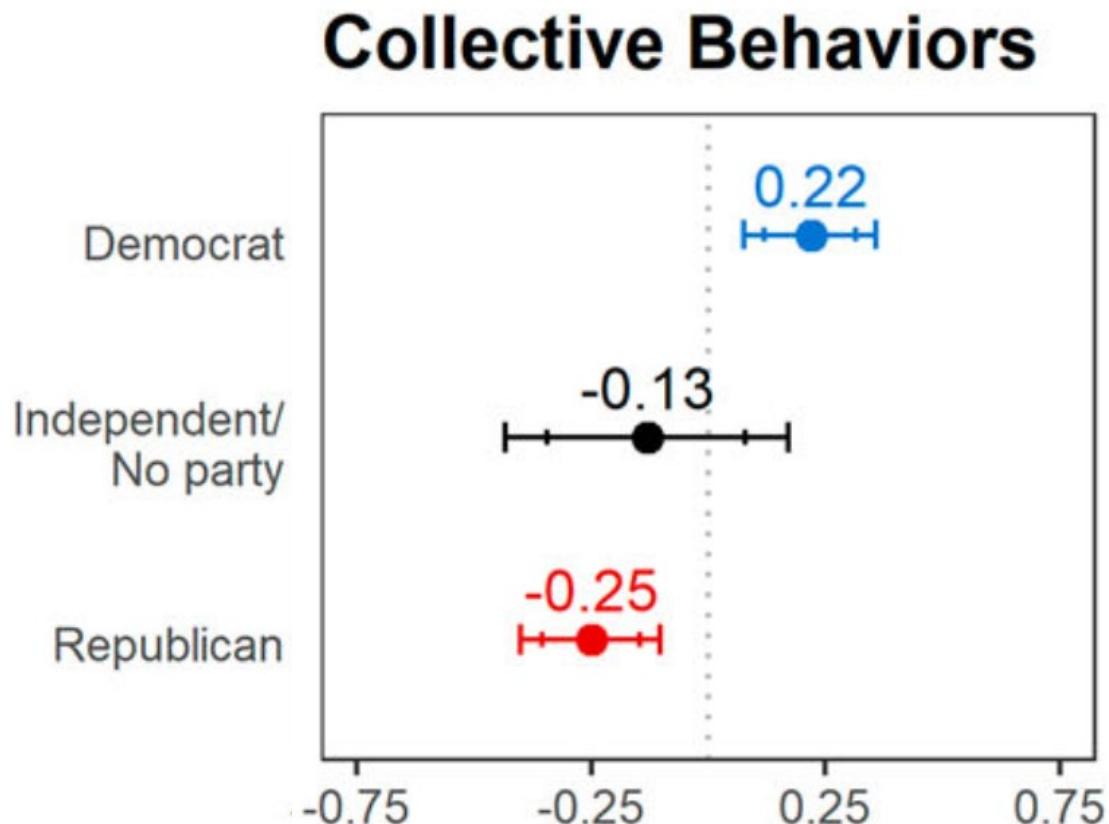
“Changing climate” 

“Climate variability” 

“Extreme weather” 

Hershberger & Newman, in press

“Climate change” vs “extreme weather”



Negative = more willing with
“extreme weather”

Positive = more willing with
“climate change”

Carman et al., 2022

What if my audience is mixed?

- **DON'T** unnecessarily activate partisan identities
- **DO** activate shared identities
- Emphasize specific, local, & relatable aspects of climate change



Image: clmcdk fejcn

Be specific, local, and relatable

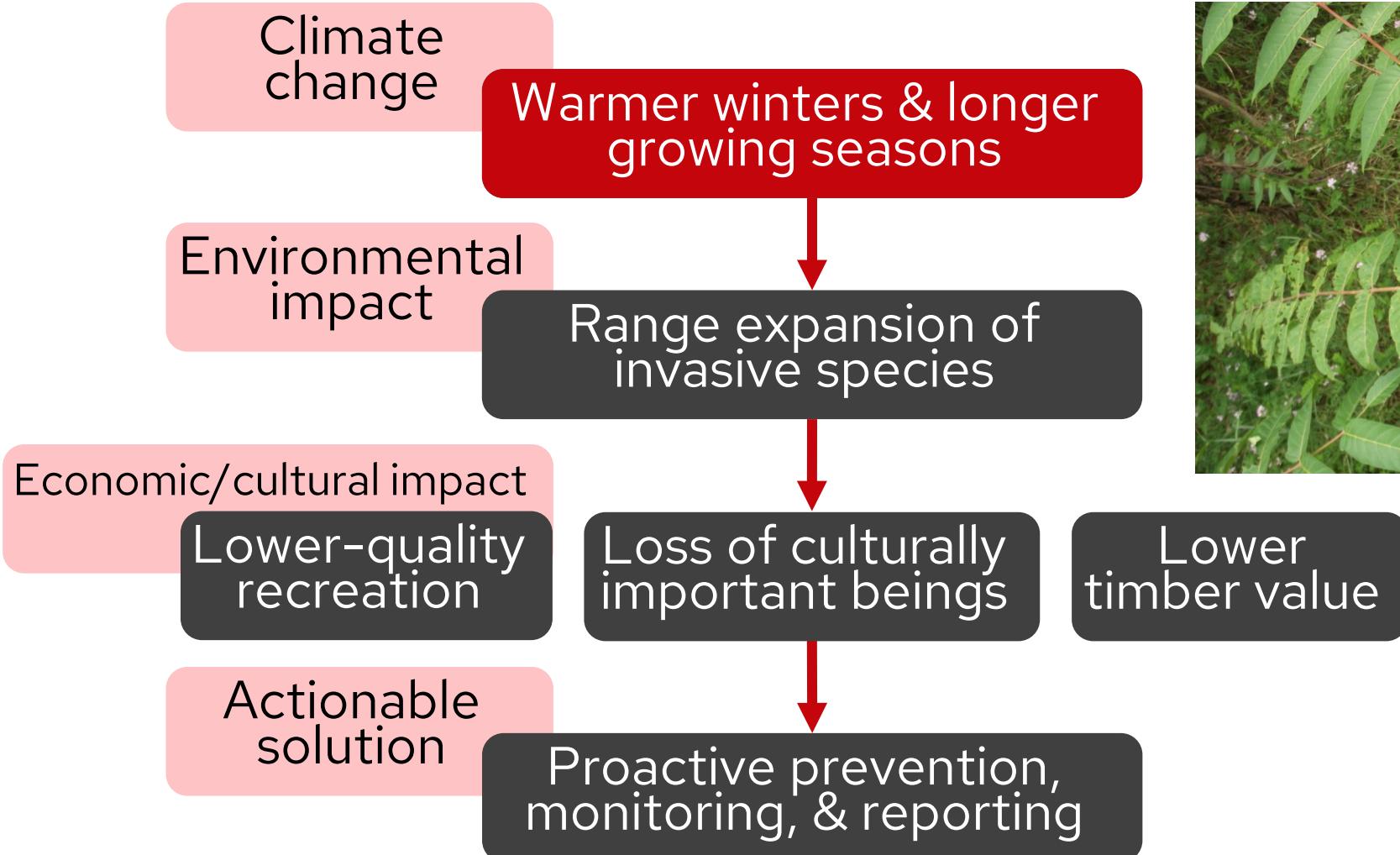


Image: Richard Gardner, Bugwood.org

YOUR TURN

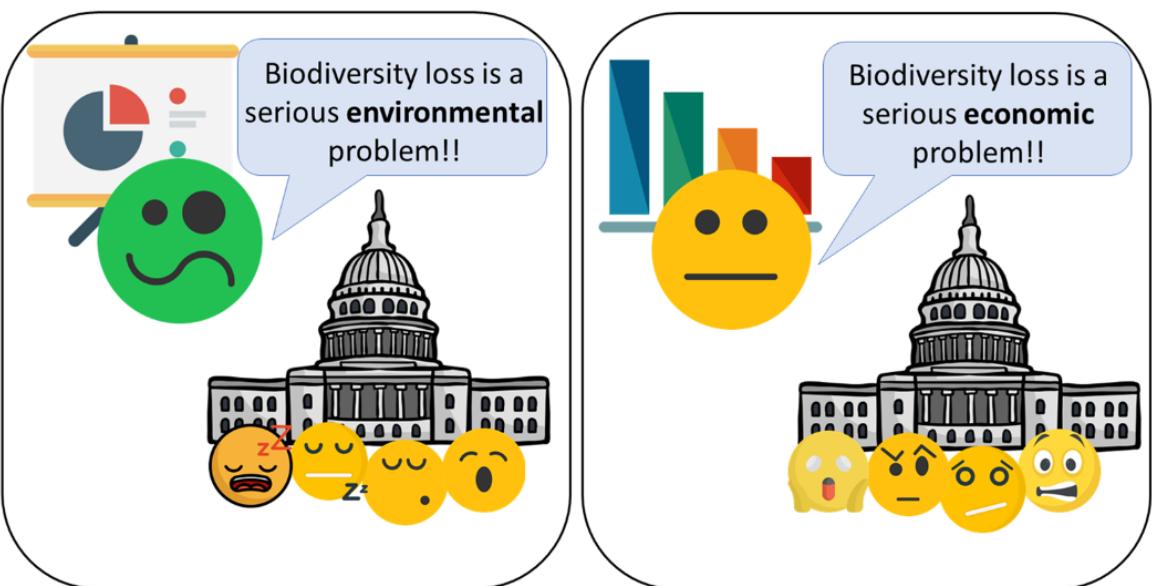
How will you refer to the concept of climate change?



**Value-focused messaging and
cultivating a sense of agency**

Message framing

- Draw attention to one aspect of a topic while deemphasizing other aspects
- Both text and visuals matter



Guenther et al., 2023
Images: USDA; Kusmanoff et al., 2020

Message framing

- Emphasize “do more good,” not “do less bad”

“Ban” 

“Upgrading” 

“Mandate” 

“Setting standards” 

“Phaseout” 

“Making solutions accessible” 

“Decrease your use of single-use products that are often thrown away” 

“Increase your use of reusable products that last a long time” 

Example: Tribal Adaptation Menu

- Respect for all beings
- Reciprocity
- Building relationships



Tribal Adaptation Menu Team, 2019

Example: Rotary Club Four-Way Test



Rotary **THE FOUR-WAY TEST**
Of the things we think, say or do:

- first** Is it the **TRUTH**?
- second** Is it **FAIR** to all concerned?
- third** Will it build **GOODWILL** and **BETTER FRIENDSHIPS**?
- fourth** Will it be **BENEFICIAL** to all concerned?

“ I never thought too much of this whole global warming thing, but it passed the Four-Way Test. ”

– Texas businessman

Hayhoe, 2021

Efficacy: an active form of hope

"Here's the big problem the *world* faces."



"Here's the big problem *you* face, and **here's what you can do about it.**"

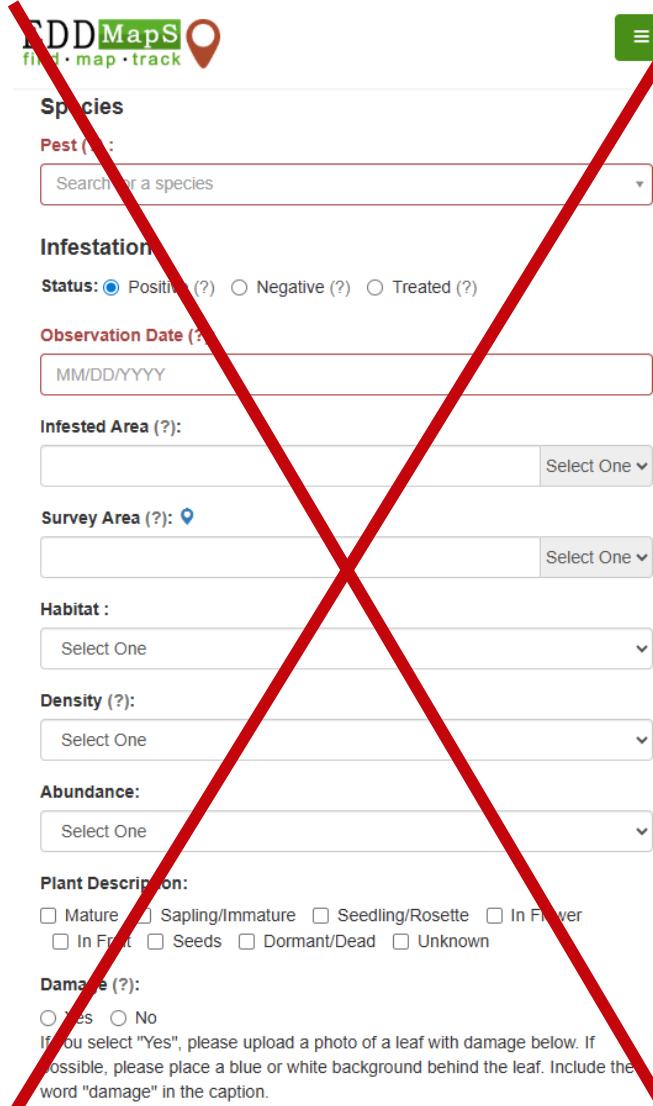


Images: Pixabay; Anastasia Shuraeva
Coleman et al., 2024; Lamm et al., 2022

Example: invasive stiltgrass outreach campaign



Stiltgrass: building efficacy



EDDMaps
find • map • track

Species

Pest ():

Search for a species

Infestation

Status: Positive (?) Negative (?) Treated (?)

Observation Date ():
MM/DD/YYYY

Infested Area ():
Select One

Survey Area ():
Select One

Habitat :

Select One

Density ():
Select One

Abundance:
Select One

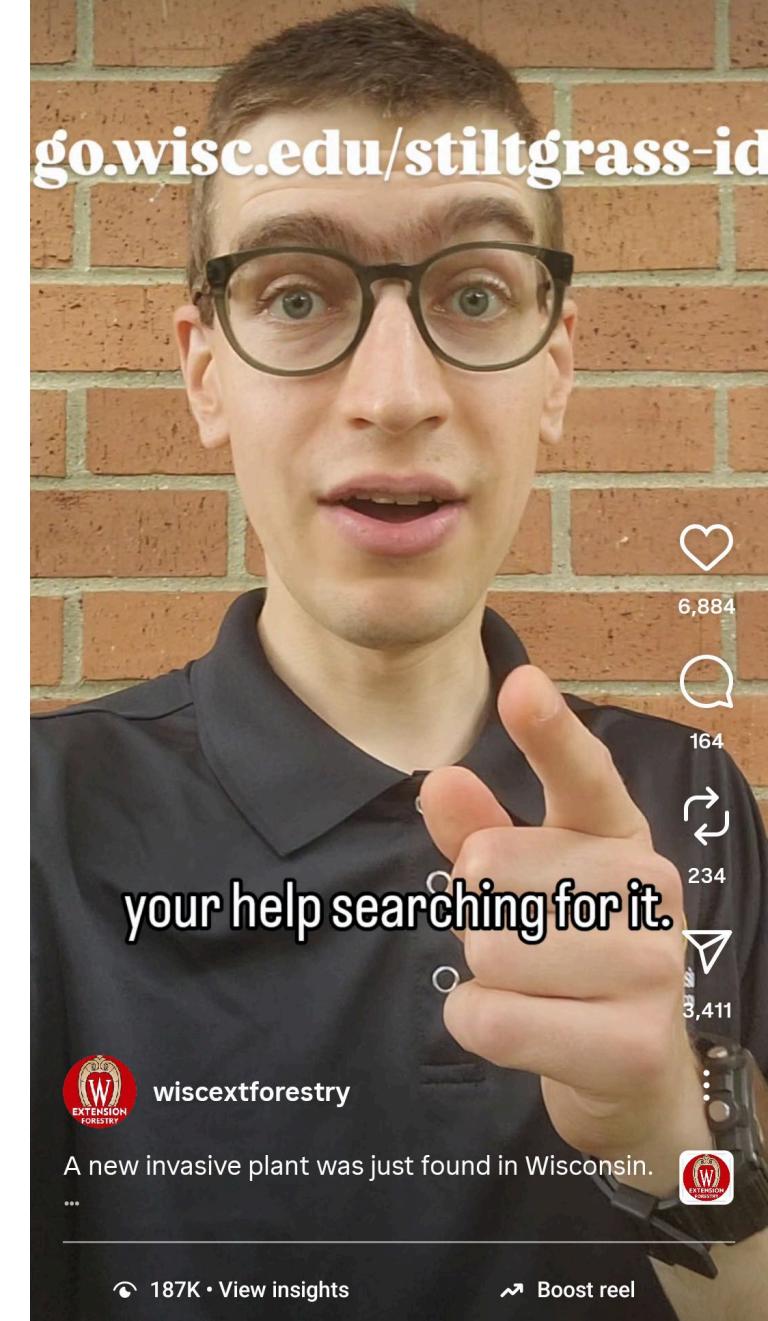
Plant Description:

Mature Sapling/Immature Seedling/Rosette In Flower
 In Fruit Seeds Dormant/Dead Unknown

Damage ():
 Yes No

If you select "Yes", please upload a photo of a leaf with damage below. If possible, please place a blue or white background behind the leaf. Include the word "damage" in the caption.

"Take photos and send them to forestry@extension.wisc.edu or Invasive.Species@Wisconsin.gov"



Stiltgrass: real-world outcomes

- 3 more infestations found within 3 weeks
 - 2 are small and likely to be eliminated!

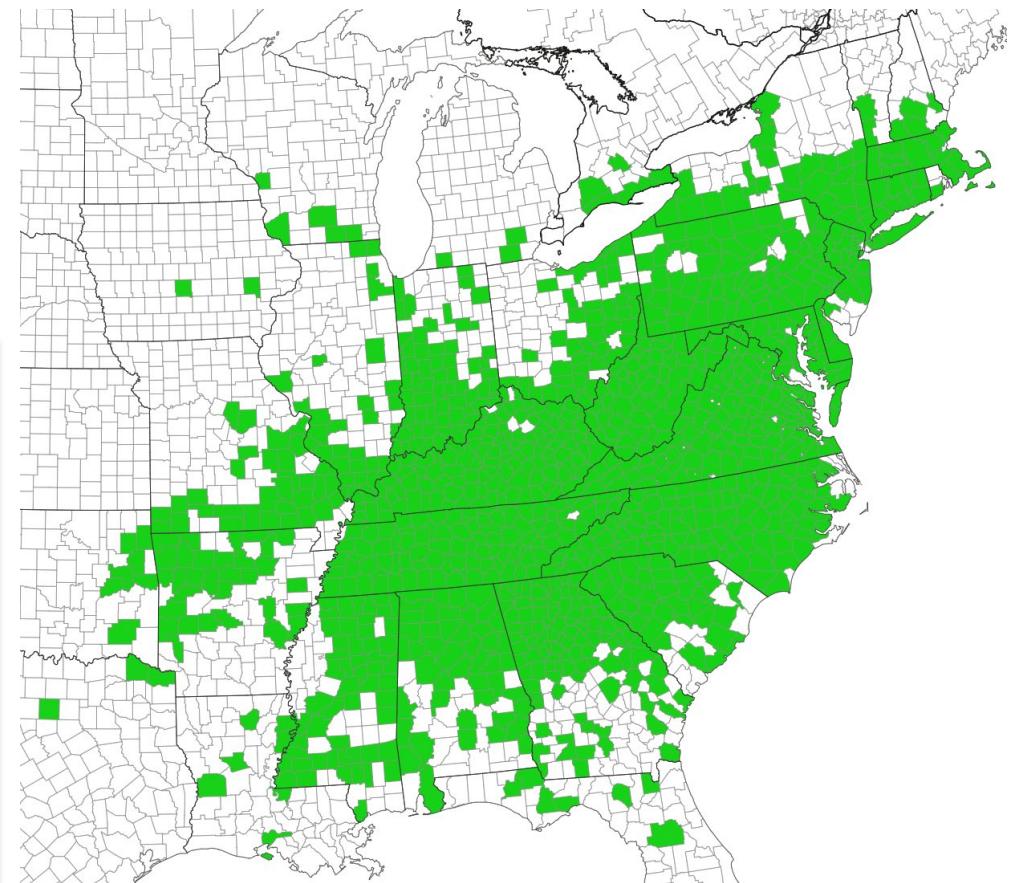


Donna Witt Laughlin · 2d

I'm so glad I posted when I saw this information . Someone found it and had it confirmed because of my post and another was thinking they also found some. Sharing definitely makes a difference.

Reply

5



Map: EDDMapS reported stiltgrass locations as of September 2025

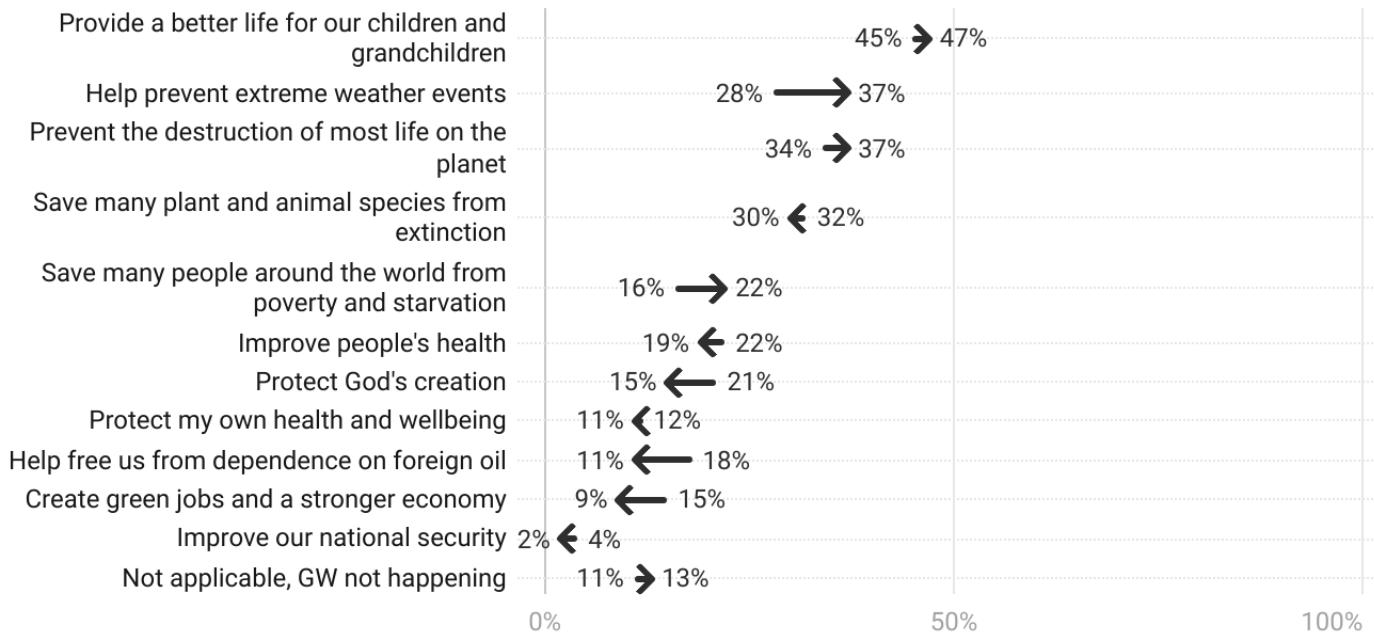
What if my audience is mixed?

- Emphasize the value of providing a better life for future generations



Changes in U.S. registered voters' views of the most important reasons to reduce global warming, 2017 → 2024

% selecting as a top 3 "most important" reason



Which of the following reasons to reduce global warming, if any, are most important to you? Please select up to three reasons.

May 2017 - April 2024.

Base: U.S. registered voters in May 2017 (n = 1070) and April 2024 (n = 896).

Image: Pixabay

Carman et al, 2024; Marshall et al., 2023; Syropoulos et al., 2023; Syropoulos & Markowitz, 2024

YOUR TURN

What does your audience **value**?
How can you increase **efficacy**?



Leveraging social norms to spur behavior change

Two types of social norms

Descriptive

- What do other people do?
- “Annually, more than 500 volunteers and an estimated 2,000 supervised students monitor 600+ stream locations throughout the state.” (Water Action Volunteers)

Injunctive

- What do other people think is the right thing to do?
- “Most Ashland County residents think highly of their friends who contribute to water quality monitoring.”

Constantino et al., 2022; Miller & Prentice, 2016

Two types of social norms

Descriptive

- “Annually, more than 500 volunteers and an estimated 2,000 supervised students monitor 600+ stream locations throughout the state.”

Injunctive

- “Most Ashland County residents think highly of their friends who contribute to water quality monitoring.”

Close reference group



More powerful norms

Constantino et al., 2022; Miller & Prentice, 2016

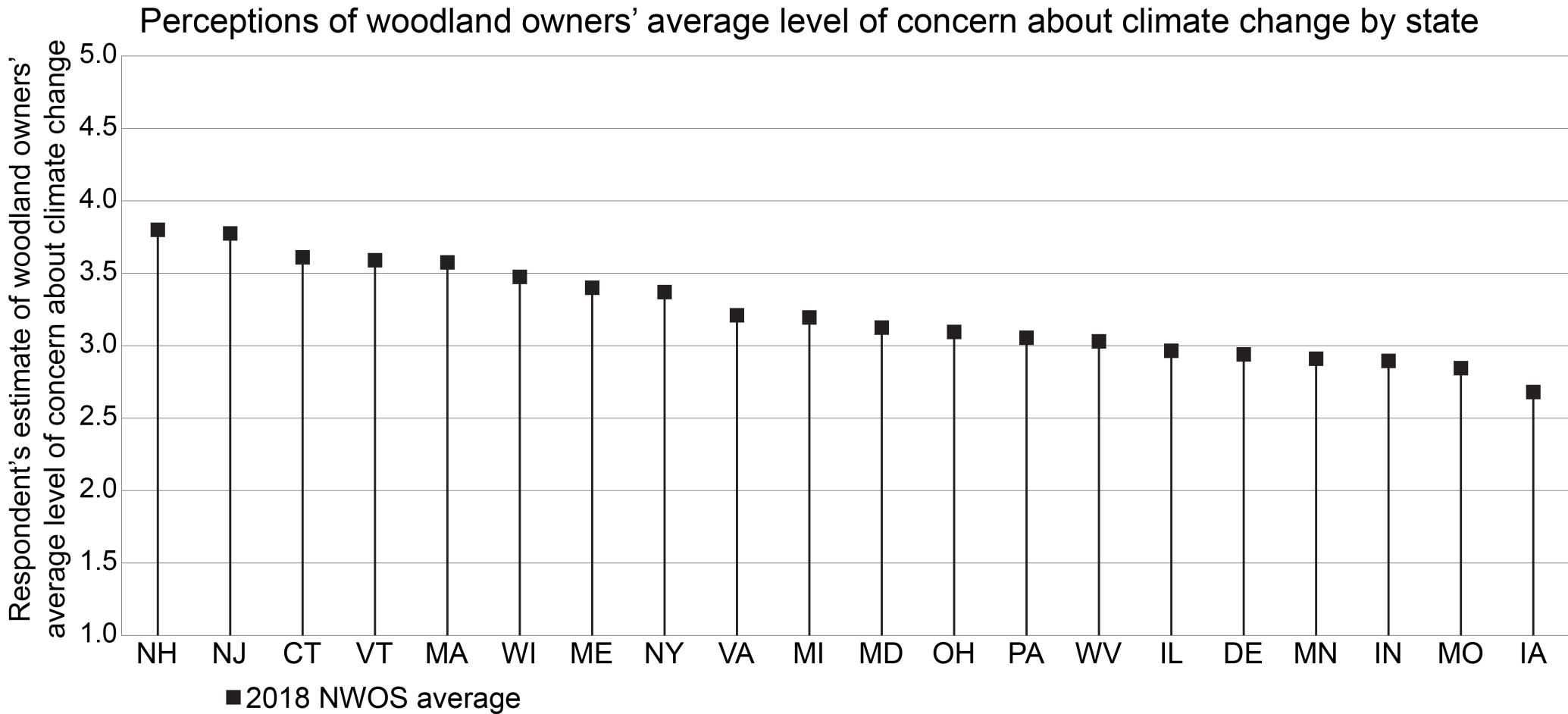
Perceptions might not match reality

- Across many reference groups, people systematically underestimate how many people:
 - **Accept** that human-caused climate change is happening
 - **Are concerned** about climate change
 - Support individual pro-climate **behaviors**
 - Support pro-climate **policies**



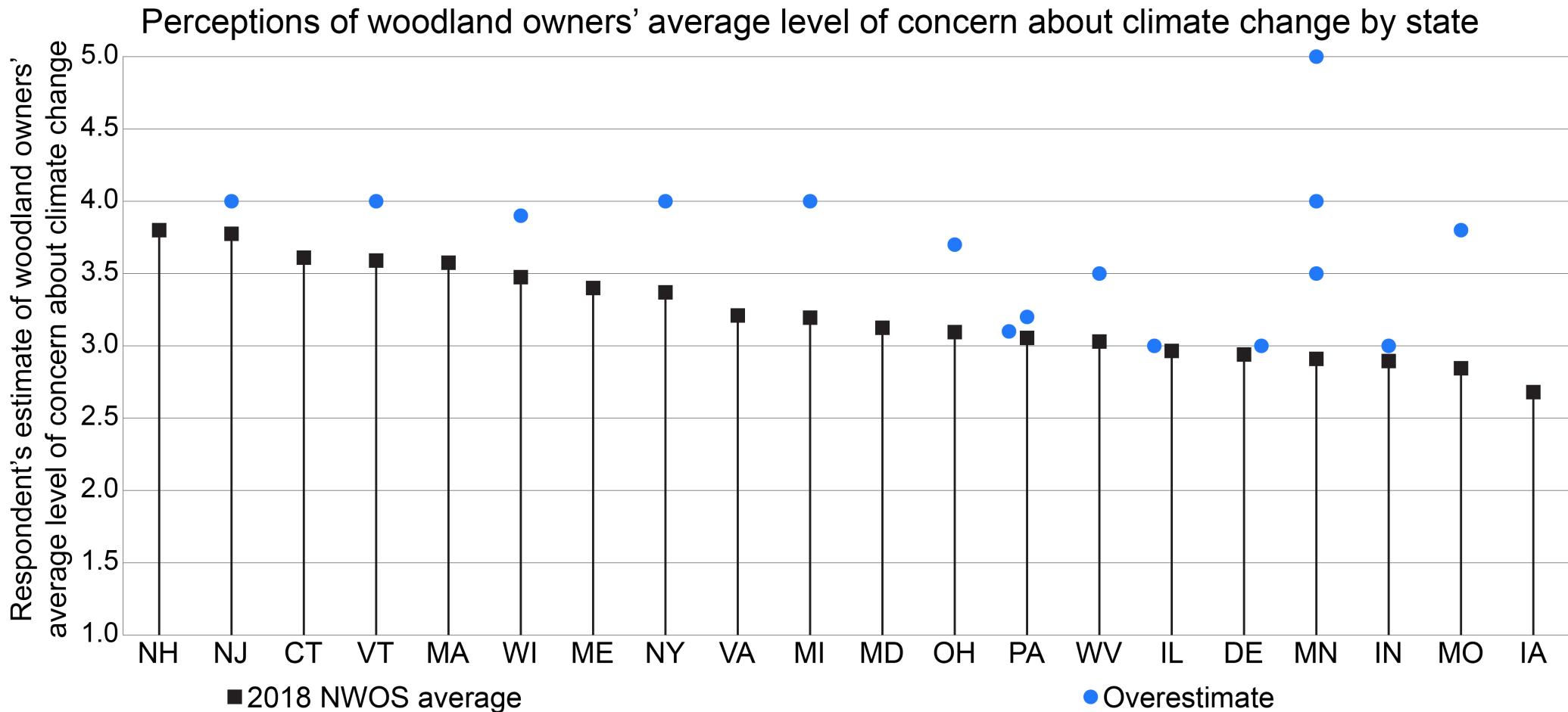
Images: Edward Kimmel, CC BY-SA 2.0; Fibonacci Blue, CC BY 2.0

Pluralistic ignorance: concern



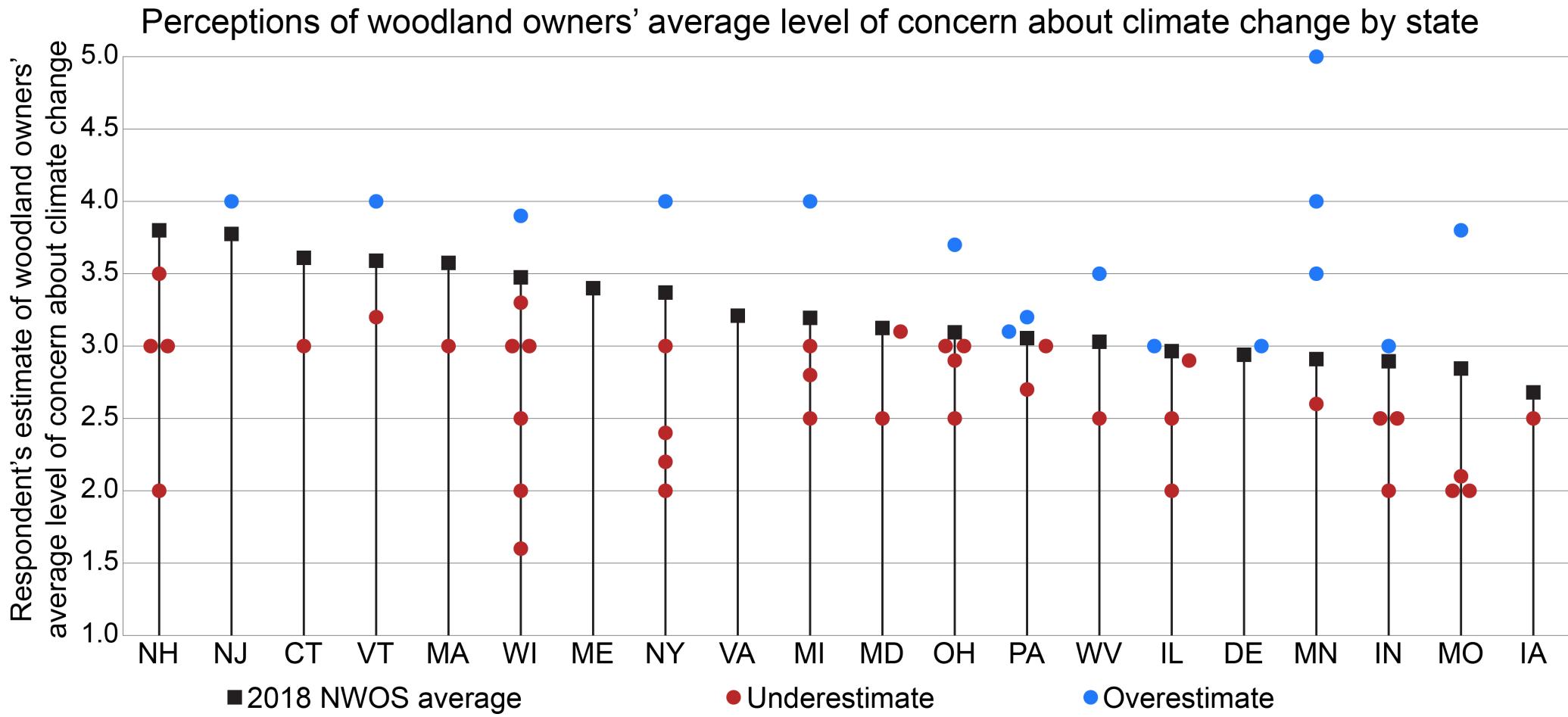
Desprez et al., 2025

Pluralistic ignorance: concern



Desprez et al., 2025

Pluralistic ignorance: concern



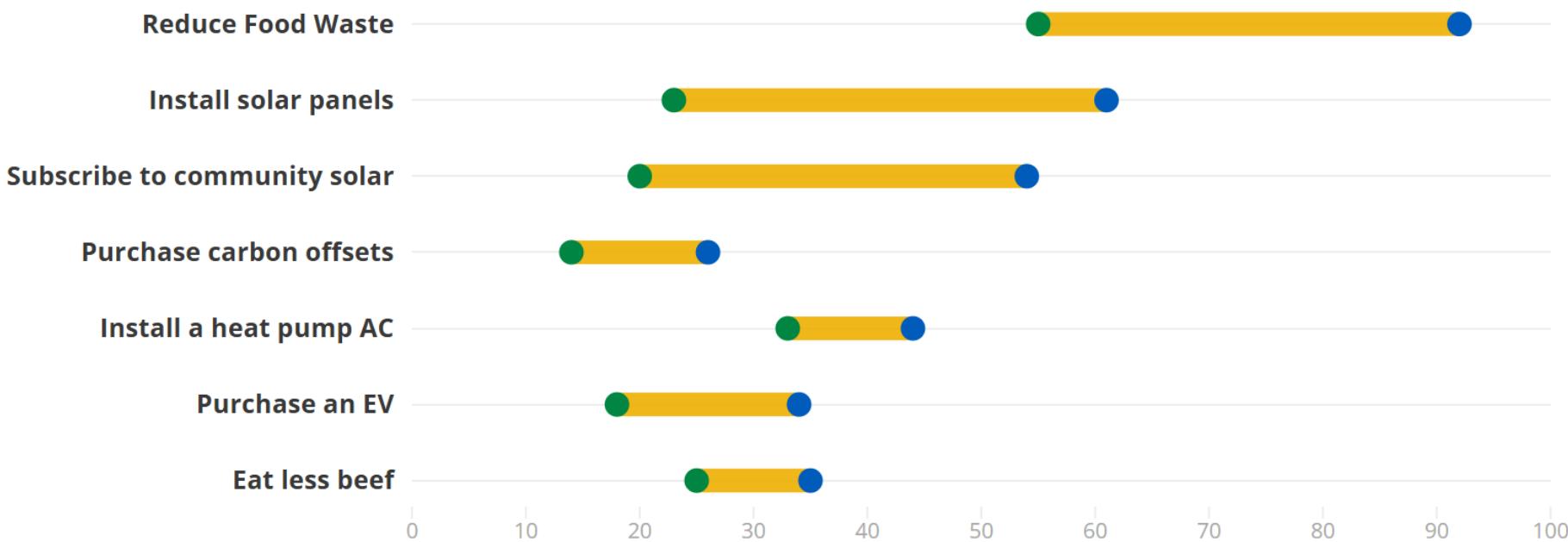
Desprez et al., 2025

Pluralistic ignorance: individual behaviors

There is a sizable gap when people are asked if they support adoption of behaviors vs their impression if others also support adoption

Across all the behaviors, there is a "normative bubble" around behavior adoption waiting to be popped: Americans support adoption of these behaviors, but they don't realize others believe the same

● Do you support adoption? ● Do you think others support adoption?



Source: [Rare "Climate Culture Index 2024"](#)

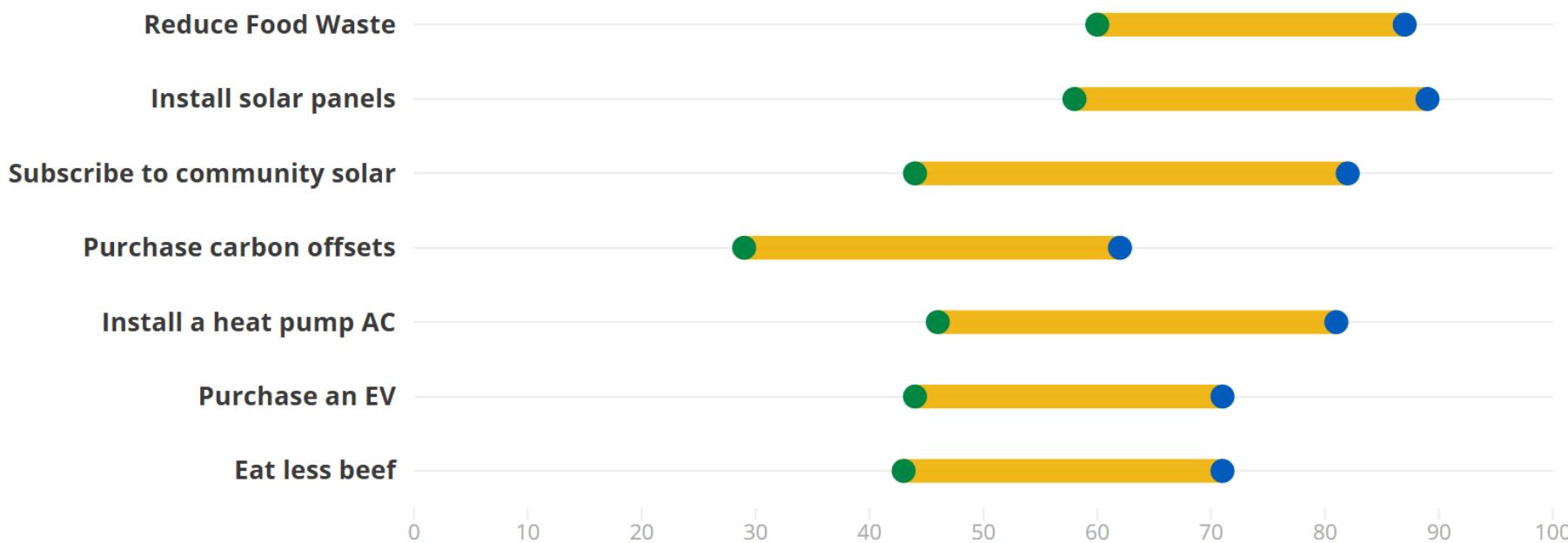
Rare, 2024

Pluralistic ignorance: policy support

There is a sizable gap when people are asked if they support policies vs their impression if others also support such policies.

Across all the behaviors, there is a "normative bubble" around policy support waiting to be popped: Americans support potential policies, but they don't realize others believe the same

● Do you support policies? ● Do you think others support policies?

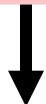


Source: [Rare "Climate Culture Index 2024"](#)

Rare, 2024

Perceived social norms matter

Learning the true norms



Stronger

- Acceptance of climate change
- Worry about climate change
- Support for pro-climate policies

Goldberg et al., 2020; Mildenberger & Tingley, 2019; Sparkman et al., 2022; Syropoulos & Sparkman, 2025

Make invisible norms visible



Audience segmentation

Word choice

Values and agency

Social norms

Misinformation

Example: Monroe Street Santas

- 2022: 5 Santas
- 2025 (videos):
56+ Santas

“We've been sending a couple messages to neighbors trying to get them to join in.”

“I think it's just to bring a sense of community to this area.”



Don't highlight an undesirable norm

“Only 17% of Wisconsin woodland owners have a forest management plan.” 

“Since 2018, more than 21,000 Wisconsin woodland owners have received a property visit  from a DNR forester.”

Dynamic norm

Butler et al., 2021; Constantino et al., 2022; Sparkman & Walton, 2017

YOUR TURN

What **social norms** can you highlight?
If you don't know the true norms, how
can you find out?

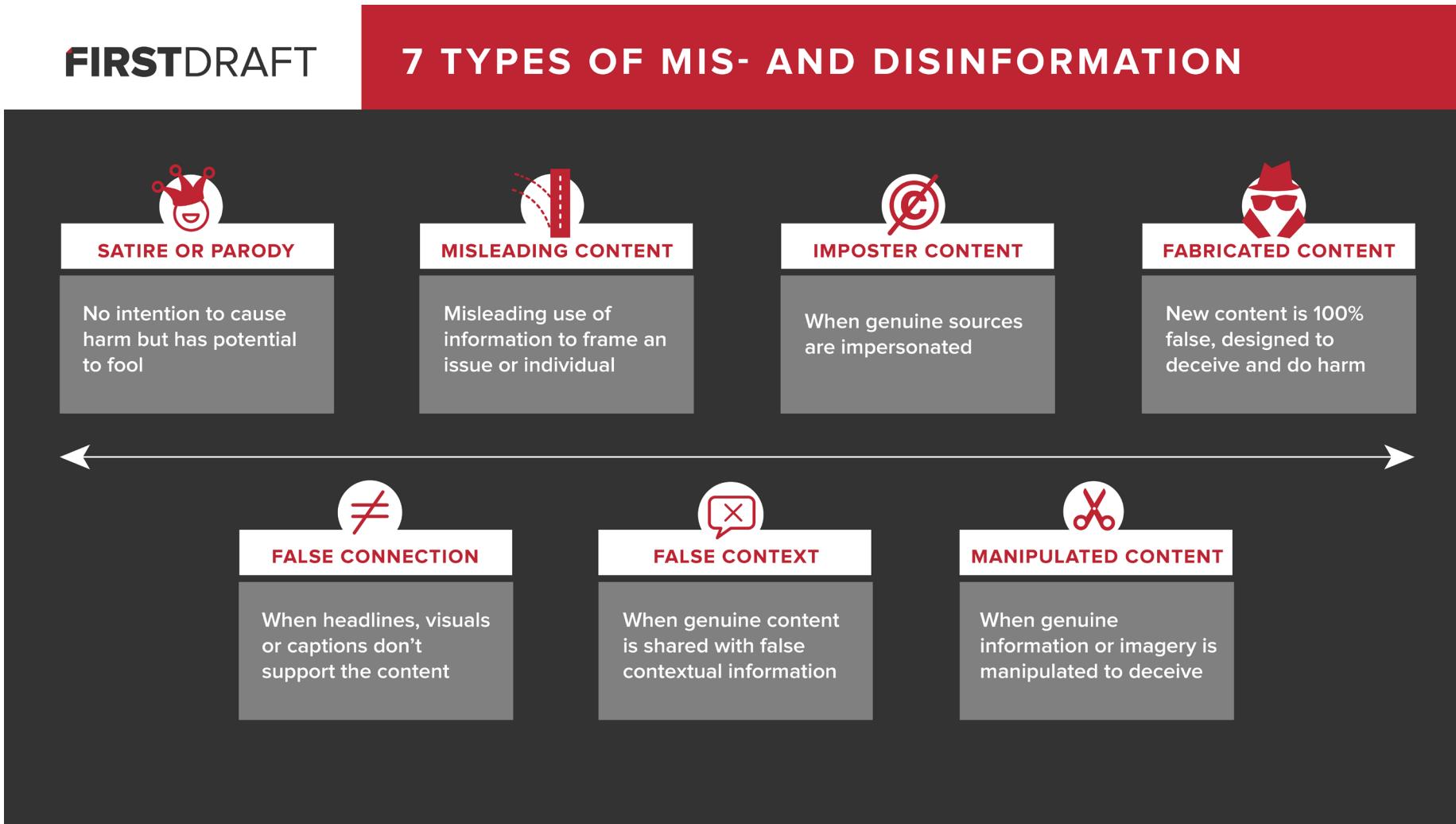
How to handle misinformation and disinformation

Definitions



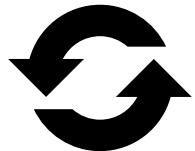
Altay et al., 2023

Types of misinformation



Wardle, 2017

Why do people believe misinformation?



Familiarity → increased belief (illusory truth effect)



Easy-to-follow narratives



Aligns with preexisting identities or worldviews



Triggers strong emotions

Ecker et al., 2022; Udry & Barber, 2024

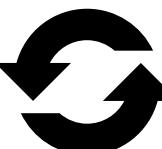
Before exposure: inoculation

- Convey the threat of misinformation
- Explain the truth and the fallacy
 - False facts and/or flawed arguments



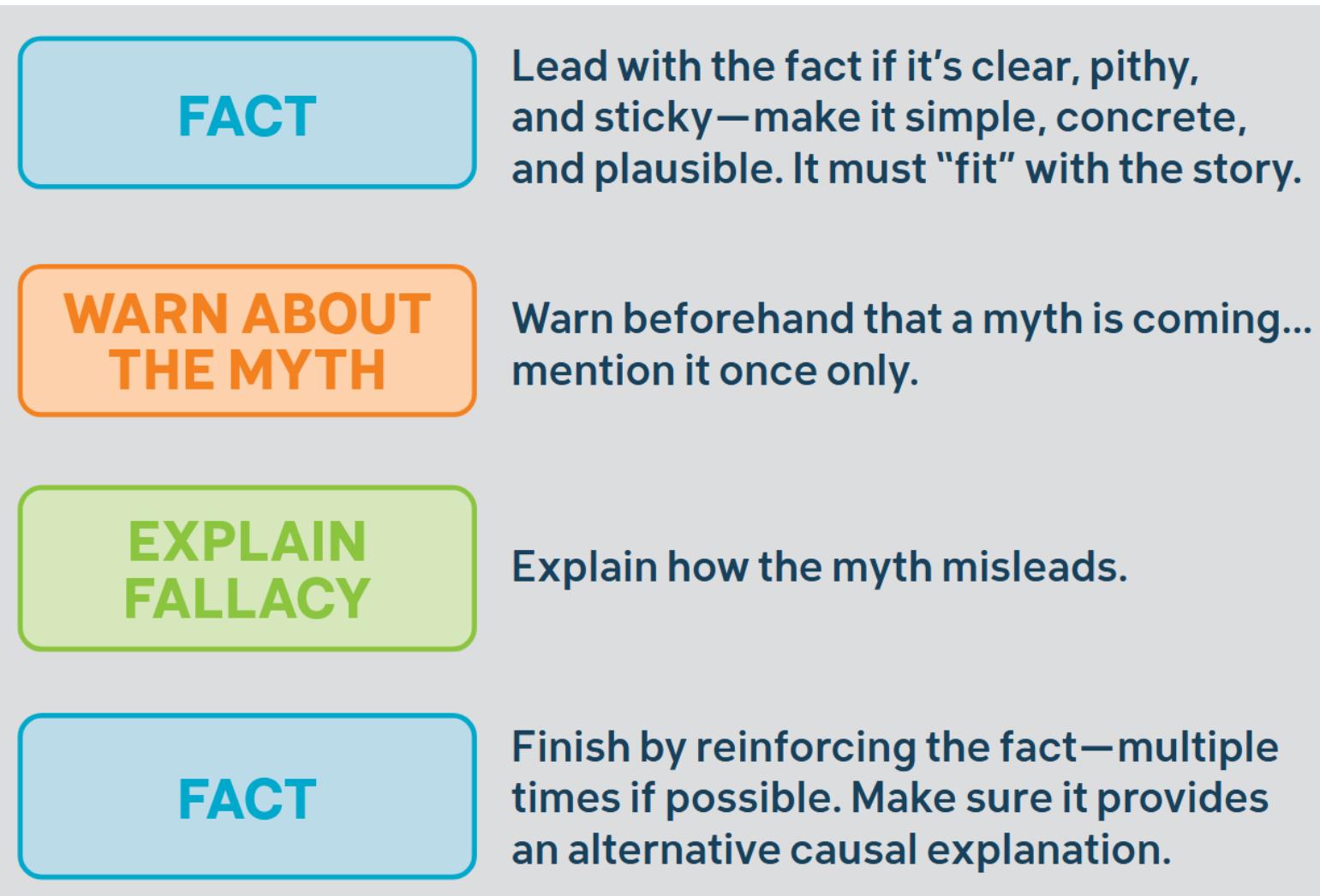
Cook, 2020; Ecker et al., 2022; Traberg et al., 2022

After exposure: effective correction

-  Use a source the audience trusts
-  Validate their underlying concern
-  Convey empathy and do not condescend
-  Provide an alternative (true) explanation
-  Repeat the correction over time

Ecker et al., 2022; Prike & Ecker, 2023; McRaney, 2022

One template: “fact sandwich”



Lewandowsky et al., 2020

Example: timber harvests

FACT

To make our forests more resilient to stresses like droughts and extreme rainfall, we need to actively steward them by conducting sustainable timber harvests.

**WARN ABOUT
THE MYTH**

Contrary to what you might assume, “letting nature run its course” is not the best approach for most forests today.

**EXPLAIN
FALLACY**

Your woodland was already dramatically changed by humans during the cutover. Now, most of the trees are the same age, and the next generation of oaks is struggling to grow.

FACT

Thinning your woods will allow more light to reach the ground so that new oaks will thrive and the ecosystem will become healthier.

Lewandowsky et al., 2020

Example: timber harvests



Use a source the audience trusts

Peer woodland owner



Validate their underlying concern

Timber harvests CAN be done unsustainably



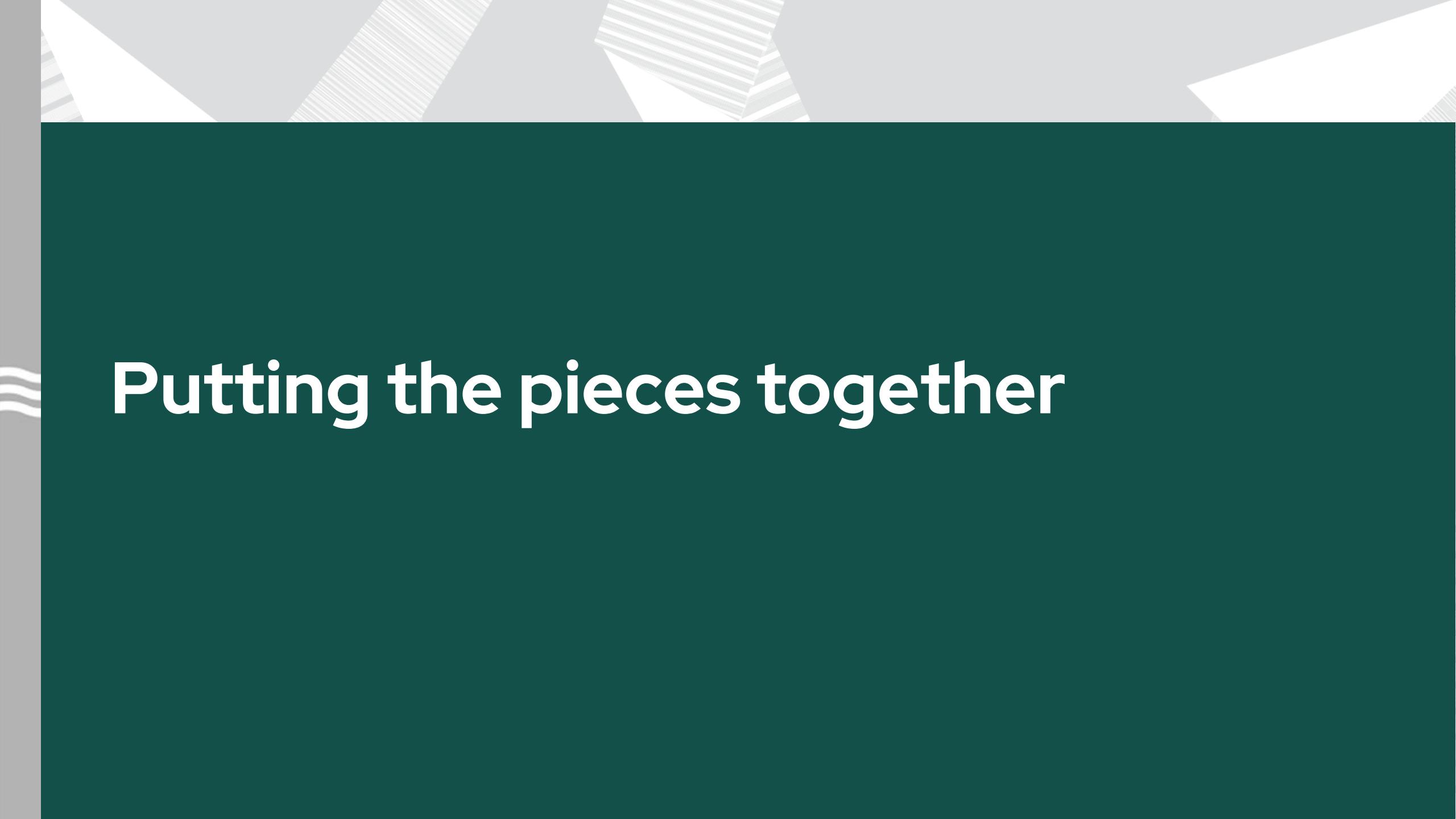
Convey empathy and do not condescend

It's understandable to not want your woods to change

Ecker et al., 2022; Prike & Ecker, 2024; McRaney, 2022

YOUR TURN

What **mis/disinformation** is your audience exposed to? How will you address it?



Putting the pieces together

YOUR TURN

Who is your messenger?
Which communication channels will
you use?
**Jot down an outline of your
message.**

Open discussion

Let's stay in touch!

 scott.hershberger@wisc.edu

 scott-hershberger.com

 [scott-hershberger-scicomm](https://www.linkedin.com/in/scott-hershberger-scicomm)

 go.wisc.edu/forestry-newsletter



Extension
UNIVERSITY OF WISCONSIN-MADISON

Scan for sources & these slides



go.wisc.edu/mcrc-climate-comm

The University of Wisconsin-Madison Division of Extension provides equal opportunities in employment and programming in compliance with state and federal law.