

Hone your pitch!  
Working with the media to communicate your science  
by  
Catherine Schmitt, Schoodic Institute



29 July 2020

## Why communicate?

You owe it to your funders (especially if they are taxpayers)!

You are working on public lands.

You can counter stereotypes and demystify “science”. You can inspire others.

You owe it to the Earth.

Improve collaboration with other disciplines.

Improve your own research.

Advance your career.

Other reasons?

## Why communicate?

“Maintaining that reserve of enthusiasm for your subject is vital for motivating yourself when things are going poorly... We all periodically face moments when we ask ourselves: why the heck am I doing this? For me, spending a part of every day searching for a piece of my subject to share with the world was a chance to remind myself of what I love about fluid dynamics. Communicating science is an opportunity to see your field anew and renew your motivation to carry on in spite of the daily frustrations. “ – Michelle Sharp, ucsusa.org



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**Keep your joy – and sanity.**

## **“Strategic communication”**

- ✓ has a specific audience (WHO);
- ✓ has a desired outcome, a change in knowledge, attitude, or behavior of the audience (WHAT, WHY);
- ✓ uses methods that are appropriate to the audience and the goal (WHEN, WHERE, HOW).

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What is your purpose in communicating?

What do you want? Why?

What is the problem? So what?

Do you want an audience to do, think, feel something?

What are you *asking* of others?

Why are you in this session? Why do you want to work with the media?

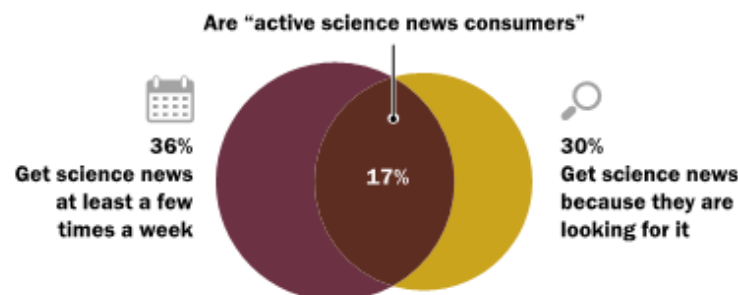


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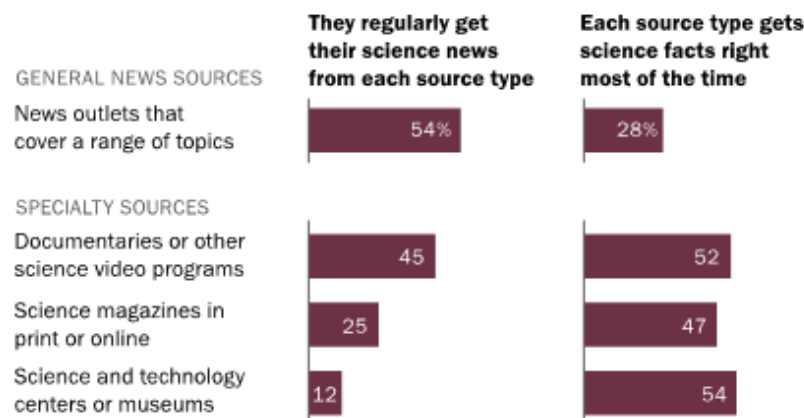
## One-in-six Americans both actively seek out and frequently consume science news

% of U.S. adults who ...



## Most Americans get science news from general sources, but fewer see them as accurate

% of U.S. adults who say ...



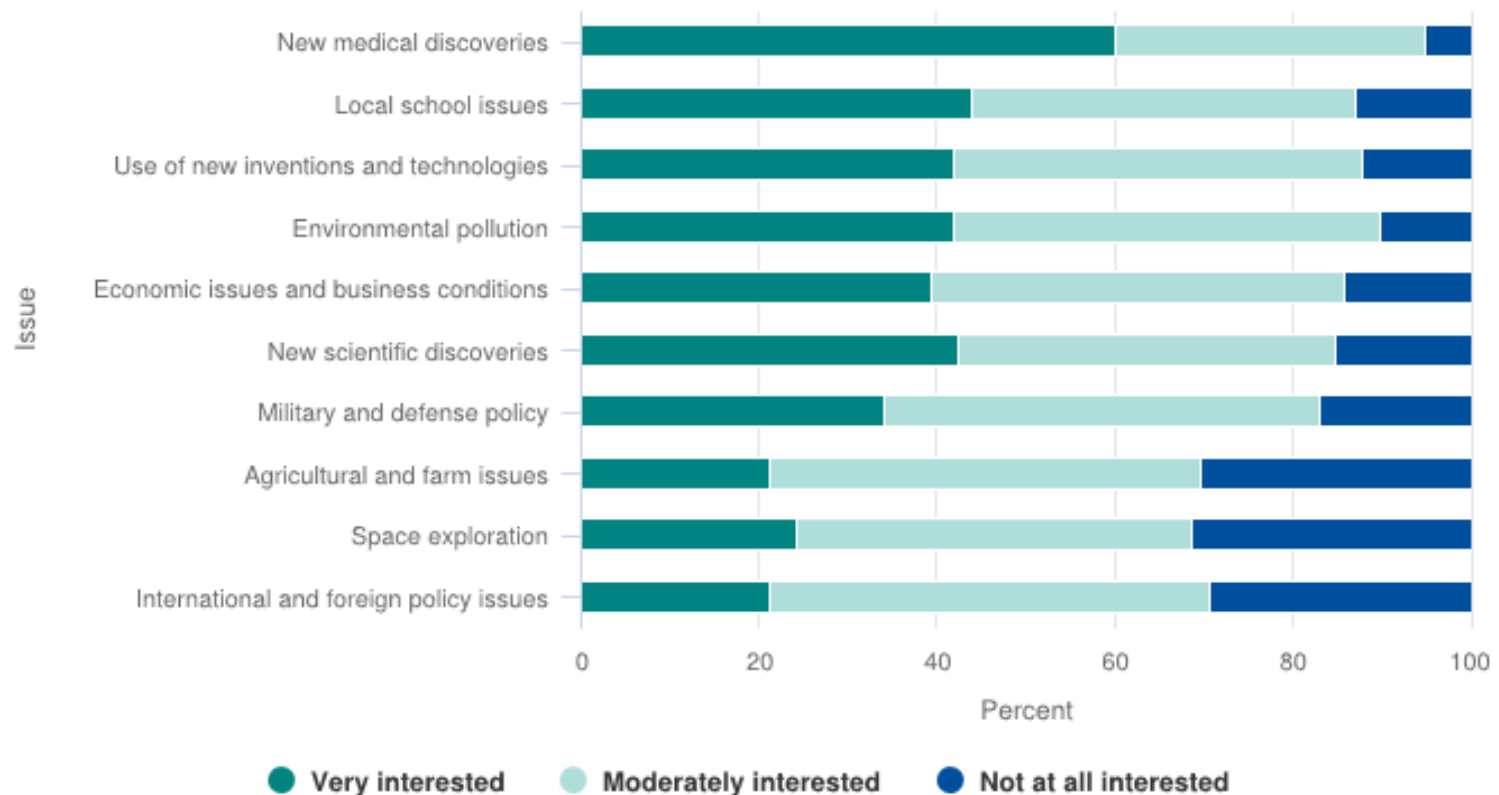
Note: "Most of the time" combines those who said "almost all" or "more than half" of the time. Respondents who gave other responses or who did not give an answer are not shown. Other source types rated are not shown.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

PEW RESEARCH CENTER

# People are interested in science.



Note(s): Responses to the following: *There are a lot of issues in the news, and it is hard to keep up with every area. I'm going to read you a short list of issues, and for each one I would like you to tell me if you are very interested, moderately interested, or not at all interested.* Responses of "don't know" are not shown. Percentages may not add to 100% because of rounding.

Source(s): NORC at the University of Chicago, General Social Survey (2016). See Appendix Table 7-1.

*Science and Engineering Indicators 2018*

# People want more science stories!

## TOPICS THAT READERS WANT TO READ MORE OF



## TOPICS THAT READERS WANT TO READ LESS OF



## TOPICS READ THE SAME AMOUNT AS THEY WANT COVERED



Source: Axios/Survey Monkey May 2019

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## Why “the media”?

They are the portal to a majority of American adults.

They are expert storytellers.

They know their audience.

They are not that different.

They can help can counter stereotypes and demystify “science” and inspire others.

## Crafting the pitch

- ✓ Remember your purpose.
- ✓ WHO are you?
- ✓ WHAT are you studying, and WHY does it matter?
- ✓ WHERE and WHEN is the news moment?

## News “moments” in a research project.

Moment	Audience	Purpose
Idea or problem	Funders, supporters	Gain support to conduct research or implement project.
Grant awarded	Funders/donors, other scientists, employers, interested public	Enhance understanding of the funds required for science, and sources of those funds. Alert people to science in their backyard.  Measurable accomplishment for researchers.
Field work		Enhance understanding of how science works, and who scientists are.  Connect with local audience.
Presentation		Connect with target audiences, practice messages.
Preliminary findings		Get feedback to improve research and its impact, connect with target audiences.
Publication		Connect with broader audiences. Broadcast message. Create new partnerships and ideas.  Measurable accomplishment for researchers.
Impact (findings are referenced, used)		Enhance public understanding of the value of science. Measurable accomplishment for researchers and funders.

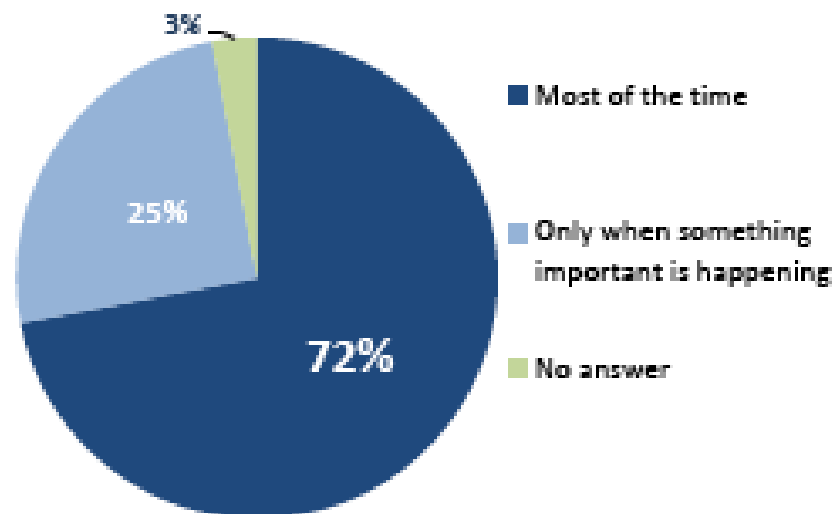


## Make it local.

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### The majority of adults follow local news most of the time

*% of adults who follow local news...*



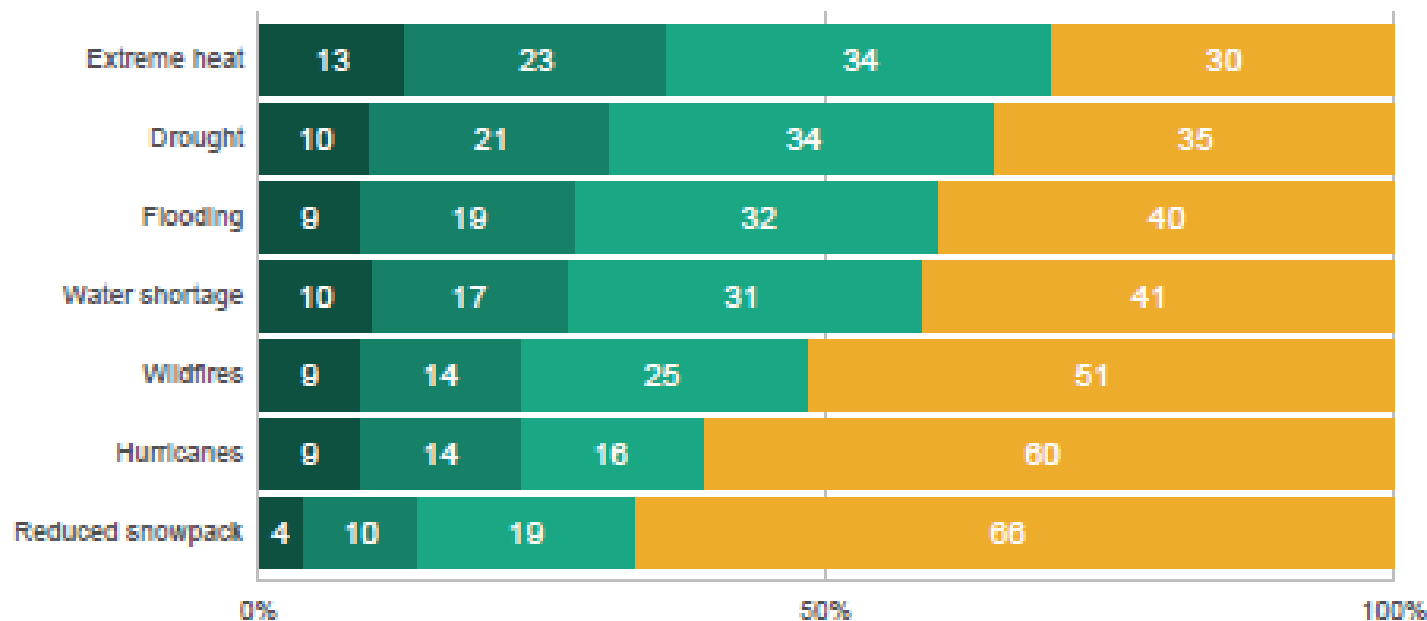
Source: The Pew Research Center's Internet & American Life Project Local News Survey, January 12-25, 2011. N=2,251 adults, age 18 and older, including 750 cell phone interviews. Interviews were conducted in English and Spanish. The margin of error for the total sample is plus or minus 2.4 percentage points.

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## Make it local.

A majority of Americans are worried about harm from extreme events in their local area

Very Moderately A little Not at all



How worried are you that the following might harm your local area?

April 2019



## Make it local.

“The importance of targeted information about **specific areas [within a larger conservation area]** is invaluable when it comes to promoting public support and sustainable use.” Scholte et al. *Wetlands* 2016

“We strongly encourage conservation biologists to take **local cultural context** into account and not think that people will automatically be persuaded by our data to change their mindsets and behavior.” Bickford et al. *Bio Cons* 2012

“There is a tension between management of larger scale conservation projects and the **smaller scales** at which implementation must occur.” Wyborn & Bixler *JEM* 2013

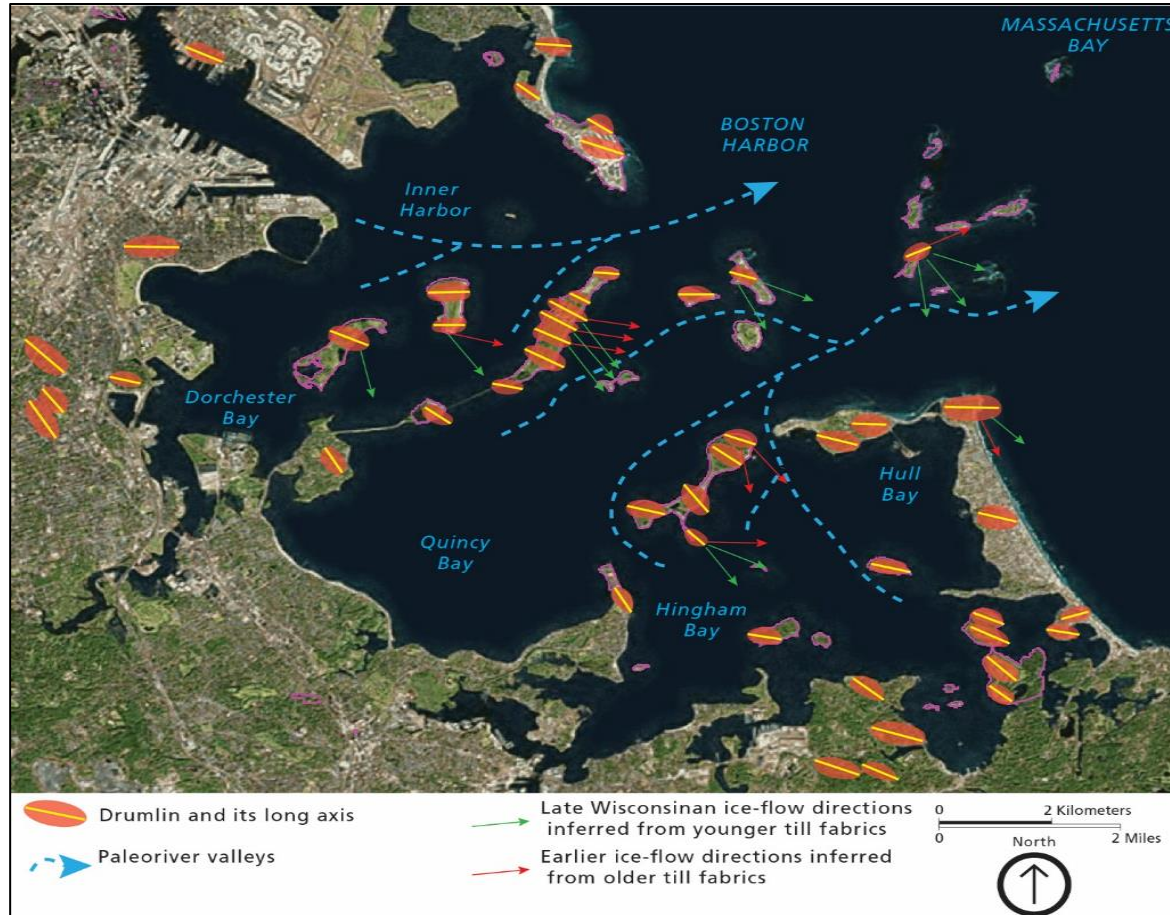
Thus, while the biosphere is undergoing mass species extinction, it is also being ravaged by a much more serious and rapid wave of **local** population declines and extinctions.” Ceballos et al. *PNAS* 2017

“Do evoke localized examples that speak to how conservation efforts preserve a way of life important and unique to **the local area.**” *The Language of Conservation* 2018

# Odd and peculiar?



# “Wow” factor?





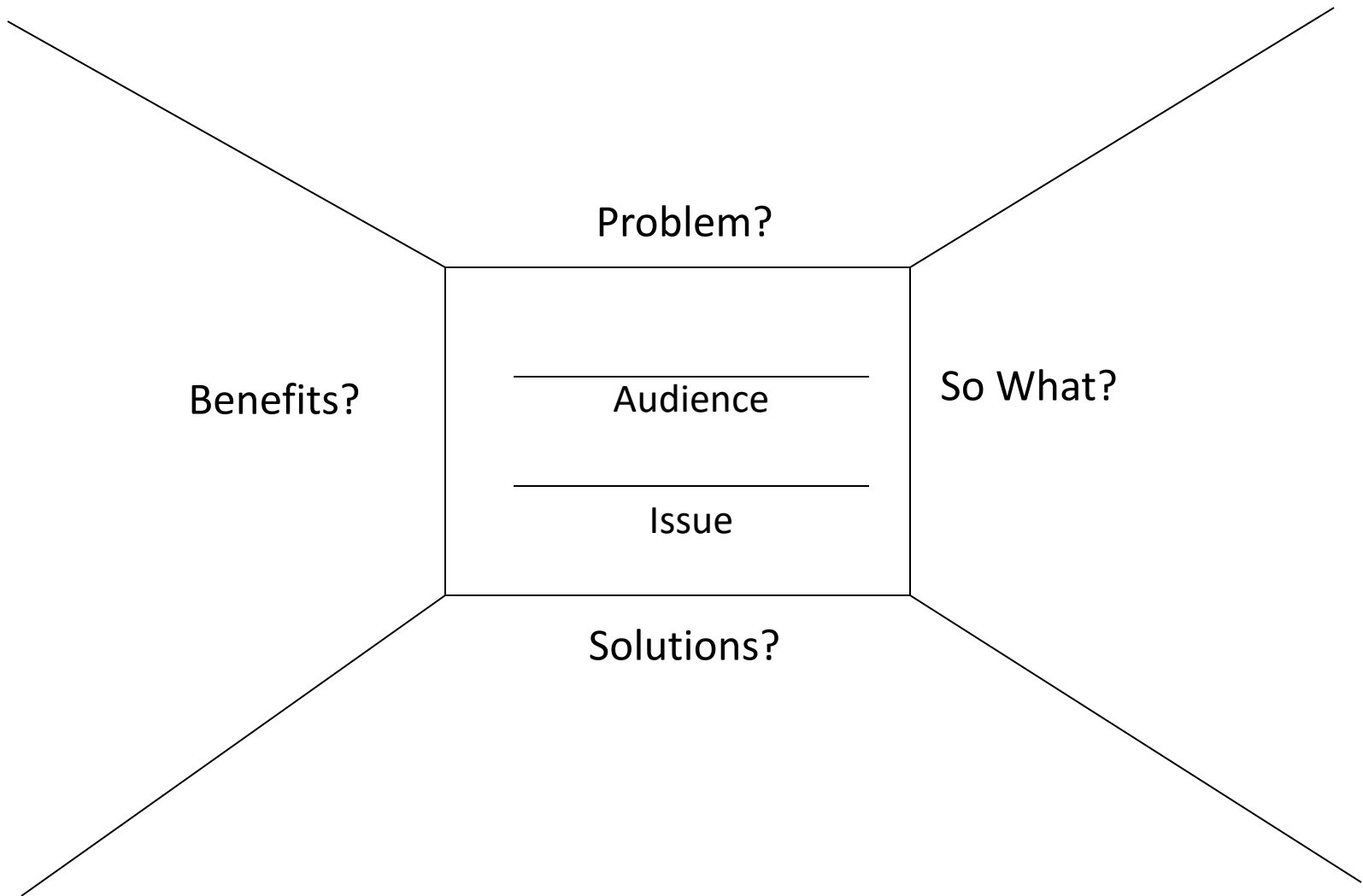
What's  
your  
story?



## Crafting the pitch

- ✓ Remember your purpose.
- ✓ WHO are you?  
*Emphasize your personal journey.*
- ✓ WHAT are you studying, HOW, and WHY does it matter?  
*Emphasize the problem you are solving. So what?*
- ✓ WHERE and WHEN is the news moment?  
*Emphasize local relevance, news angle, “wow”.*

# Message Box





# ABT FRAMEWORK BASICS

The Elements of ABT (And, But, Therefore) Universal Narrative Template

## REFERENCE CARD

**The ABT Narrative Template** is a new tool for organizing the narrative structure of any amount of content. It is at the core of storytelling, logic, reason, argument and the scientific method.

It is the idea of shrinking a narrative thread down to a single sentence using three connector words: **and**, **but**, **therefore**. It embodies the three forces of narrative:

- **AGREEMENT** – and
- **CONTRADICTION** – but
- **CONSEQUENCE** – therefore

You can  
also think  
of it as:

- **SET UP** – and
- **PROBLEM** – but
- **SOLUTION/ACTION** – therefore

The ABT Narrative Template was developed in 2012 by scientist-turned-filmmaker Randy Olson, though its origin reaches back thousands of years to Aristotle and the beginning of narrative culture.

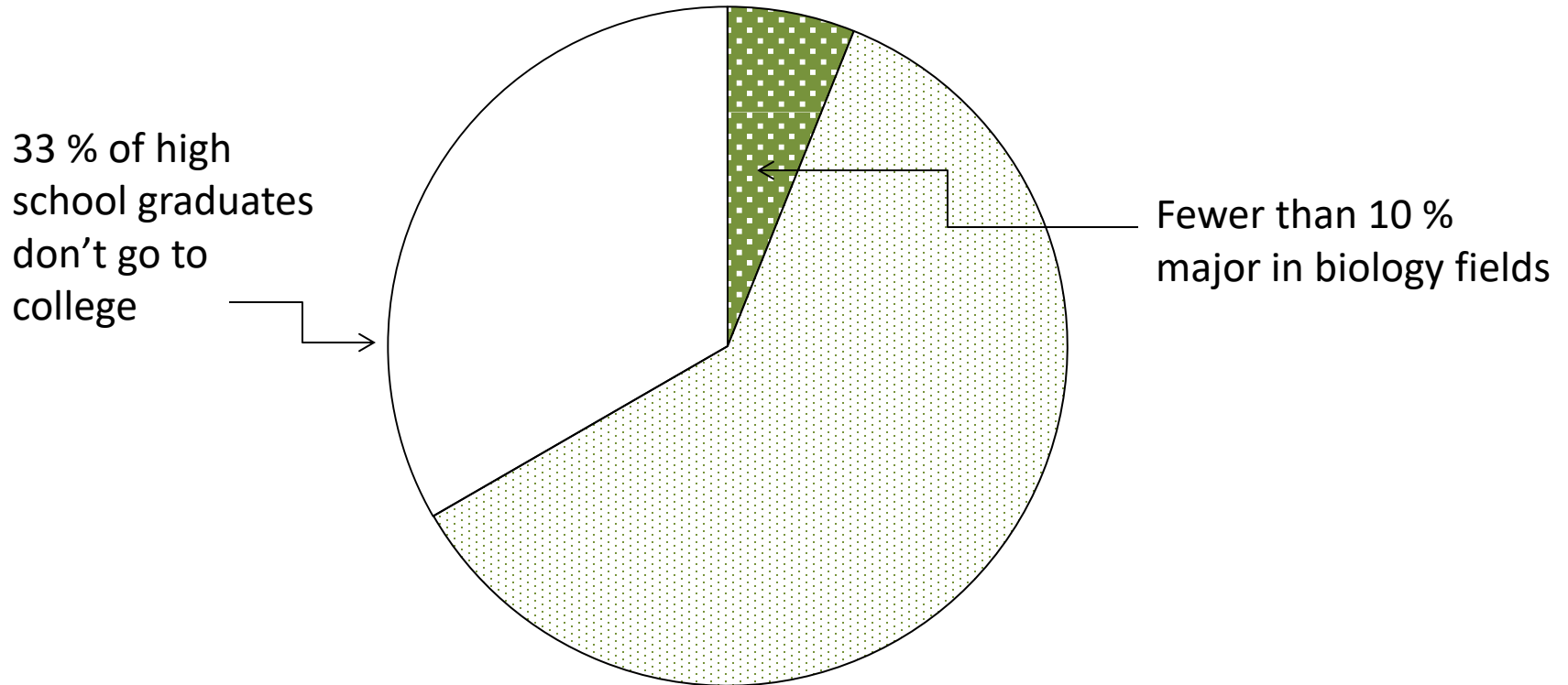
## Crafting the pitch

- ✓ Remember your purpose.
  - ✓ WHO are you?
  - ✓ WHAT are you studying, HOW, and WHY does it matter?
  - ✓ WHERE and WHEN is the news moment?
- 
- ✓ Beware the “Curse of Knowledge”!

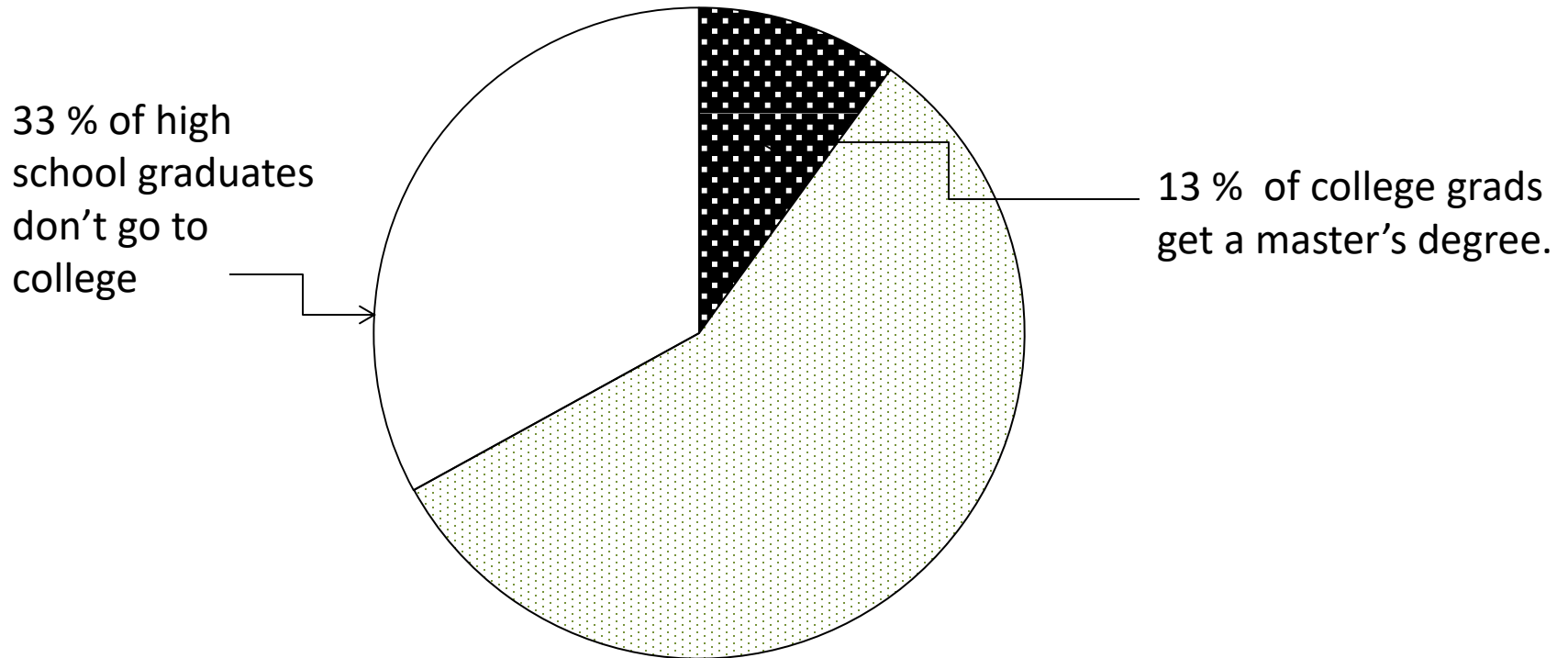
# Poll Questions

- Do you have a bachelor's degree?  
What was your major?
- Do you have a master's degree?  
Major?
- Do you have a doctoral degree?  
Science, medicine, law, other?
- How many years have you been working in the  
conservation field?

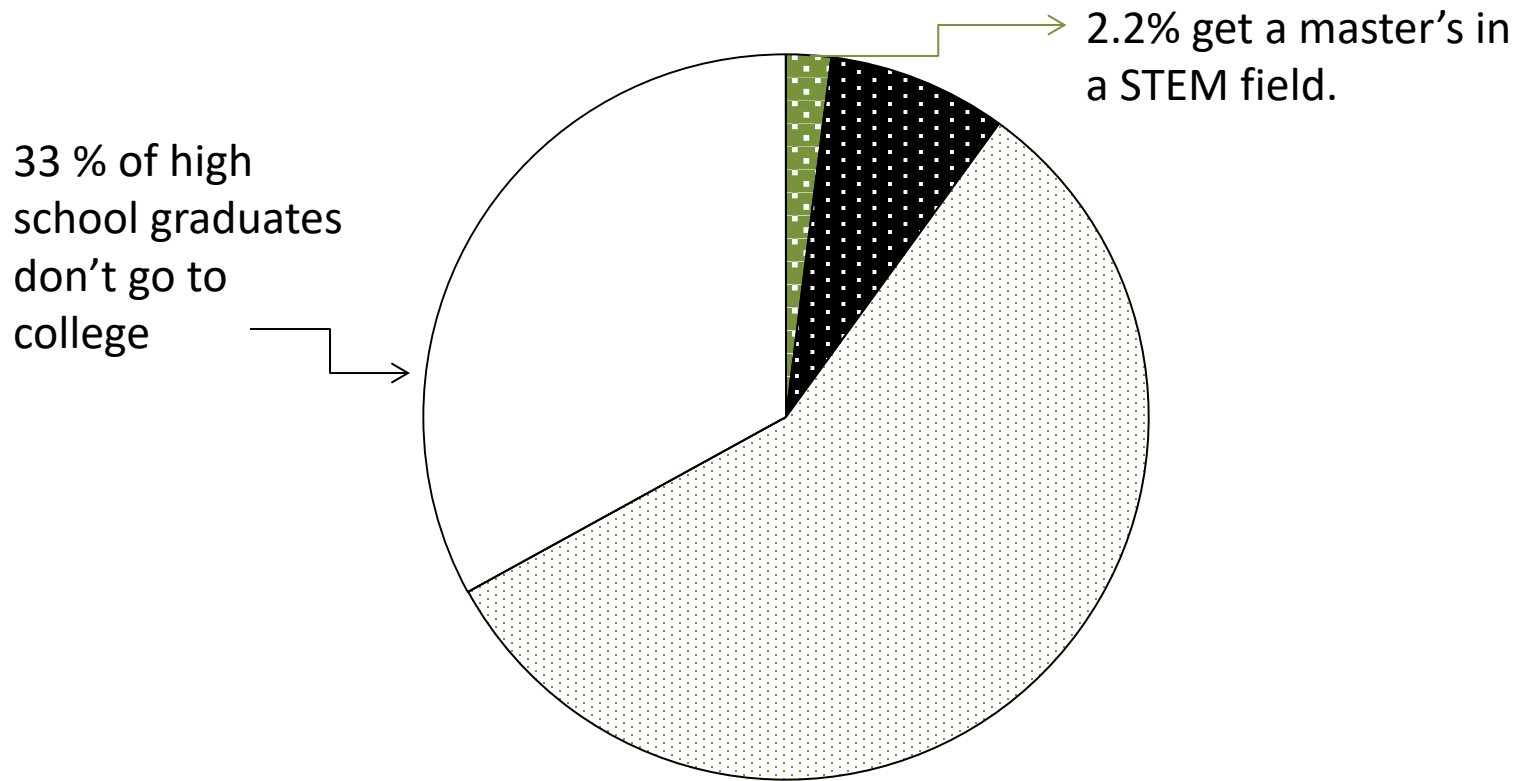
# The Curse of Knowledge



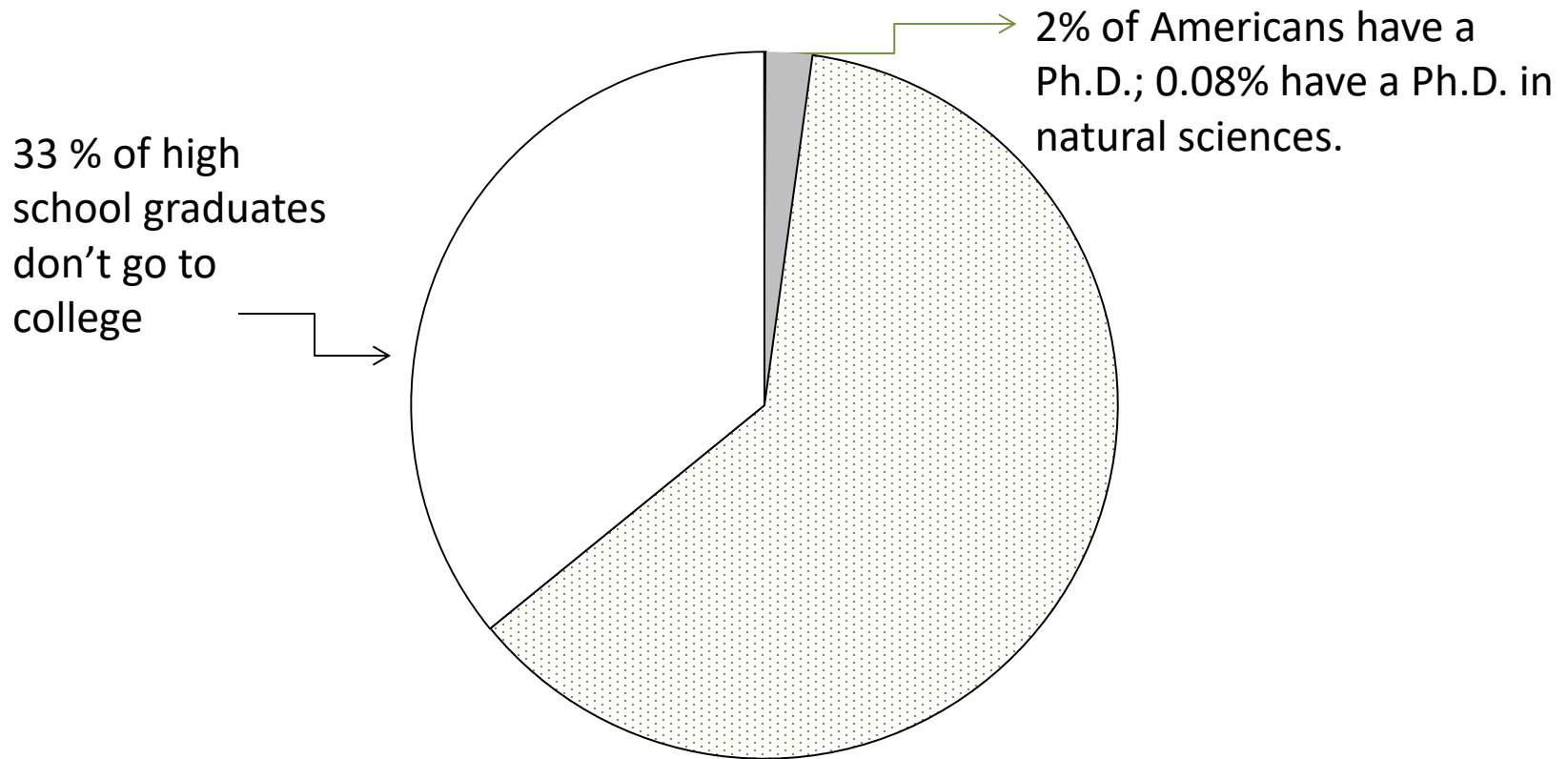
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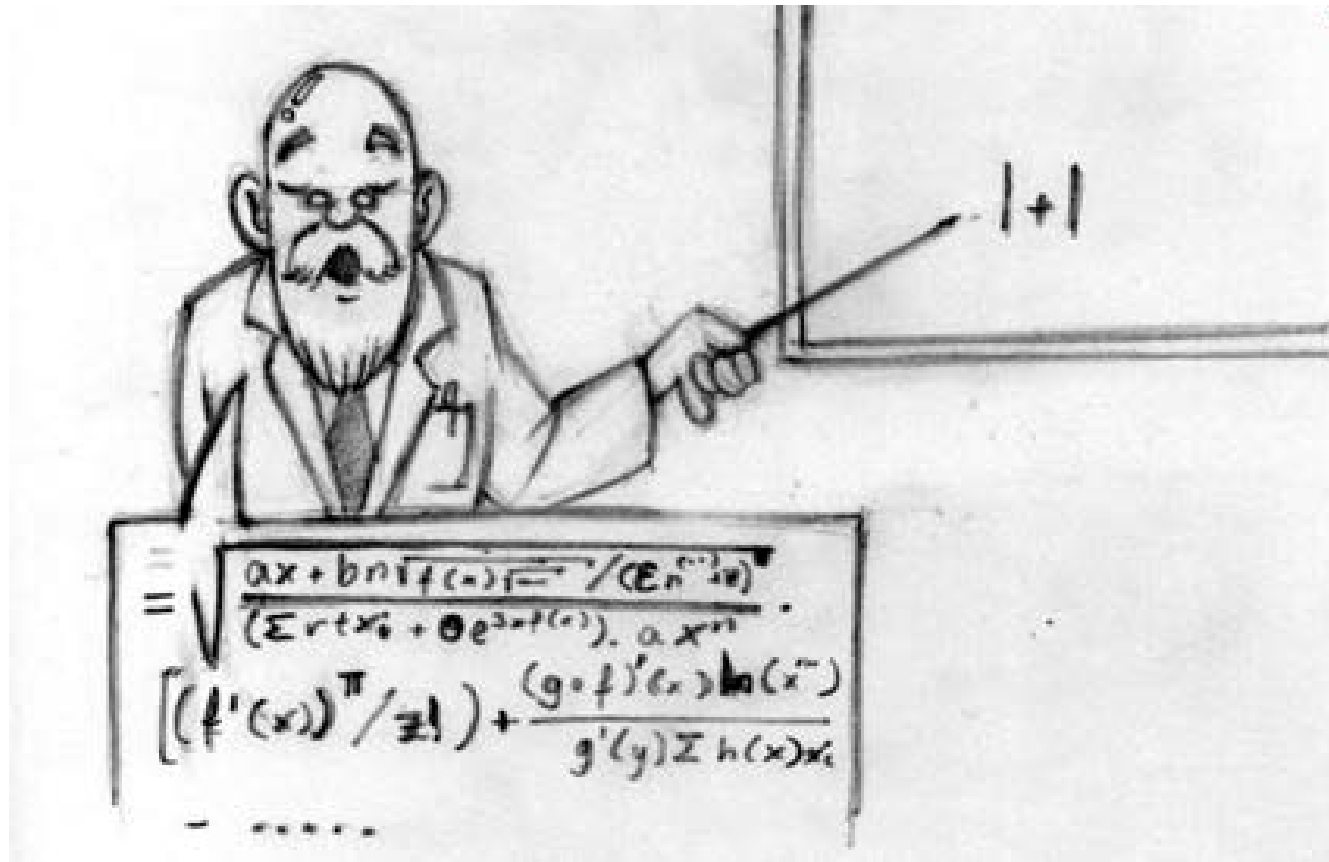


# The Curse of Knowledge





The Curse of Knowledge manifests as jargon.



*graphic by Doruk Golcu*



# Examples of jargon.

Terms that have different meanings for scientists and the public		
Scientific term	Public meaning	Better choice
enhance	improve	intensify, increase
aerosol	spray can	tiny atmospheric particle
positive trend	good trend	upward trend
positive feedback	good response, praise	vicious cycle, self-reinforcing cycle
theory	hunch, speculation	scientific understanding
uncertainty	ignorance	range
error	mistake, wrong, incorrect	difference from exact true number
bias	distortion, political motive	offset from an observation
sign	indication, astrological sign	plus or minus sign
values	ethics, monetary value	numbers, quantity
manipulation	illicit tampering	scientific data processing
scheme	devious plot	systematic plan
anomaly	abnormal occurrence	change from long-term average

*Somerville & Hassol 2011*

scientific term	public meaning	better choice?
healthy	???	
ecosystem	???	
biodiversity	???	
exotic/non-native	foreign = bad	
natural resource	???	
sustainability	status quo	



Below are some other examples of insider terminology. While we are not recommending you abandon these terms altogether, each likely requires additional context or explanation in order to prevent more general audiences from becoming confused or drawing conclusions that are counterproductive.

- Carbon neutral
- Environmental sustainability
- Energy transition
- Energy future
- Green infrastructure
- Green economy
- Green businesses
- Ocean acidification
- Food security

## Words to Watch

Message testing and interviews with external audiences (funders, policymakers, and other leaders representing the health/healthcare, education, children & youth, environment, and corporate sectors) revealed the following “words to watch.” These words were most likely to evoke negative feelings or confusion with external audiences, or were found to not resonate. These words should be used with caution and should be paired with language that provides additional explanation and context.

### **Nature**

Seen as far away, grand, something you “go to.” Sounds elitist. Conjures images of undeveloped, isolated places. Resonates the most with “inside the tent” audiences.

### **Outside**

More expansive term than nature, but less action-oriented. “Right outside the door.” Seen as inclusive of manmade environments. Least popular term tested.

### **Outdoors**

The most accessible of the terms to new audiences. Simpler, more traditional language. Seen as less judgmental, less political than other terms. Connotes elements of activity. Resonates the most with urban audiences.

### **Stewardship**

Often linked with ‘conservation’ and both are problematic and poorly defined by new audiences. Inside the tent jargon. Raises questions of if and how time outdoors correlates to future stewardship.

### **Resilience**

Buzz-wordy. Overused. Can be misunderstood. Best to avoid.

### **Healthy Communities**

Concept tests well, but needs definition for some audiences. Showing common threads of personal health, education, and environmental care are important descriptors.

### **American(s)**

Triggers biases towards non-citizens, raises immigration issues. Seen as exclusionary. Use “all people” or “everyone” as alternatives.

### **Safe / Safety**

Needs context and explanation. Resonates differently for communities of color. Most audiences lack widespread awareness of safety differentials outdoors.

### **Access**

Needs to be paired with examples of why access is an issue, and how lack of access leads to disparities. Most resonant when paired with ‘nature,’ as access to the ‘outside’ has different meaning in an urban setting.

**rethink  
outside**

Shared Narrative

Storytelling Resource













[rethinkoutside.org](http://rethinkoutside.org)

**PERSPECTIVE ARTICLE**

Front. Commun., 30 January 2020 | <https://doi.org/10.3389/fcomm.2020.00002>



# Science Communication Demands a Critical Approach That Centers Inclusion, Equity, and Intersectionality

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Alycia N. Mosley Austin<sup>5</sup>,  Bryan M. Dewsbury<sup>6</sup>,  Mónica I. Feliú-Mójer<sup>7</sup>,  Katharine W. B.  
McDuffie<sup>1,2</sup>,  Kendall Moore<sup>8</sup>,  Christine A. Reich<sup>9</sup>,  Hollie M. Smith<sup>10</sup> and  Cynthia Taylor<sup>6</sup>

problematic metaphors and bias

sports: *hit it out of the park*

violence (war): *combat climate change*

industrial: *economic engine*

racism, colonialism: *natural laboratory, remote, explore, discover*

ableism: *plant “blindness” vs. plant love*



LETTER TO THE EDITOR |  Open Access |  

**We do not want to “cure plant blindness” we want to grow plant love**

Caitlin McDonough MacKenzie, Sara Kuebbing, Rebecca S. Barak, Molly Bletz, Joan Dudney, Bonnie M. McGill, Mallika A. Nocco, Talia Young, Rebecca K. Tonietto ✉

First published: 18 July 2019 | <https://doi.org/10.1002/ppp3.10062> | Citations: 3

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- ✓ WHERE and WHEN is the news moment?  
*Emphasize local relevance, news angle, “wow”.*
- ✓ Beware the “Curse of Knowledge”!

**50-150 words (or 1 minute) max!**



## Panelists





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**Post your 50-150 word pitches in the Q & A or at this link:**

**<https://www.scsparkscience.org/workshops/hone-your-pitch/>**