# SCIENCE COMMUNICATION



### **Gracielle Higino & Katherine Hébert**

June 1-2, 2020 @ 1-2:30PM EST









# Part 2 Social media

### [ Today's objectives ]

- How to write a **blog post** when you're used to writing scientific articles?
- How can I do effective SciComm on Twitter?

### Why use social media?



- Tell your own story in your own way
- Informal and interactive (good for sparking conversations!)
- Potential for reaching broader audiences



- **Investment** of energy to build & maintain your audience
- Maintain a barrier between your personal/professional self
- **Discomfort** with promoting yourself and competing for attention

**-1-**Writing
a blog post

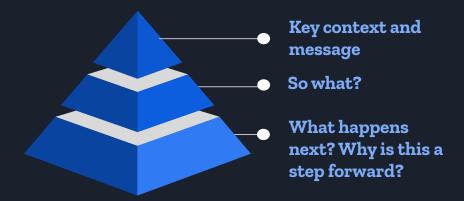


### Rethinking the flow of ideas

Typical scientific audience

Background
Supporting details
Results & conclusions

Broader public audience



### Essential building blocks

**Essential context** 

Focus on a key idea that is relatable to your audience.

Key message

Give the answer early and make it clear.

So what?

What does this mean (or change) for your reader?



### Piecing it together!

We broke a blog post into tiny pieces. Oops!

It's up to you to piece it back together again.



### How to get your post shared

#### People share news and information for a few reasons, including:

- Self-enhancement to make them look good!
- Social bonding to form connections!

#### Well, we know that people are more likely to share:

- Surprising, interesting, or entertaining content (to look fun!)
- **Useful information** (to look smart & aware!)
- Positive content (who wants to make others feel bad?)
- Emotional content (bonding!)

Framing your information with this in mind can really help to get your content out there!

### Language is your friend

#### Active voice

Passive: "This was done by me"

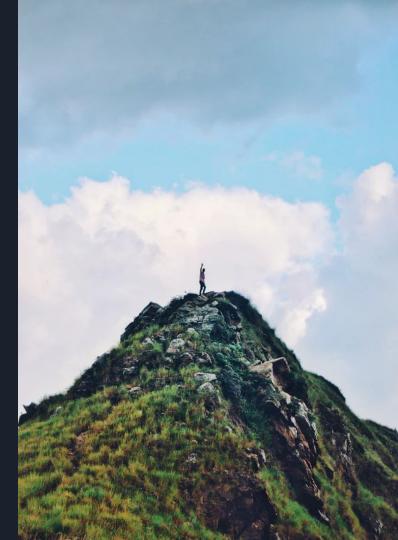
Active: "I did this"

#### Positive phrasing

- Negative: We did not find a difference between turtles...
- o Positive: Turtles had the same ...

#### Person-centered language

- O Use "I"!
- Be as personal as you want share opinions, emotions, memories, jokes, etc.



### Style is also your friend

- Break your text up!
  - Titled sections can be great
  - e.g. <u>How nature restoration reduces flooding</u> on the
     WWF-Canada blog
- Keep your main points at the front of your sentences / paragraphs

Have fun with it! It's your blog post!

#### How nature restoration helps reduce rising flood waters



WWF

APRIL 28, 2020



Saint John River. Credit: Terry Kelly/WWF-Canada

It's flood season again, Simon Mitchell, WWF-Canada's Freshwater Lead Specialist, lives steps away from the Saint John River in New Brunswick, so we asked him how our restoration work can help provide nature-based solutions to this increasing problem.

#### Why is flooding in the Saint John River getting worse?

Flooding is a complex issue that's affected by many things. Over the last couple of years, we've had a slightly higher than average snowpack. Development and land clearing have also changed the landscape and we're seeing warmer temperatures sooner than what we're used to. When all of this is accompanied by rainfall, snow melts more rapidly than ever before. Basically, the river system becomes overwhelmed and floods occur.

#### What are the effects of this?

While all of Canada is **coping with the pandemic**, many still face the same risks from extreme weather that come every spring. Communities, businesses and households are experiencing flooding, closures and property destruction. Many people are forced to leave their homes during this time, which is a challenge at the best of times, let alone during a global pandemic.

We're seeing flood water in places we aren't used to seeing it, and many of these places don't have the infrastructure they need to deal with flooding. Wildlife are at risk, too, because flooding shifts their habitats — sometimes eliminating it entirely. Just like when we face displacement, wildlife are threatened by flooding, and these are often species that are aiready at risk.

# **Titles**Short, clear, and reader-friendly

### The Arctic is cool — let's keep it that way



#### **ELISSAMA MENEZES**

· Analyst Marine Shipping and the Climate Emergency

The strange incident with the giant clam by Maria Dornelas 19.05.2020

Frozen Toes, Wet Sock, and Icy Boots - Studying Bats in the Canadian Winter

WCS Canada's Muddy Boots blog

## The real Tinkerbell: don't mess with these tiny fairy wasps



July 4, 2019 1.50am EDT

What trees would we plant to maximise carbon uptake?

Dr Markus Eichhorn (Trees in Space)

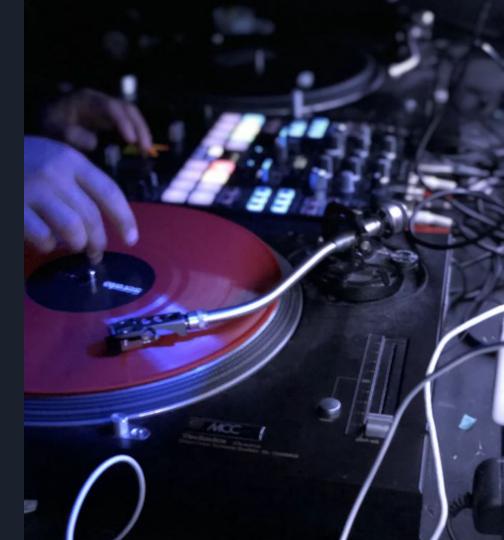


### R-r-r-remix a title!

Remix this article title to make it more suitable for a blog post:

"Ice Cream Structural Elements that Affect Melting Rate and Hardness"

Muse, M. R., & Hartel, R. W. (2004). Journal of dairy science, 87(1), 1-10. https://doi.org/10.3168/jds.S0022-0302(04)73135-5



-2-How Twitter works



### Is Twitter the right platform for you?

#### Real-time

Fast-paced, immediate communication

#### Direct engagement

You can talk to people directly, and start conversations.



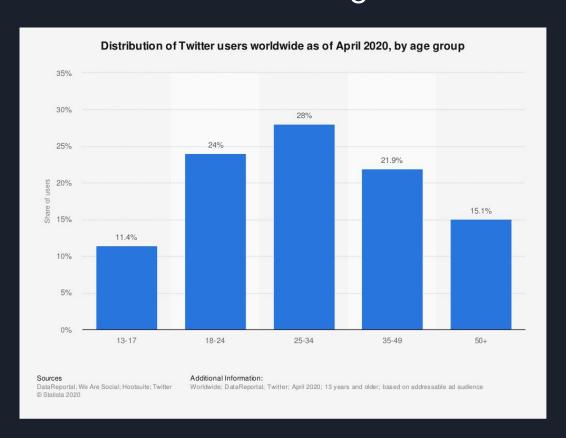
#### Audience expands quickly

Tweets can be seen by followers and by people who don't follow you (yet!) thanks to hashtags, and algorithms.

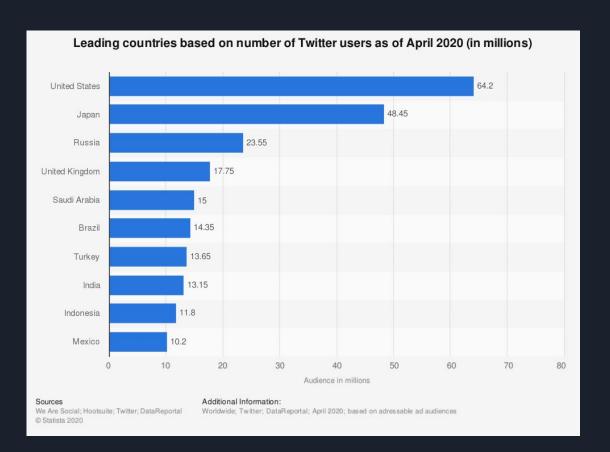
#### Concise

Limited to 280 characters per tweet, Twitter isn't necessarily the place to elaborate deeply on complex ideas.

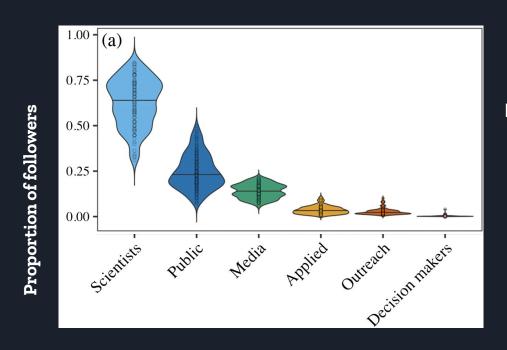
### The Twitter audience: Age



### The Twitter audience: Countries



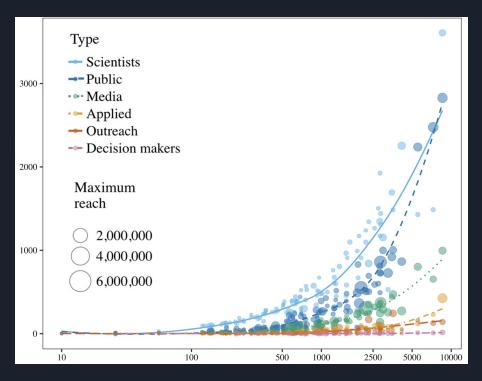
### Scientists' Twitter audiences



#### Not just scientists...

- More non-scientists than you might think
- Main platform used by journalists!

### The Twitter audience



**Total followers** 

"Academic scientists on Twitter start by preaching to the choir but can eventually **sing from the rooftops**."

Especially if you have >1000 followers!

Modified from Fig. 3 in Côté, I.M. and Darling, E.S., 2018. Scientists on Twitter: preaching to the choir or singing from the rooftops?. Facets, 3(1), pp. 682-694.

### **How Twitter works**

- Public by default
- Maximum of **280 characters** per tweet
- Text and lots of media options:
   images, videos, polls, gifs, links, and #hashtags
- Username, picture, and bio to present yourself





Hey scientist friends! Let's fill folks' feeds with neat science facts! What's your go-to fact from your discipline to get people to say "wow" and want to learn more?

My example: did you know Greenland sharks, which can live over 400 years, eat polar bears and reindeer?



○ 6,495 3:04 PM - May 6, 2020

(i)

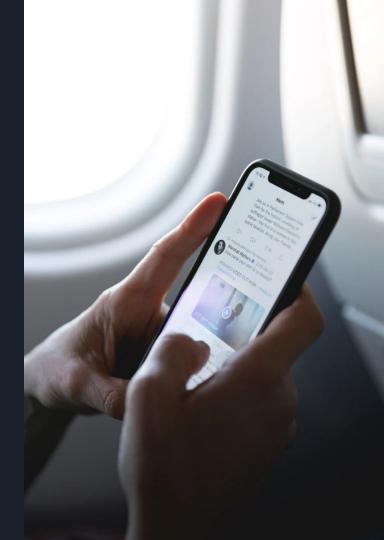
1,633 people are talking about this

,

### **How Twitter works**

- Follow accounts
- Feed shows tweets/retweets from people you follow
- Reply to, like, retweet, and/or share these tweets
- Write your own tweets
  - Note: you can't edit them!

See <u>Wired "How To Use Twitter: Critical Tips For New Users"</u> for more info on the basics of Twitter (how to create an account, use lists, etc.)



### The algorithm behind Twitter's feed

#### Recency

When was the tweet published?

#### Media

Are there photos, GIFs, videos?

#### **Engagements**

How many likes/RTs/etc. the tweet already has

#### **Activity**

How active is the user?

Twitter's feed is not chronological.

It shows "top tweets" first.

Use Tweetdeck!

### Build a profile



#### **Emily Darling**

@emilysdarling

WCS conservation scientist thinking about coral reefs, fisheries, climate change, big data, and how to tweet about it. Tweets my own.

**2,192** Following **7,062** Followers

#### Username that represents you

• Does it work when read as one word?

#### Short, but informative bio

- Use keywords and/or hashtags
- Add affiliations
- Add links to your work (website, online material)
- Don't forget you have a personality

Add a picture of yourself (and a header)!



### Write a bio!

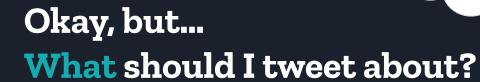
Write yourself a Twitter bio (or update it, if you have one)!

Give feedback to 1 bio in the etherpad.

Get feedback on yours.

It's a win-win!





One of the most confusing things about Twitter is what to tweet.

We have some suggestions of where to start!



### Some ideas to get started...

- Fun facts about your species, system, or process
  - Add pictures, GIFs, videos!
- Promote your science
  - Blog post or an article that just got published?
- Work life in the lab, office, or the field
  - Catching bugs? Identifying bugs? Fixing bugs?
- **Engage!** Retweet and reply! Talk to people.

Be creative and get out there!
The more you tweet, the easier it will become.



### Anatomy of a tweet



#### #Hashtags

**#sturgeon** and **#ReviewPaper** marks the tweet for related searches

#### @Mentions

@authors and @collaborators to tag relevant people & direct interested readers to their accounts

#### tinyurl.com/...

Space is valuable! Use tinyurl, bit.ly, etc. to shorten your links.

#### Media

Add photos, illustrations, gifs to make the tweet stand out to interested people (who like fish!)

### Use threads to elaborate

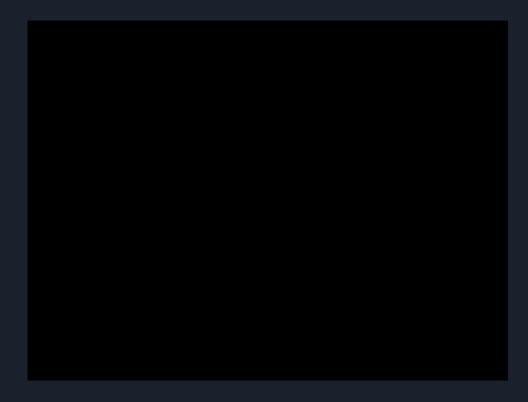


This is the first tweet in a thread!

A thread is a series of tweets that are linked together, like a discussion or an elaboration of the original tweet.

Very useful if you need more than 280 characters!

### Use threads to elaborate



### How to make a thread

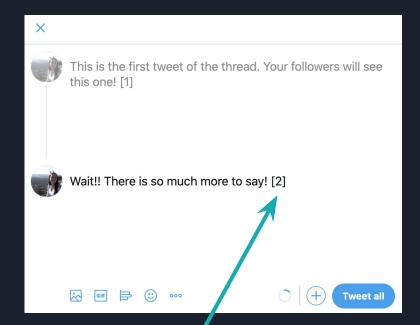
**Step 1:** Start a new tweet





Clicking this will open a thread!

**Step 2:** Click + and continue the thread



Numbering the tweets can improve readability



### #ThreadTuesday!

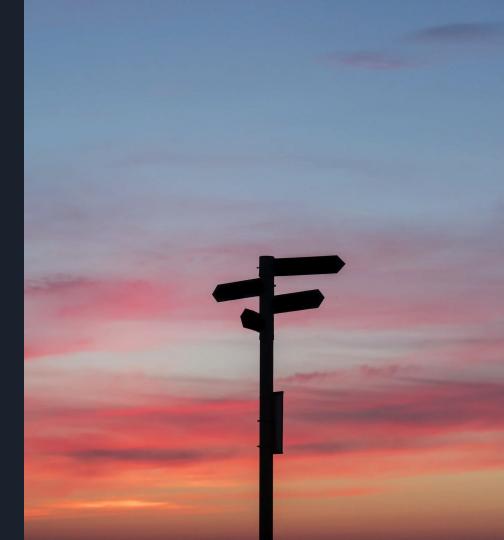
Write your own thread (min. 3 tweets).

#### Need ideas?

- Your research project, or study organism/system
- Something you've learned so far in this training
- Anything else (your pet! the bread you made! how you're coping with isolation!)



-3-Tips, tricks, and best practices



### Follow people!



Twitter's best benefits are conditional on building your network actively and continuously.

- #FollowFriday (or #FF)
- Click and search hashtags #ecology, #scicomm, etc.
- Followers/Following
   Who are your followers, your labmates, your affiliations following?
- #PhDChat, #AcademicChatter, #SciComm general chatting about life and work as a scientist
- "Who to follow" suggestions
   Twitter's suggestions will improve as you build your network



### #Follow...Tuesday

Find 3 accounts to follow. Go!

Don't forget to share them in the etherpad!



### Accessibility



Many Twitter users use screen readers. To make sure your content is readable using text-to-speech software:

- Shorten your hyperlinks (<u>bit.ly</u> or <u>tinyurl.com</u>)
  - e.g. I love happy dogs #DogsRule <u>bit.ly/3e1aqdl</u>
- Capitalize each word in your hashtags
  - #LikeThis instead of #likethis
- Avoid acronyms when possible (or spell them out!)
- Add alternative text to image posts

Describes the content of images to convey the information they contain.

Settings > Accessibility > Compose image descriptions

### A note on misinformation



It's tempting to engage with tweets that are spreading false information, but you could end up amplifying it!

#### Some things to think about:

- Explain the context to your audience before replying/quote-tweeting/retweeting misinformation. Be very clear!
- If possible, respond without linking your audience to it directly.
- Think about what you'd do in case you accidentally spread misinformation:
  - Delete post? Respond with the correct information?
  - How can you make sure the original audience sees your correction?



#### **IGNITE - Science Communication Training**

#### SciCommCollective

Great list of resources (assembled by McGill students, including BIOS<sup>2</sup> fellow Alex Arkilanian!) for science communication and STEM!

#### BES Guide to Social Media for Ecologists

In-depth guide about using social media (including Facebook, Youtube, Instagram, Twitter, etc.) to do SciComm.

#### **BES Guide to Promoting Your Research**

This guide is to help people at all career stages find the best way to promote their research using various forms of media.

#### <u>How To Make A Personal Media Kit For Your Scientific Work — And Why You Need One</u>

The importance of capturing photos, video and audio of yourself and your research in action for SciComm.

#### A Beginner's Guide to Science Communication Opportunities in Canada

Training opportunities, as well as outreach, public speaking, writing, journalism and social media initiatives to in Canada as of 2019.



## Questions?

### Thank you!

@ bios2