Data workshop outline - please add points!
- Large data storage
  - Not one solution
  - Catalog of datasets
  - Could have databases in different places
    - Phenocams in one place - Texas computing
    - Traits in another
  - Standardized plot IDs
  - Retiring PIs - ITEX database for general data
- Go over past meeting minutes
- How to structure Slack
- How to structure Github
  - Links in README
  - New repos
- Communication/Accessibility questions

Group meeting in Johnson central room discussed:
- Having an ITEX data working group. One thing would be to do some data cataloguing. But the other would be to have people who have already done some synthesis contribute to developing:
  1. If you are starting a new ITEX site, how to make things and organize/manage data so that it is easier to later integrate into the existing synthesis datasets and minimizes data-fixing work by synthesis authors. Basically what are the most common issues that can be headed off? (Metadata variable names, site naming, …?) because there are new sites being added all the time! This would also make it easier for the PI's of new sites to avoid headaches for themselves and their own use of their data, probably.
  2. What data are most important/useful to collect in Year 1 to have baseline? Both for each site's own purposes and integration into synthetic datasets
  3. Data management protocol/suggested tips
- We agreed it is too much to ask that people submit or update their posted datasets after every summer field season. Also not a good use of postdoc time to have someone integrate new data into the dataset (e.g. phenology dataset) every year. Probably more efficient to do it in batches when we take the decision to do a synthesis in a topic and there is e.g. a postdoc dedicated to this.
- However, it would be great to have to whatever extent we can, some list of what type of data was collected at each site (don't need to post actual data) - helps generate new synthesis ideas and evaluate feasibility of ideas.
  - Bob pointed out that we have more of this than we think - survey data from after Parma meeting
  - We also have a number of protocols that are probably relevant that nobody uses

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Abstract for data and code

Dataset sizes, code complexity and virtual communication options have increased rapidly in the last decade. In January this year a small group of ITEX members met to brainstorm some potential options for data storage and communication. We thought it would be useful to try out some different tools at this meeting and then discuss what could work out well for ITEX going forward. We discussed two main points. (1) How can we make our network's published work easier for people outside of ITEX to find and cite? and (2) How can we improve data and code sharing within the network? This presentation will be a very brief introduction to Github, Slack and Google Scholar so everyone can make an account at the meeting and decide what would be most helpful and inclusive for ITEX going forward.

ITEX Google Scholar for sharing published work:
https://scholar.google.com/citations?hl=en&user=fTF80xoAAAAJ

ITEX Github Organization for sharing code: https://github.com/orgs/ITEX-sites/repositories

ITEX Slack group to enable easy casual communication about the code and other topics:
https://join.slack.com/t/itex-corp/shared_invite/zt-2c6mx45s3-YPesiRPuHMnhBiTEl9izuA

##
Meeting date: 8am (PST) Jan 23, 2024
Zoom link:
https://ubc.zoom.us/j/62537743028?pwd=NWJoOXhSSXV4QklwNW1uZ3huOWZrdz09

In attendance: Sarah Elmendorf, Mariana Garcia Criado, Bob Hollister, Courtney, Collins, Cassandra Elphinstone

Goals:
- Discuss best practices for making code and data accessible and easy to find for all members in ITEX.
- Discuss how data, code and scripts can be shared and co-edited by a wide range of people using github.
- Discuss the best method for casual communication between people within ITEX.

Agenda (1 hour) - please feel free to edit

Methods to link and share published data/code/papers in ITEX (20min):
- Published data
    - ITEX Zotero shared library for papers?
        - https://www.zotero.org/groups/2211939/lter-ble/collections/LDBWKRXN
        - https://www.zotero.org/groups/350172/shrubhub/library

- https://www.zotero.org/groups/4922160/alpine_plants
- Already Google scholar page
  - Papers linked here: https://scholar.google.com/citations?hl=en&user=fTF80xoAAAAJ
  - Published code/data can also be linked here
- Is there a standard database ITEX recommends? Polar data catalog? Dryad?
  - Anne's database is coming out - Zendo and linked on Github
  - Arctic Data Center (cost associated but Bob can cover)
  - Isla maybe hiring a data liaison for ITEX?
  - Polar data catalog is easy other option
- Published code (individual github repos/Zendo/zotero?)
  - What is the best way to make this code accessible to keep being used?
    - Code through github and Zendo
      - Link to large database and then explain filtering done for specific analyses
    - Zotero - link to previous versions
      - For some PIs this is extensive and can just search on web of science
      - Many version of large databases are already on: https://www.gvsu.edu/itex/synthesis-data-4.htm

Options for making pre-published code and data accessible/shareable (20min):
- Unpublished data (?? - only if wanted to be shared - e.g. Greg's Alex data)
  - Maybe a compute canada cloud account for data sharing
  - Is this something Isla could own for sharing large ITEX data with network and collecting retired PIs older data?
- Unpublished code (Github organization): https://github.com/orgs/ITEX-sites/repositories
  - Climate data - filtering code - something we all need to do
  - Plotting code - lots of repetition
  - Allows many users to share their code and general scripts both published and unpublished
    - E.g. I have found some code from Anne very helpful in plotting climate data a couple years ago and other code from Courtney useful for plotting warming control comparisons

General casual ITEX communication (10min):
- Slack (need a paid plan for memory)
  - Already Arctic Hub Network
  - Email to gmail to save older messages - test early
- Discord (free but less formal)
  - Less people on it
- another option?
  - Email to ask Anne, Isla, Signe

- Ask if combined with ArcticHub - can name change and make Arctic hub a channel?

Conclusions (10min)
- How to structure discussion at ITEX meeting to be productive on these topics?
    - Openness and inclusivity - a few people know what is happening in the network, should we be thinking of how to make this information/oversight
- Slack practice at the meeting
    - Specific meeting channel
    - Introduce at the beginning of meeting
- Github tutorial - simple video/slides
    - Editing a README
    - This exists intro
    - Code in progress can be shared here
    - How to make an account
    - Who to send username to get added
    - Link to R?
- Google scholar video for how to upload papers
    - Bob has a video