digitization
ACADEMY

Introduction to Biodiversity Specimen Digitization

Overview

This free, online course is focused on introducing the creation of digital data about biodiversity specimens to those who are just beginning this activity. This course is targeted at those already associated with a biodiversity collection, such as student technicians, collections management professionals, or curators. The course will be relevant to a diversity of collection types. Participants do not need to have prior knowledge of biodiversity informatics or specialized software.

Learning Objectives

The aims of the course are to empower participants with the knowledge and skills to do the following:

1. Identify and describe relevant facets of information or potential information related to biodiversity specimens.
2. Identify and describe common digitization protocols and best practices related to transcription, imaging, and georeferencing.
3. Identify downstream uses that are relevant to digitization decision-making.
4. Recognize basic principles of data management, including the importance of identifiers.
5. Identify collections management system options and the major differences among them.
6. Outline a digitization project, including quality control and a data management plan that includes data sharing.

Class Format & Homework

This course is a fast-moving mix of synchronous presentation and discussion and asynchronous work either alone or in small groups. In general, each day will begin with time for questions about the asynchronous activity and/or readings from the day prior, followed by a presentation of new content and activities related to the new content.

Schedule & Topics

The schedule below provides a high-level overview of course content. Topics will be updated with links to their corresponding slide decks as available. Links to recordings of each block will be posted after the conclusion of the block.

	Synchronous	Asynchronous
Block 1	Course introduction Introduction to digitization and biodiversity data	**Reading (read prior to first meeting):** Nelson & Ellis 2019 **Optional Reading:** Ball-Damerow et al. 2019 Heberling et al. 2021 Wieczorek et fal. 2012
Block 2	Elements of digitization workflows	**Activity 1:** Transcribing specimen records **Reading:** Nelson et al. 2012 **Optional Reading:** Lendemer et al. 2020
Block 3	Transcription and data management	**Reading:** Collection Management Systems wiki page and linked surveys
Block 4	Collections Management Systems Live discussion/Q&A with collections management system representatives	**Activity 2:** Exploring Collections Management System options
Block 5	Imaging	**Reading:** (1) iDigBio imaging-related workflow modules and tasks lists (2) A detailed specimen imaging protocol of your choice produced for a collection or Thematic Collection Network (TCN) focused on a specimen type relevant to you. One place you can find protocols is in the resources linked to the TCNs listed here.
Block 6	Imaging (continued)	**Activity 3:** Designing part of a digital imaging pipeline
Block 7	Georeferencing	**Optional Reading:** Marcer et al. 2022
Block 8	Project design and management Outro	

Meeting Time & Place

The course will occur via Zoom.

Content & Communication

Access to and management of the course's digital content will be accomplished via Google Drive. Communication outside of the synchronous Zoom sessions will be via email.

Materials Needed

Participants will need to access Zoom and Google Drive as part of this course.

Code of Conduct

All participants are expected to abide by iDigBio's Code of Conduct and Community Code of Conduct: https://www.idigbio.org/content/idigbio-code-conduct

Recording Policy

Each class will be recorded and posted for later asynchronous viewing. Zoom recordings are available exclusively to participants and not to be shared publicly.

Acknowledgements

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