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Assignment 5

ENGL 3002

The focus on the fourth Data in the Wild session was one that something I had never even thought to have existed at the University of Cincinnati. The focus topic was that of the UC Herbarium, which is the University’s collection over 125,000 plant specimens from around the world and even dating back to the nineteenth century. Our presenter, Eric Tepe, is one of the professors who oversees the collection and has been crucial in digitizing many of the specimen. The data itself is the specimen of plant and all the observable information with the item. Additionally, tags that denote collection site, year, and species name are included in the data.

Some of the challenges facing this data has to do with the nature of the collection. As organic materials, the specimen can be damaged over time if not stored properly. In the case of UC’s collection, flooding of the storage room has also ruined some specimen and their valuable data labels. These issues can persist as well as other issues with older specimen. When they were collected standards were not clear and much of the information, if any, is not helpful. One of the plants Professor Tepe showed us was one of the early specimens and for location only labeled, “Near Cincinnati”. One of the biggest challenges with older data is finding pieces in collections with valuable data provided, otherwise the specimen can sometimes be simply a curiosity only.

Despite the challenges faced in this field of data collection, sharing of the data has become more and more accessible. The herbarium has uploaded records internally to UC Scholar, as well as a wider network of resources through the Consortium of North American Bryophyte Herbaria. The Consortium is a great way for professionals to share information and is easy enough for any interested public individuals to register an account for as well. Obviously, without photography much of this data would not be able to be stored. While the physical specimens remain scattered in cabinets and storage around the world, it is beneficial that high quality photos and the associated tag information can be effectively stored and shared digitally. Otherwise for the physical plant samples, per Professor Tepe, warm, dry climates typically hold the best for aging specimens. Because plant matter is organic, it will eventually waste away but there are ongoing efforts to delay decay and preserve samples as long as possible.

Overall, I was very pleased to visit the UC Herbarium and learn about this hidden treasure. Ultimately it made me aware that any field can find a way to effectively archive and share their data, even for natural plant species. Through using the Consortium database, researchers can uncover insights outside of their institutional records. Even finding Universities hundreds of miles away with specimen from Cincinnati strengthens the research community. This tour solidified in me that in some fields, like natural sciences, there are those already working diligently to digitize and share.

**References**

National Science Foundation. (n.d.). Consortium of North American Bryophyte Herbaria.

Retrieved from <https://bryophyteportal.org/portal/>

University of Cincinnati. (n.d.). Herbarium. Retrieved from

https://www.artsci.uc.edu/departments/biology/research/herbarium/default.html