Herbarium Advisory Committee Meeting, 2024-12-19

Attendees: Herrick Brown, Avery Browning, Csilla Czakó, John Nelson, Keith Bradley, Maura Flannery, Johannes Stratmann, Trey Franklin, Eric LoPresti, Mihaly Czakó, Michael Weisenburg, Lana Burgess, Dave Damrel, Dixie Damrel.

General HAC info:

- Next planned meeting is set for Friday, February 21st, 2025.
 - Tentative to the week of February 17th, since several of our schedules for the new semester will not be available until the new year.
 - Avery will send out reminders.
- Expected meeting frequency = approximately every 2 months, for a one-hour period.
 - We will have slightly more frequent meetings in the beginning to establish momentum and get into the groove of things.
- Topics to cover each meeting (as applicable):
 - Budget
 - Volunteer/staff changes
 - Processing statistics
 - Volunteer hours
 - o Loans
 - Website updates
 - Donations
 - Equipment or supply issues
 - Additional meetings, conferences, seminars, etc. attended by Herrick or Avery
- Term limits some members are likely indefinite, others may be rotated as impacted by workload, scheduling needs, etc., but we want to also be selective with members, to maintain a level of expertise and familiarity within the community
- Recognition by the university and department currently, we would be considered adhoc

Current herbarium stats:

- 40 specimens are processed each week (mounted, imaged, data entered, filed) for a rate of approximately 2,000 new specimens accession each year
- We have 5 datasets in GBIF (algae, bryophytes, fungi, lichens, and vascular plants) and over 1,000 citations to date
- In this year alone:
 - o Over 8,000 new specimen images captured
 - 10's of thousands of new records and edits
 - o 27 'transactions' with other organizations (loans, gifts, etc.)

- Overall digital stats from online portals:
 - Record count
 - 122,912 on SERNEC
 - 892 on Algae Portal
 - 386 on Lichen Portal
 - 3,304 on Bryophyte Portal
 - o Records imaged
 - 92,431 on SERNEC (75%)
 - 851 on Algae Portal (95%)
 - 3 on Lichen Portal (0.78%)
 - 7 on Bryophyte Portal (0.21%)
 - Records ID'd to species
 - 116,485 on SERNEC (95%)
 - 627 on Algae Portal (70%)
 - 347 on Lichen Portal (90%)
 - 3,250 on Bryophyte Portal (98%)
 - Records georeferenced
 - 33,795 on SERNEC (27%)
 - 866 on Algae Portal (97%)
 - 327 on Lichen Portal (85%)
 - 88 on Bryophyte Portal (3%)

Herbarium internal info:

- A large portion of our labor comes from volunteers, which include our retirees that come in on Fridays to mount specimens and students who mainly cover portions of the digitization process
 - Student volunteers are especially prone to fluctuations in number and availability
 - The only employees are Herrick (curator), Avery (assistant curator), and Hien (workstudy student – digitization).
 - Employees are technically of the Biological Sciences department, which is where paychecks are dispersed from
 - Batson Endowment is later billed for the cost to cover the expenses
 - Herrick currently does not have a way of seeing how much money is coming out of the endowment for wages
- The herbarium has a critical need to increase our budget for staff, maintenance of the collection, and further collection growth
 - We do have a time-limited grant project through SCDNR for USFWS, which funds Avery's position
 - Loss of Avery's position would be detrimental to the herbarium, but more money is needed to sustain it

- We have a few donors, but donations do not make up much of our funding (this year we received about \$7,000 in donations)
- Current outreach:
 - Herbarium tours
 - Free plant ID
 - Botany walks on the Horseshoe
 - Segments in SCETV's 'Making it Grow!'
 - Regular presentations at iDigBio (consecutively for the past 4 years, majority by Csilla and Avery; upcoming presentations at ASB and iDigBio 2025)
 - Our Florascope newsletter
 - Free digital resources for other herbaria
 - Consortium of SC Herbaria (collaboration with SCDNR)
 - Botany Boot Camp by Dr. Nelson (perhaps to return in the spring?)
 - Volunteering positions

NSF Grant

- Avery and Herrick have been working on an NSF proposal under the capacity and infrastructure category.
- Installation of a compactor system is the proposed solution for the issue of capacity and collection maintenance
 - \circ Estimated cost for installation = \$500,000
- Additional funds also requested for staffing
- Plan for retired cabinets to go to herbaria in areas of the state with a lack of botanical sampling done

Ways to reach our goals

- Create a proper budget, and express the need to be able to view its status on a regular basis
- Get at least something submitted to NSF. A letter of support from DNR would be beneficial.
 - There have been recent issues regarding communication with NSF and program officers, TCN funding was also cut.
 - Check into the MRI program. It is not discipline specific, and we may have a better chance of reaching a program officer with MRI appearing to be more active and responsive
- Look into integrating USCH specimens into library searches (i.e., searching for journals or papers about a species also returns the herbarium specimens as a result)
 - $\circ~$ In theory, this is possible, and Michael Weisenburg would be willing to help liaison
 - Thoughts from Zoom chat:
 - 10:35:36 From Lana Burgess to Everyone:

That is what the Provost wants for us. She wants all of McKissick Museum's collections database accessible through Thomas Cooper Library's catalog.

• 10:35:55 From **Michael Weisenburg** to Everyone:

Has anyone talked to Dean Banush about this?

- 10:36:01 From **Michael Weisenburg** to Everyone: *Banush
 - 10:37:47 From Lana Burgess to Everyone:

He was an in a meeting with the Provost and I when she mentioned it, but Dean Banush thought it would be too difficult to create mark records. I think he could be persuaded, but after the library renovation project.

- Establish relevance to the university
 - The herbarium is interconnected to multiple facets of USC, and we need to be vocal about it
- Look into getting Herrick's position endowed
 - This would free up money for additional staff
 - Trey Franklin is looking to do something like this for the arboretum, has connections, and is willing to help
- Court potential donors
- Advocate for expansion into other rooms (i.e., CLS 207 and 205)
 - Relevant to the renovations to the 3rd and 4th floors of Jones if enough labs are moved over, the need for these rooms by other classes may no longer be necessary, making them obtainable for the herbarium
 - Uncertain if the new science building was approved by the board of trustees (2028 was floated as a possibility), but this would create signicantly more space

To-do **prior** to the next meeting:

- Continue progress on NSF grant and get something submitted
 - Also look into the MRI program
- Speak to Garrett about establishing a proper budget and regular viewing of the herbarium's account status
- Continue to expand on outreach initiatives
- Inquire about integrating our specimens into the library's search feature, Michael is willing to help liaison
- Look at getting Herrick's position endowed, work with Trey on this
- Identify potential donors
- Continue to monitor herbarium stats and have those numbers ready for review
- Continue website and newsletter updates