



Taking the Pulse of Natural History Collections During COVID-19 Series: Where are we now?

September 15: Review Results of BCON's Community & Institution Surveys

Gil Nelson, iDigBio

Barbara Thiers, New York Botanical Garden



Welcome and Introduction to a series within a series

1. **Executing Virtual Events: Lessons learned from Digital Data & SPNHC Conferences**
 - Jul 28: Planning for Virtual Events
 - Aug 25: Executing Virtual Events
2. **Sept 15-17: Taking the Pulse of Natural History Collections During COVID-19**
3. **Oct 27: Virtual Project Management, Tips and Tools**

Today: Results of BCoN Community Survey, Barbara Thiers

**Tomorrow: Collections Perspectives:
John Bates, Emily Braker, Brian Atkinson, Mare Nazaire**

**Thursday: Moving Forward: Response and Opportunities for the Future
Rob Gropp, Scott Miller, Roland Roberts, Pam Soltis
Presentations and Panel Discussion/Q&A**

Unanticipated opportunities



*Adapting to COVID-19: Resources for Natural History
Collections in a New Virtual World*

Surveying the Community and Planning for the Future

Barbara M. Thiers
New York Botanical Garden



BIODIVERSITY COLLECTIONS NETWORK

NEWS GROUPS MEMBERS RESOURCES WEBINAR CONTACT US

News

COVID-19 Impacts on Biodiversity Science Collections

Written by
Jyotsna Pandey

May 19th, 2020

2 Comments

Survey Results Identify Concerns

The American Institute of Biological Sciences (AIBS), Biodiversity Collections Network (BCoN), Natural Science Collections Alliance (NSC Alliance), and Society for the Preservation of Natural History Collections (SPNHC) surveyed individuals affiliated with US biodiversity science collections to better understand the effects of COVID-19 related disruptions and closures on biodiversity research and education collections, and the people who use and care for these scientific resources. The survey was conducted in April 2020.

<https://bcon.aibs.org/2020/05/19/covid-19-impacts-on-biodiversity-science-collections/>



**BIODIVERSITY
COLLECTIONS NETWORK**

Survey title: **COVID-19 Impacts of Biodiversity Science Collections**

Dates: April 1-30, 2020

Participants: 390 respondents (collections professionals)



BIODIVERSITY COLLECTIONS NETWORK

High-Level Summary of Results (390 respondents):

- 96% of Collections were unavailable in April
- 90% of respondents were working from home
- Chief concerns expressed by respondents:
 - Inability to provide vital research services (64%)
 - Loss of funding for collections care, materials and supplies (64%)
 - Inability to provide outreach opportunities to public (47%)
 - Loss of staff due to budget cuts (47%)
 - Inability to meet existing grant and contract deadlines (44%)



Natural History Collections and COVID-19: Operational Status, Economic Impacts and Plans for Reopening: Second Survey

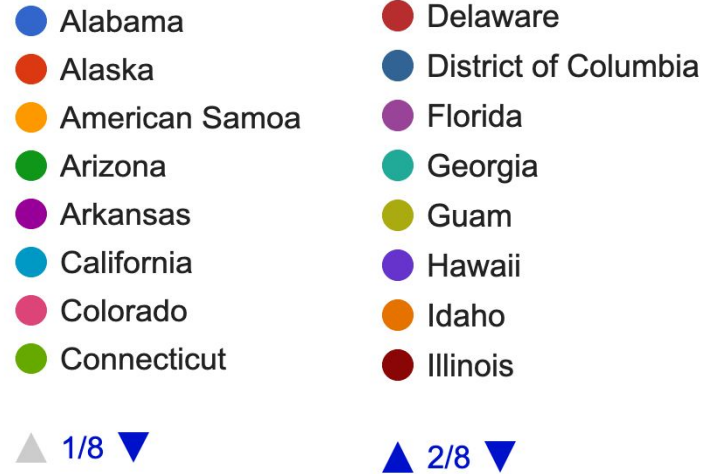
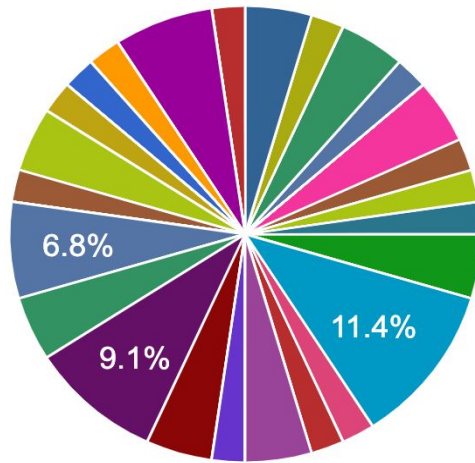
This survey of natural history collections institutions will be conducted between 14 August and 14 September 2020 to assess the impact of the pandemic on their functions and closure and reopening status. We are looking for a single response per institution. This survey will require an understanding of your institution's plans for reopening as well as staffing and budgetary situation.



Participants

State or territory

44 responses

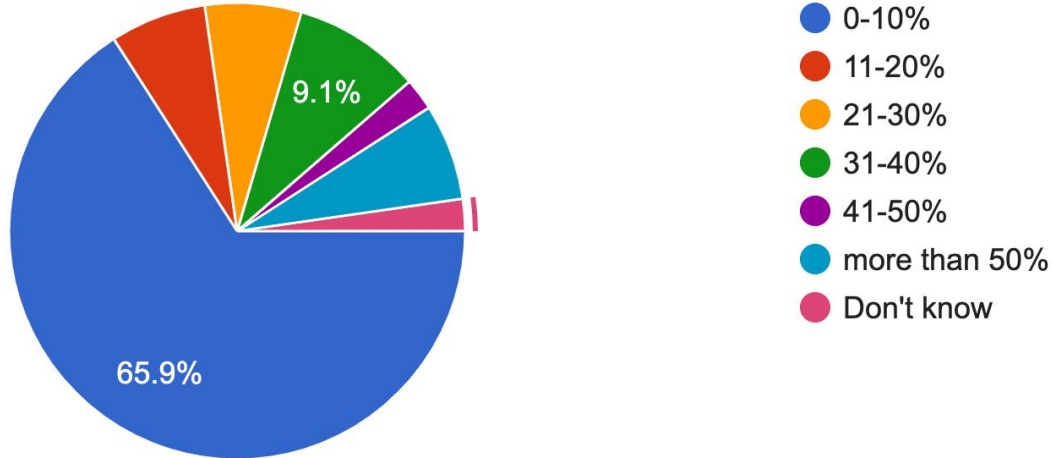




Current Status

6. What percentage of total staff are currently laid off or furloughed?

44 responses





Current Status

Staff Positions Most Affected by Layoffs and Furloughs Institution-Wide:

Curation/Collections: 36%

Guest Services, Retail: 28%

Research and Publications: 21%

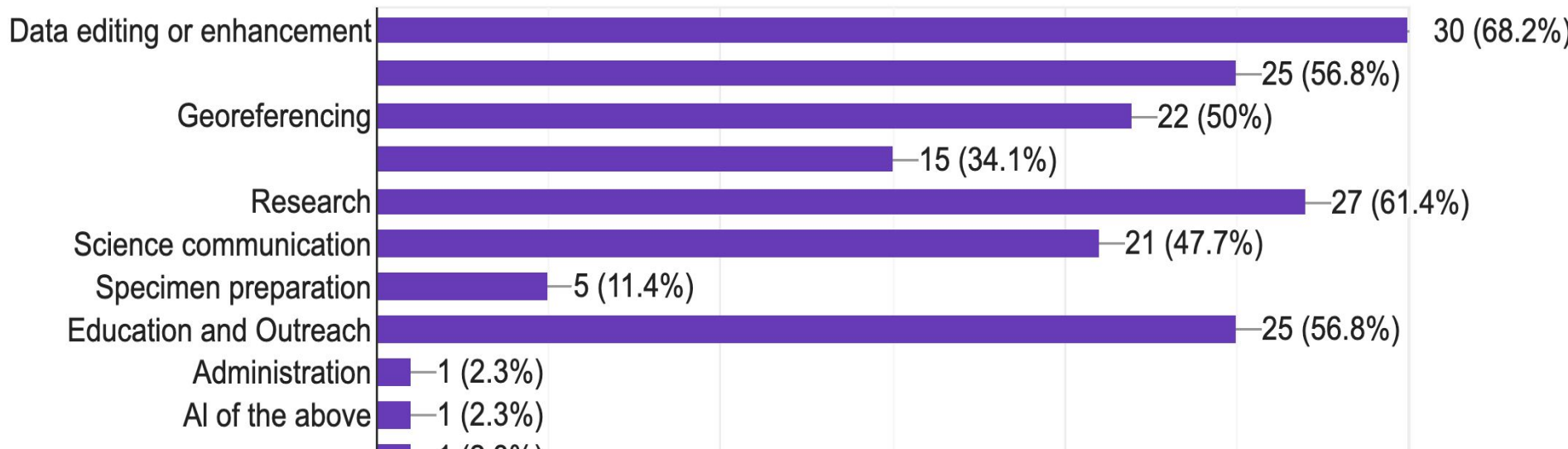
Exhibits: 13%



Current Status

13. What kind of work is happening remotely?

44 responses



Current Status

Other Current Activities:

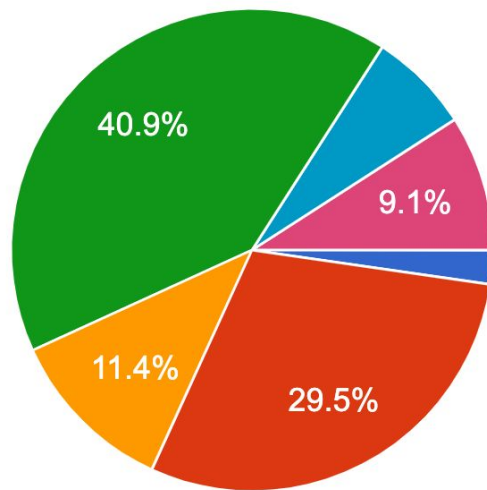
- Updating policies and procedural documents
- professional development activities
- leading workshops,
- community science projects
- field work, information requests
- Student training, graduate student supervision
- taxonomic updates, exhibits planning, data requests
- Social media content and distribution
- Trying to organize a state-wide 'photographic scavenger-hunt' to get diagnostic photos of live plants for the entire Indiana flora.
- Proposals and grant writing, donor relations
- Camps Program



Current Status

15. How has the productivity of your staff been affected by working from home?

44 responses

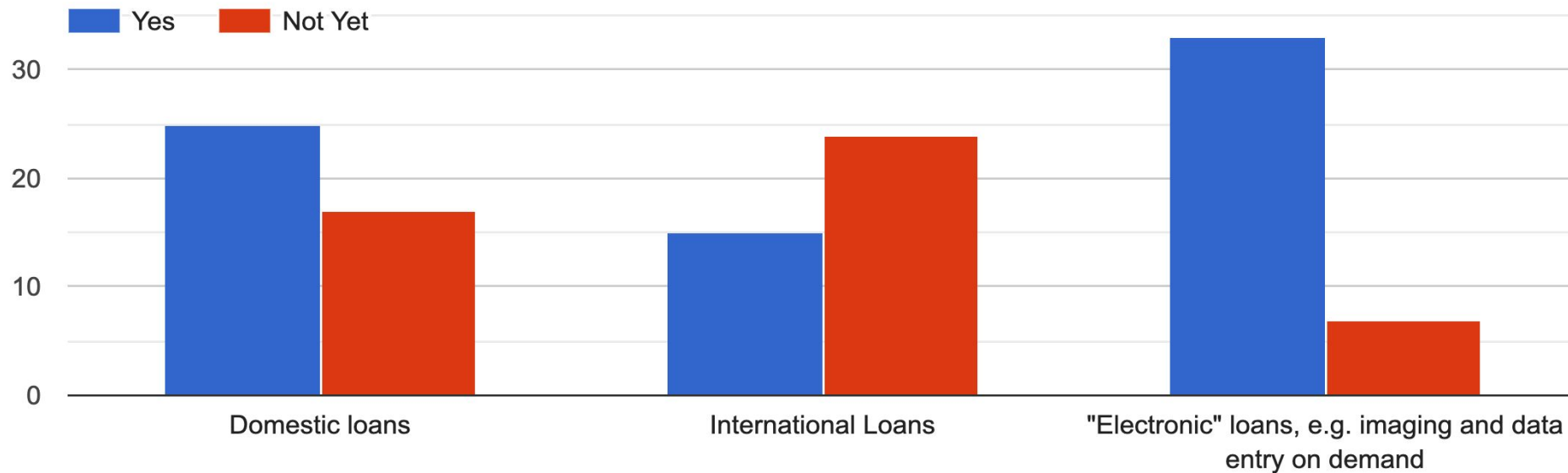


- Not at all
- Somewhat less productive
- A lot less productive
- Priorities have changed, but still as productive
- Somewhat more productive
- A lot more productive
- Don't know



Current Status

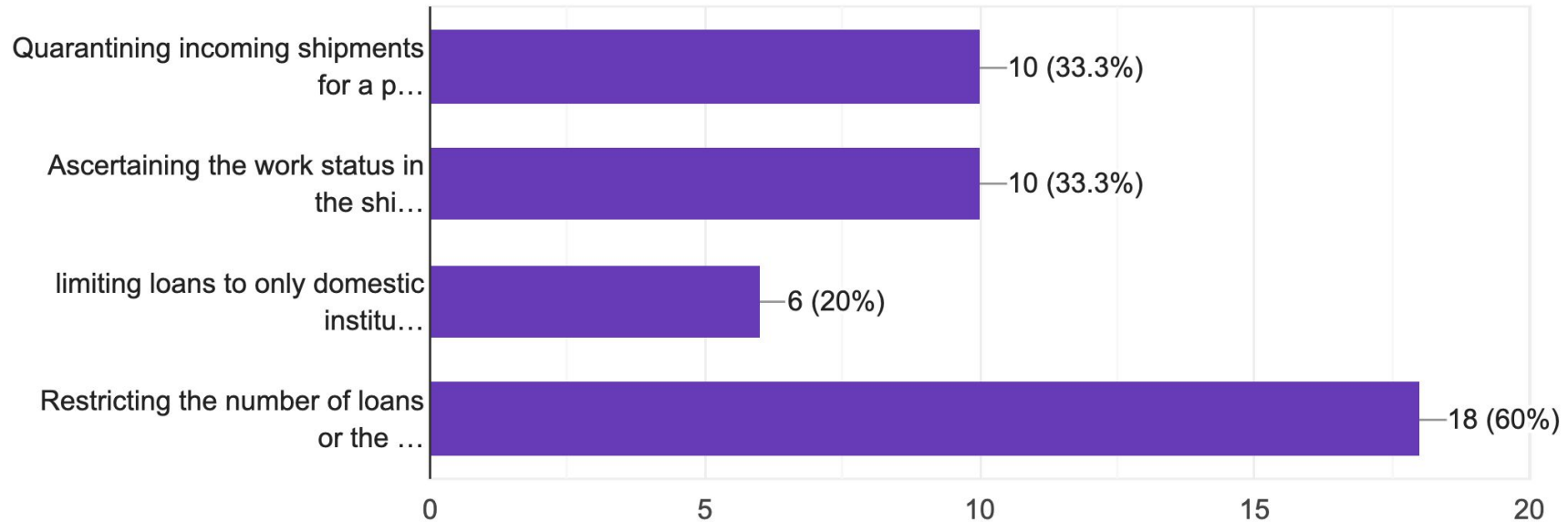
19. Status of Loan Programs





20. What additional precautions are you taking regarding loans at this time? (check all that apply)

30 responses

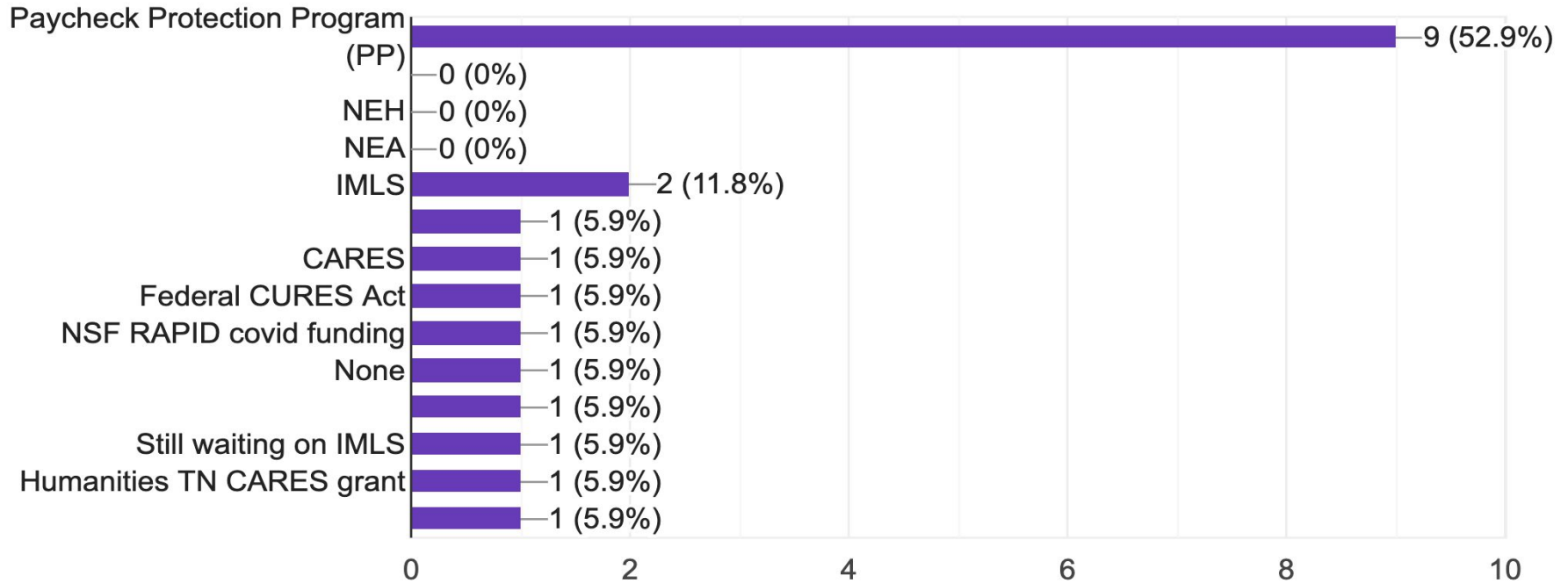




Finances

5. Regarding the following forms of financial relief, please select which ones your institution has received:

17 responses

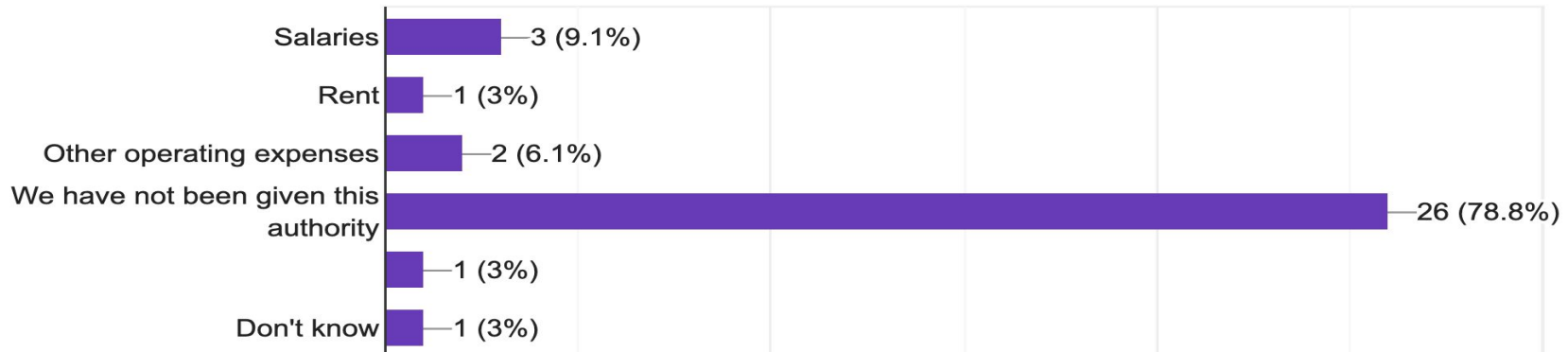




Finances

8. Has the museum's governing authority authorized the museum to use a board-designated restricted fund or endowment for purposes other than... of the following reasons? (check all that apply):

33 responses

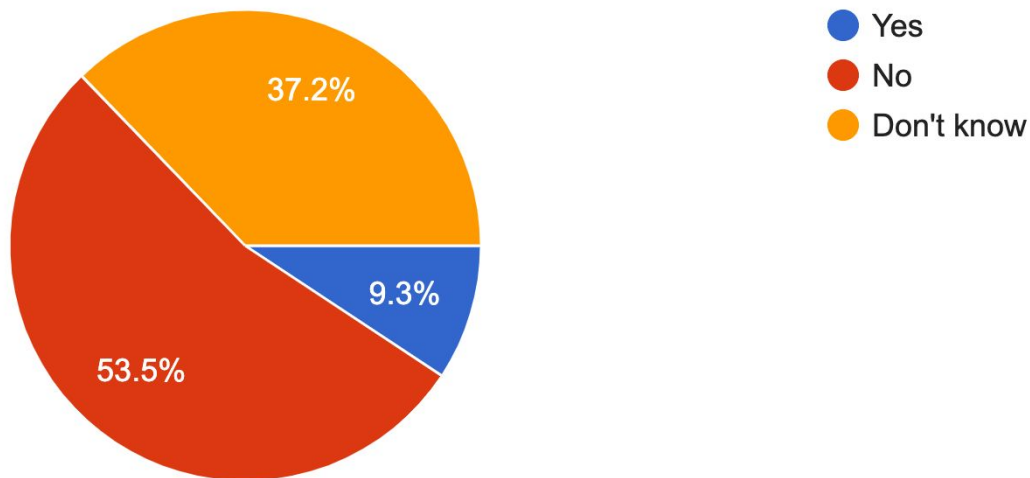




Risks and Threats

9. Do you believe there is a significant risk of your museum closing permanently in the next 16 months, absent additional financial relief?

43 responses





Risks and Threats

- Loss of staff; searches to fill vacant faculty-curator positions may be delayed.
- In ability to process new specimens in the labs.
- Significant loss of our volunteers
- Loss of interest to educational programs as well as university students because of our limited access during this time.
- Education of volunteer productivity; reduction of intern program; diversion of collections staff to assist with public programming/education, reduction in budget for archival materials for re-housing
- Budget cuts at the university will translate to reducing our already small budget.



What Can We Do?

- Keep talking among ourselves -- this webinar series, others
- Work across organizations with an interest in collections to coordinate activities, share findings.
- Follow up on the guidance provided by recent reports on how to increase the relevance and thus funding for collections



Extending U.S. Biodiversity Collections to Address National Challenges



<https://bcon.aibs.org/2019/01/16/community-input-requested-extending-u-s-biodiversity-collections-to-address-national-challenges/>

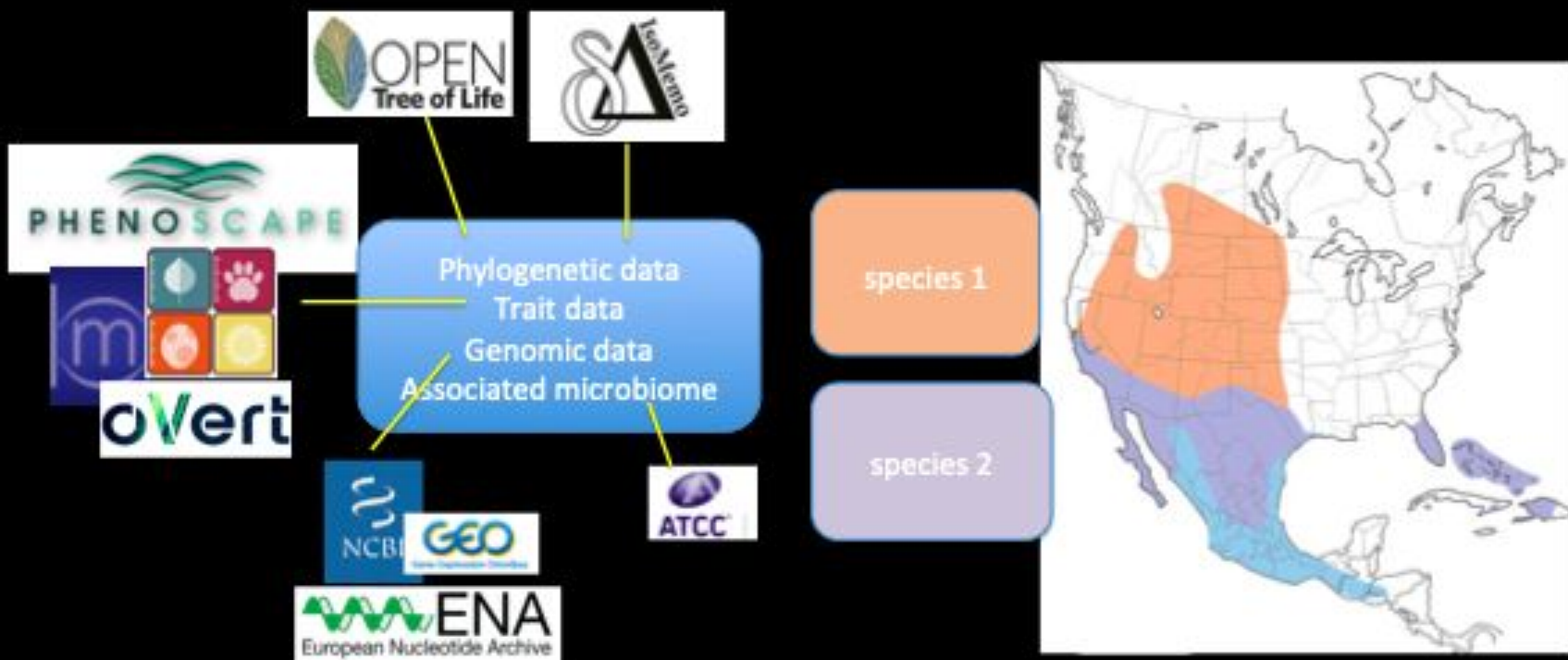


Focus of the new Agenda

*transforming our wealth of physical specimens
and related digital data into an extended
specimen network that will represent to
biodiversity held in U.S. biodiversity collections*



Research question: What factors might explain the distributions of these taxa?





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Biological Collections

ENSURING CRITICAL RESEARCH AND EDUCATION
FOR THE 21ST CENTURY





Statement of Task (abbreviated)

- Explore the contributions of biological collections of all sizes and institutional types to research and education.
- Envision future innovative ways in which biological collections can be used to advance science.
- Outline the critical challenges to and needs for use and maintenance of biological collections.
- Suggest a range of long-term strategies that could be used for their sustained support.





Vision for the Next Decade

For biological collections to survive and thrive...

Provide long-term support for collections-based scientific research, *instill* a culture of stewardship for and access to biological specimens, *build and grow* biological collections to better represent global biodiversity in space and time, *promote* access to biological collections as important educational resources for the general public, and *encourage* the exchange of biological resources and knowledge.





Realizing This Vision (1)

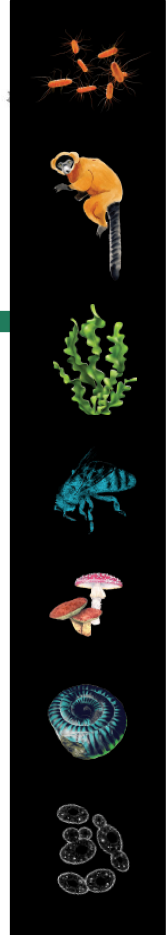
- Explores ways that biological collections contribute to society (Chapters 2 and 3).
- Addresses how the biological collections community is working toward a common vision in light of today's challenges.
- Recognizes that future success of biological collections depends on addressing four interrelated issues:
 - 1) Upgrade and maintain physical infrastructure and growth of collections (Chapter 4)
 - 2) Develop and maintain tools and processes needed to transform digital data to an easily accessible and integrated cyberinfrastructure platform (Chapter 5)
 - 3) Recruit, train, and support the workforce of the future (Chapter 6); and
 - 4) Ensure long-term financial sustainability (Chapter 7).





Report Structure

- Each Chapter lays out main challenges for all collections and path forward for the biological collections community.
- Recommendations are offered to:
 - The leadership (directors, managers and curators) of biological collections
 - The biological collection community (professional societies, associations, coordination network etc..)
 - The NSF Directorate for Biological Sciences
- The report is intended to launch a national conversation about the future of biological collections.





A framework for collaboration and innovation is needed

- More than ever, biological collections have an **energized community ready to step up** to meet basic biological and societal challenges. The time to act is now.
- Many of the recommendations are **beyond the capability of individual collections to implement**.
- **Several research communities have established central hubs, multi-tiered networks, associations, or synthesis centers**, funded through NSF grants or other federal and state support.
- The biological collection community could **leverage the organizational structure of centers and networks as a model to establish an Action Center for Biological Collections**.



Recommendations for the National Science Foundation

Recommendations 8-1: NSF should help [establish a permanent national Action Center for Biological Collections](#) to coordinate action and knowledge, resources, and data-sharing among the nation's biological collections as they strive to meet the complex and often unpredictable needs of science and society.

Recommendations 8-2: NSF should [lead efforts to develop a vision and strategy, such as a decadal survey](#), for targeted growth of the nation's biological collections, their infrastructure, and their ability to serve a broader range of users and scientific and educational needs.

Recommendations 8-3: NSF should [expand partnership capabilities more broadly across NSF, other federal agencies, international programs, and other sectors to maximize investments](#) in support of Recommendations 8-1 and 8-2.

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Biological Collections

Public Briefing Thursday 17 September , 11 AM ET
Register here:

<https://www.nationalacademies.org/event/09-17-2020/biological-collections-ensuring-critical-research-and-education-for-the-21st-century-report-public-briefing>



Break-out room discussion session

What are the top three challenges faced by collections since the pandemic started?

bit.ly/idigbio-poll

Break-out room discussion (20 minutes)

Review (10 minutes)

Discussion (30 minutes)



Taking the Pulse of Natural History Collections During COVID-19 Series: Where are we now?

September 16: Collections Perspectives & Break-out room discussion

Speakers: John Bates, Emily Braker, Brian Atkinson, Mare Nazaire

September 17: Moving Forward: Communities Response and Opportunities for the Future: Presentations and Panel Discussion/Q&A

Speakers: Rob Gropp, Pam Soltis, Scott Miller, Roland Roberts



Please help by providing feedback about this webinar series!

Survey link:

https://ufl.qualtrics.com/jfe/form/SV_aVL7wEfLYUXcbFb