



Sustainability of TCNs

Summit VI

November 1-3, 2016

Chattanooga, TN



NSF Collections Programs

- Advancing Digitization of Biodiversity Collections (ADBC)
 - https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503559
- Collections in Support of Biological Research (CSBR)
 - https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503651



Advancing Digitization of Biodiversity Collections

- **Program Goals:**
 - Digitize existing, vouchered, curated specimens in nonfederal U.S. collections
 - Include ancillary material available
 - Build on existing resources
 - Innovate to improve process
 - Collaborate to increase numbers of specimens
 - Research grand challenges as rationale
 - Link to national resource (iDigBio)
 - Train next generation and inform public
- **Thematic Collections Network (TCN)**
 - Research justification for specimens
 - Assessment of importance of specimens for the chosen research theme
 - Innovative methods to increase efficiency, lower cost
 - Collaboration across institutions and across collection types
 - Management plan, task analysis, data management
 - 2-4 year awards
 - Integration with iDigBio (data, outreach)
- **Partner to Existing Network (PEN)**
 - Add information to existing network projects
 - Should fit the TCN – why appropriate
 - Fill in gaps for coverage and increase specimens to meet research theme
 - Enhance outreach/training/education
 - Improve data management of collection
 - Increase collaboration and accessibility
 - 2-3 years with active TCN



Collections in Support of Biological Research

- **Program Goals:**
 - Enhancements that secure and improve existing collections
 - Improves the accessibility of digitized specimen-related data
 - Development of better methods for specimen curation and collection management
 - Supported areas:
 - Established living stock/culture collections
 - Vouchered non-living natural history collections
 - Jointly-curated ancillary collections such as preserved tissues and DNA libraries
- **Funding provided for:**
 - Improvements to secure and organize collections that are significant to the NSF BIO-funded research community
 - Secure collections-related data for sustained, accurate, and efficient accessibility to the biological research community
 - Transfer ownership of collections.
- **Solicitation Notes:**
 - Digital data generated through the activities of funded Natural History projects must be integrated with iDigBio
 - Letters of institutional support are no longer accepted for Natural History collections proposals
 - Demonstrate clear and urgent need to secure the collection



Thoughts for Discussion

- Basics of TCN sustainability planning
 - Why sustain?
 - No replacement for TCN, it has a unique role
 - Job not done, reasons to grow (more data, research, education-outreach)
 - Strong community support
 - What needs sustaining and at what level
 - Programmatic leadership
 - Technical support
 - Sustainable collaborator efforts

Partnerships

- Obtaining critical mass of active cooperating TCN collections
 - Include enough good partners
 - Allow or solicit people to utilize their expertise
- Effective use of PENs
 - Tradeoff between TCN and PEN budgets
 - Extending the work of original collaborators in meaningful ways

Partnerships (cont.)

- Collaborating outside TCN
 - Relying on iDigBio support
 - Cyberinfrastructure including data hosting
 - Digitization workflows, working group support
 - Education/Outreach
 - Identifying commonality with other TCNs
 - Connecting Paleo & modern data
 - Education-Outreach needs

Partnerships (cont.)

- Collaborating outside TCN
 - Connecting with software and projects
 - Examples for SCAN (Visipedia, TaxonWorks, Pacific Northwest Moths, Atlas of Living Australia, National Park Service, Education specialists, Long-Term Ecological Research etc.)
 - Connection benefits
 - Funding
 - Cost reduction
 - Extended benefits

Partnerships (cont.)

- TCNs beyond 2021
 - Should a case be made for continuing the TCN model?
 - What other models (e.g., more centralized) should be considered for continued digitization efforts?