Sustainability of TCNs

Summit VI
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NSF Collections Programs

• Advancing Digitization of Biodiversity Collections (ADBC)

• Collections in Support of Biological Research (CSBR)
Advancing Digitization of Biodiversity Collections

• Program Goals:
  – Digitize existing, vouched, 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
    • Voucher 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?