Assessment of iDigBio Actions regarding 2017 EAB Recommendations

The EAB was satisfied with the actions taken by iDigBio to address the recommendations by the EAB 2017 report regarding both "data use" and "sustainability". The EAB is confident that iDigBio will continue to make progress on all items listed in the "Consolidated 2016 EAB recommendations". There were a number of action items that we were not able to discuss atare listed below

- 1) Find and engage remaining collections (How many collections and specimens are there really?. This was summarized by Larry Page at the 2018 Summit.
- 2) *Funding model for ADBC*. This was developed through the NSF Site Review and the CoF report, although it was focused more on the iDigBio portion of the ADBC.
- 3) *Improving quality of data in iDigBio, especially taxonomy (next "moonshot" for collections?* To our knowledge, this was not an explicit action item for iDigBio in 2018, at least for taxonomy.
- 4) *More response from TCNs on research, education and outreach*. The iDigBio lists numerous research, education and outreach activities on their website that summarize these accomplishments.

Data Use Actions

The iDigBio continued to develop various estimates to allow for assessment of data use, ingestion, temporal coverage, taxonomic coverage, and incremental and cumulative trends in data use. The Stats Portal also provides website use estimates based on a comprehensive array of statistics from Google Analytics (**Figure 1**). Trend data are available regarding iDigBio's social media presence (e.g., Twitter, Facebook), which is increasing, as well as information on access to the iDigBio newsletter and participation in workshops and webinars. I

Below were specific suggestions from TCNs regarding research uses of the data and a snapshot assessment by EAB as to the progress made by iDigBio in addressing these needs.

- Providing better taxonomic information to users (especially paleontological names and better separation between paleontology and neontology) Did iDigBio make any progress on the issue?
- Finding ways for iDigBio to ingest more types of data (e.g., genetic, metadata, links between specimens) that are available from the TCNs, but not currently transferrable to the iDigBio portal. The EAB is not aware of any progress on this issue.
- Publishing a workflow aimed at researchers downloading data from the iDigBio portal (e.g., how to clean the data for research use). The RiDigBio package makes it easy to download and use data. iDigBio id actively working with GBIF and others to achieve workflows to ensure data providers increase the quality of data provided to aggregators.

Although it is not necessarily iDigBio's role to advocate on behalf of the TCNs with NSF, it may be possible for the TCNs and iDigBio to work together seeking NSF support to fund Post-Doctoral research using iDigBio/TCN digital data.

iDigBio Website Analytics	2018 (Website)		Data From C
^{Users} 74,802	Sessions 103,049	Pageviews 186,624	Bounce Rate 65.1%
iDigBio Website Analytics	2017 (Website)		Data From (
^{Users} 66,279	Sessions 90,467	Pageviews 163,259	Bounce Rate
iDigBio Portal Analytics	2018 (Data Portal) Data		Data From
^{Users} 16,755	Sessions 30,783	Pageviews 123,257	Bounce Rate 52.7%
iDigBio Portal Analytics	2017 (Data Portal) Data From		
^{Users} 22,814	Sessions 36,191	Pageviews 153,477	Bounce Rate 57.9%

Figure 1. Increase in user activity for iDigBio web portal and website in 2018 compared to 2017. Four metrics from Google Analytics are shown.

EAB Recommendations: iDigBio Priorities for the remaining ADBC Program

The priorities identified by iDigBio that focus on the remaining period of ADBC funding are reasonable and justified. The EAB encourages iDigBio to develop specific goals and action items that can be initiated by early 2018, and continue other ongoing efforts that will achieve

goals of the ADBC program. Developing closer ties with the international community is likely to reduce redundancy and lead to a stronger cyberinfrastructure better able to serve researchers the data they need.