



# **NEON Biorepository Technical Working Group**

## ***2020 Annual Report***



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National Ecological Observatory Network (NEON) is a project sponsored by the National Science Foundation and proudly operated by Battelle.

## Introduction

Since its inception, NEON has relied on expertise within the science, education, and engineering communities to advise on key areas impacting the design, construction, and maintenance of the observatory with the goal to optimize its operation. Currently, two types of external advisory bodies support staff and leadership in making key decisions that guide all of NEON's activities: the Science, Technology & Education Advisory Committee (STEAC) and Technical Working Groups (TWGs). Both bodies are comprised of experts nominated to serve in these roles who are selected by NEON staff following a rigorous selection process.

NEON currently relies upon input from 22 TWGs. These groups play an important role by providing input to NEON's data collection and processing methods and ensuring that NEON infrastructure, data, and programs are a valuable community resource. Working groups are participatory and advisory; they are often tasked with providing input on issues that have scientific, educational, engineering, or operational implications.

This document includes a summary of activities, recommendations, and NEON's response to those recommendations for the Biorepository TWG during the 2020 funding year (November 2019-October 2020).

The Biorepository Technical Working Group is comprised of curation, archival and museum collections experts as well as ecologists and others who would make use of the NEON Biorepository. The group advises NEON on curation best practices, and discoverability of and ready access to biological samples and specimens for future scientific research. A particular focus is to broaden the availability and use of museum assets for regional to continental-scale ecological research.

## Q1 – November 2019-January 2020

### Summary of Activities

TWG reviewed a sample use request for mammal ear punches (*Peromyscus polionotus*), by a researcher conducting a functional and conservation genomics project.

*Note: Meeting delayed while Katie Levan on maternity leave. First meeting planned for March.*

### TWG Recommendations

N/A.

### NEON Response

N/A

## Q2 – February 2020-April 2020

### Summary of Activities

No meeting held during Q2.

### TWG Recommendations

N/A

### NEON Response

N/A

### Additional Notes:

Next TWG meeting scheduled for early in Q3 (May 18); TWG will provide additional input into the design of the NEON Biorepository. Planned activities include a discussion of the current construction status, numbers of specimens planned, and a more formalized sample use request workflow.

## Q3 – May 2020-July 2020

### Summary of Activities

Discussed Biorepository construction schedule, annual projected archive sample numbers and types, and quality plan. TWG members collated documentation of curatorial best practices for sample types NEON will be archiving. Discussed need for publicizing NEON samples housed at ASU and other facilities on the NEON website and other aggregators (e.g., GBIF, iDigBio); discussed mechanisms for publicizing sample use.

### TWG Recommendations

Suggested best practices for the NEON Biorepository in line with other institutions with regards to curation and loans.

### NEON Response

NEON Biorepository will highlight sample use on its portal; sample specimens will be cross listed on aggregator websites

## Q4 – August 2020-October 2020

### **Summary of Activities**

No activity for Q4.

### **TWG Recommendations**

N/A

### **NEON Response**

Work is ongoing to address previously raised recommendations.