STEAC MEETING REPORT (09/20/2023)

The members of the STEAC met on September 20th, 2023, with a quorum of eight members attending (Meghan Avolio, Sarah Bevins, Michael Dietze, Rich Fiorella, Sparkle Malone, Jackie Matthes, Kim Novick, Steve Petruzza, Sydne Record, Daniel Rubenstein, and Sydne Record). Four NEON-Battelle staff attended (Chris Florian, Darcy Gora, Nico Franz, Steve Jacobs, Paula Mabee, Kim Nitschke, and Kate Thibault).

The meeting was virtual, and the following topics were discussed: I. Approval of the minutes, II. The Best Practices manuscript focused on open ecological data, and III. Planning for AY24 STEAC and beyond.

- I. Approval of previous minutes for 08-16-2023. Minutes approved (Unanimous vote).
- II. Best Practices for Open Ecological Data: The STEAC discussed the manuscript, "Appropriate reuse of data relies on investment into FAIR principles by data stewards and users" and the results of the associated community survey. Based on the survey results, a first draft of the manuscript was developed and shared with NEON and the larger STEAC group. The manuscript was also sent to survey contributors for additional input by the STEAC. The deadline to contribute to the manuscript is October 10th.

In addition, the STEAC discussed other examples of challenges with open data, including citing datasets. Examples from the computer science field were raised as possible examples of how to produce "data papers" that could be cited. The Ecological Society of America (ESA) provides outlets for data papers for ecological datasets. One challenge that was noted by STEAC members was that often journals may limit the total number of citations and as such some synthesis papers may put dataset citations/DOIs in supplemental materials, which do not then provide proper attribution to data authors. An additional challenge that was raised for the manuscript was the federal push for open data and accessibility but how some network data (e.g. USFS FIA) have privacy issues and may not be fully open to the public or may contain "fuzzed" data.

Planning for AY24 STEAC: Battelle proposed that the STEAC will remain active. NEON provided a summary of a second advisory body they would also like to develop focused on "emerging technology." The group would be composed of experts that can provide guidance on new technologies, measurement approaches or software development that could replace or simplify core NEON measurements and data product generation. The STEAC welcomed the idea of this group but also raised a few questions or issues for consideration. The NEON would have to find ways to avoid COIs related to new instrumentation from possible experts from select instrument vendors. It was suggested that NEON consider using the assignable asset program to provide funds for researchers to deploy and test new measurement approaches, instruments or software to provide a layer between NEON and vendors. It was also suggested the STEAC could also be used to try and identify COIs, but it was also raised that this isn't part of the STEACs role. The STEAC also reiterated that any "emerging technology" group focused on simplifying NEON measurements needs to include a focus on AI/ML methods. Finally, NEON and the STEAC agreed the focus of this new group should rotate as well as the expertise and personnel participating in the group.