Field to Database - Biodiversity Informatics and Data Management Skills for Specimen-based Research Post-workshop Summary

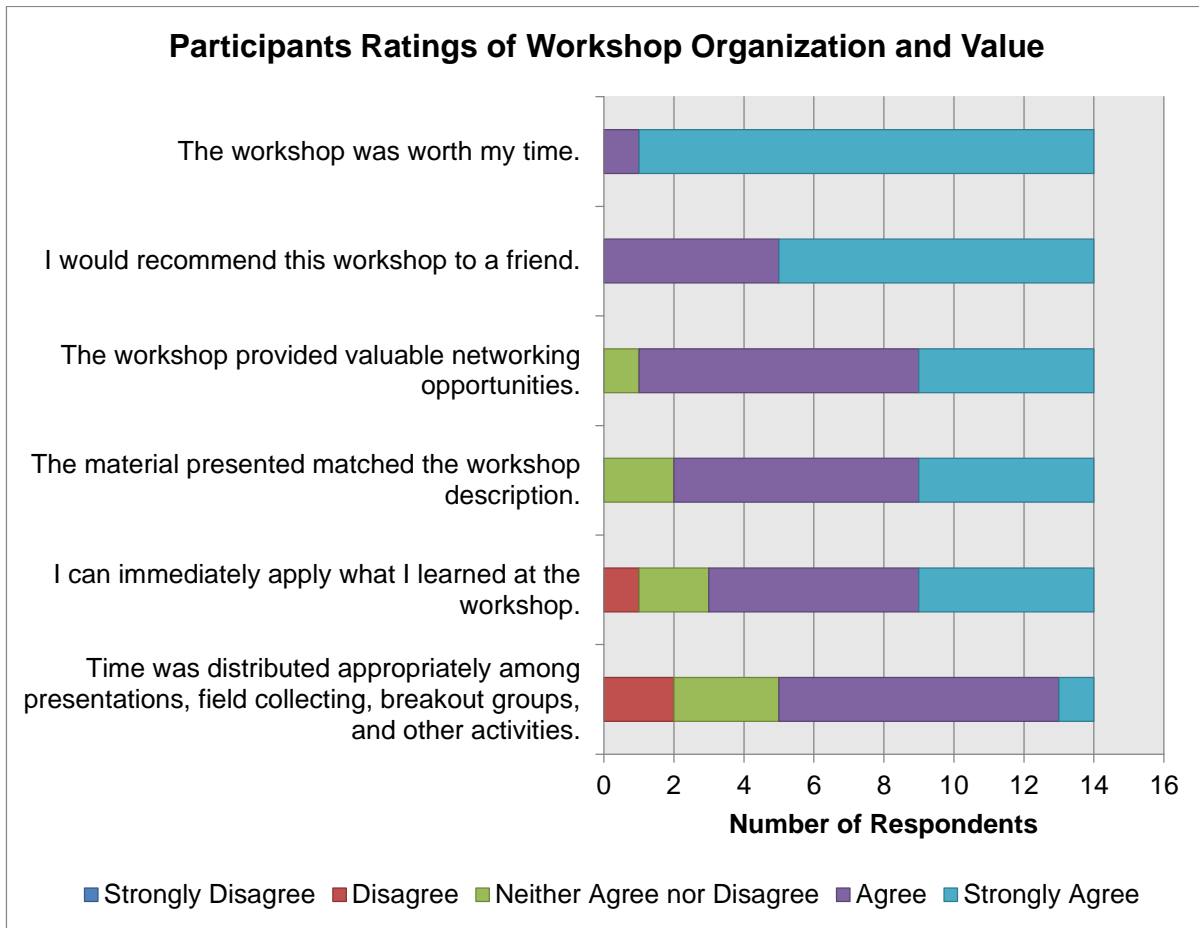**Summary**
The workshop was held in Gainesville, March 9 – 12, 2015. Prior to the workshop, 19 participants completed a pre-workshop survey in which they rated their level of skill with R programming and language. Skill level was almost evenly distributed with 6 rating their levels as "low/total beginner," 5 as "Somewhat low," 5 as "neither high nor low," and 3 as "somewhat high/I can write my own scripts."

Fifteen of 20 participants (75%) and 4 of 15 instructors/assistants (27%) at least partially completed the post-workshop survey. Participants (not including instructors/assistants) gave the workshop an average grade of "A" (n = 9, range = A- to A+). All who responded indicated that their level of expertise with getting quality, standardized data collected in the field into a format suitable for upload into a database to support long-term reproducible research workflows, data sharing, and data publication was at least somewhat higher following the workshop then before.
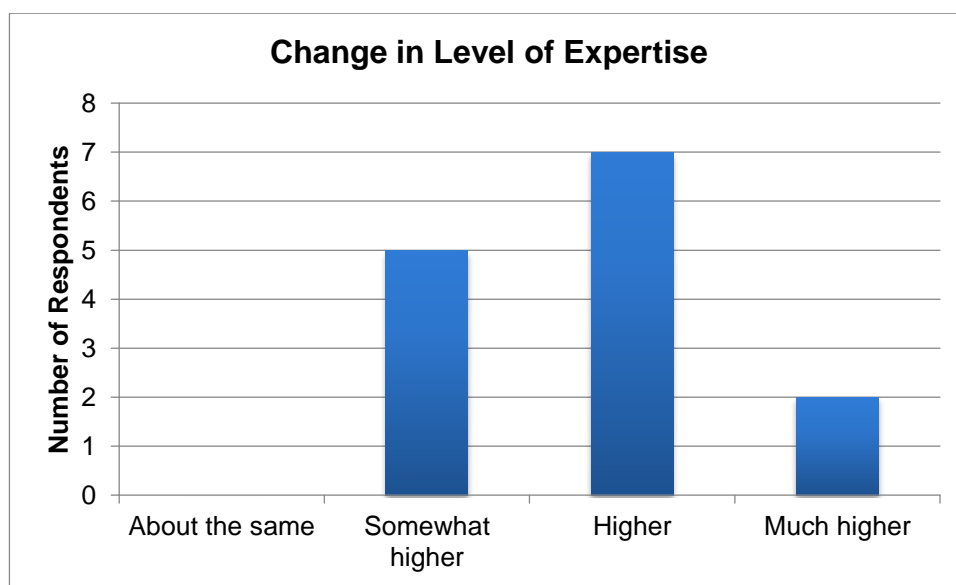
When asked if the workshop met expectations, five respondents indicated that it exceeded them while the remaining indicated that it either met of mostly met their expectations. All respondents either "agreed" or "strongly agreed" that the workshop was worth their time and they would recommend the workshop to a friend. One participant indicated that he/she would not be able to immediately apply what was learned at the workshop, but noted "*My position within my institution does not require much data manipulation or research, however I am able to act as the intermediate between data and the research and can push for use of some of the methods we covered.*"

Participants Ratings of Workshop Organization and Value

Legend: Strongly Disagree / Disagree / Neither Agree nor Disagree / Agree / Strongly Agree

With the exception of "apps for use in the field," the majority of respondents rated coverage of the workshop topics as either "successful" or "very successful." Of the topics, "using R, "cleaning data using R," "field to database workflows," "data and metadata standards," and "planning for fieldwork (both lecture and in the field" were rated as the most successful.

Ratings of Topic Coverage by Participants Only
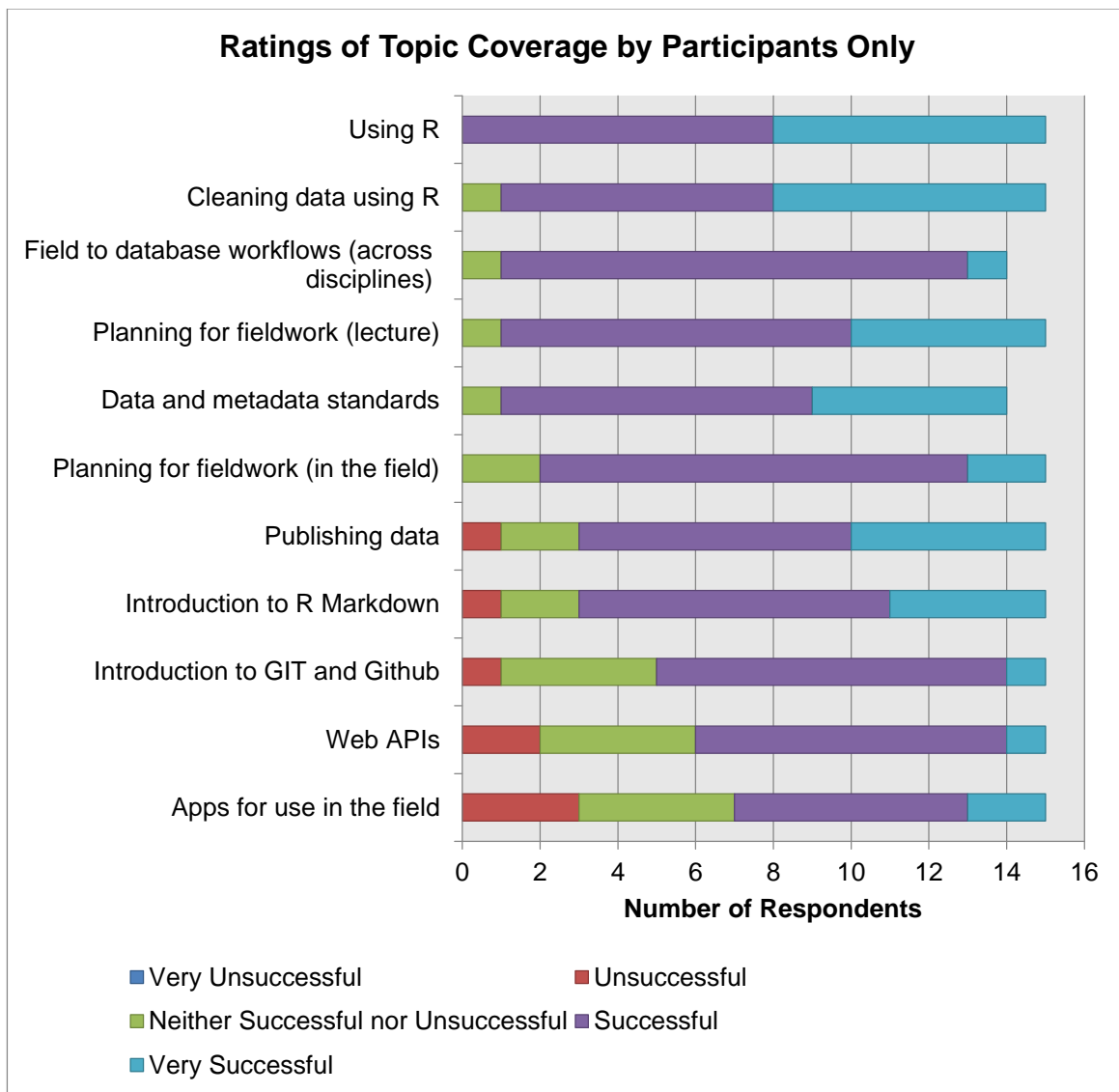
When asked about topics for which the respondents would have appreciated greater coverage, the most frequent response were issues related to "R" (n = 10). Similarly, when asked for the one most important thing they learned, seven respondents mentioned R-related skills. With respect to immediate changes in data management practices, the most frequent response (n = 5) referenced use of Darwin Core standards. In terms of follow-up activities, all who responded indicated interested in sharing what they learned with others in the lab or institution among other efforts. Participants and organizers shared thoughts about ways to improve future workshops; however, no consistent themes emerged.