Authorship of peer-reviewed publications can be a sensitive issue for any large collaborative research program, even as expectations for collegiality and mutual respect are generally met. This CAP authorship policy presents some general principles, criteria, and procedures for determining authorship of CAP-generated publications. Integrity and the responsible conduct in the reporting of research are essential for maintaining trust in the findings and products of any research enterprise. Authorship provides credit for all researcher contributions to a project, but it also carries responsibility and accountability. An overarching consideration is that CAP is a diverse, collaborative, interdisciplinary research endeavor where considerable effort goes into gathering, analyzing, and managing data, and writing papers, but where the disciplinary traditions about authorship often vary. This policy is meant to provide guidance for general expectations on authorship for publications generated by all CAP researchers. In some isolated cases, modifications to this guidance may be necessary to accommodate unique dimensions of some research activities. In such cases, these modifications should be explained to participants and documented with the CAP Director at the outset of the project to avoid misunderstandings.

General Principles:

1. Publication quality is very important to all CAP researchers and to the integrity of the CAP program.

2. The encouragement of junior scientists and scholars (i.e., pre-tenured faculty, postdoctoral scholars, and students) is a priority in publication and authorship.

3. The underlying philosophy is one of freely sharing ideas, data, and skills, of encouraging multi-authored collaborative papers, and of fairness in authorship.

4. The long-term observational datasets and experiments that are the foundation of CAP as a research platform, as listed in the most recent renewal proposal and as shown on the CAP website, are an open resource. They are not "owned" by any CAP participant nor do they carry any guarantees of authorship on publications that use these resources.

5. In general, researchers are not guaranteed automatic authorship on any paper. Exceptions to this include situations where researchers develop specific experiments and wish to be given the opportunity to publish the data from the experiments before the data are released after the two-year embargo period. Exceptions should be documented in writing, and approved by the CAP Director.

6. Individuals who have contributed substantively to project design, data collection, database design, or data analysis should be given every opportunity to contribute in a significant way to publications, with co-authorship based on each individual's contributions.

7. Individuals responsible for data analysis and write-up should complete products in a timely manner.

8. Co-authorship by practitioner partners is encouraged, with recognition that their time constraints in contributing to publications may at times create barriers to their inclusion. Every effort should be made to minimize those barriers. Practitioner authors may have special requirements, such as the need to have publications reviewed within their organizations. Collaborators should be sensitive to these needs and make adjustments where needed.

9. The CAP grant and NSF support should always be acknowledged using the following statement: This work was supported by the Central Arizona-Phoenix Long-Term Ecological Research Program (CAP LTER), NSF grant number DEB-1026865 (CAP III) or DEB-1637590 (CAP IV).
**Best Practices for Co-Authorship:**

1. Significant intellectual contributions to the central ideas or actual research upon which a paper is based, in analysis of the resulting data, and in written contributions to the paper itself.

2. All co-authors should have made substantial and direct intellectual contributions to the work.

3. All others who made other substantial contributions should be acknowledged.

4. All authors should participate in writing the manuscript by reviewing drafts, approving the final version, and assisting with revisions.

5. All authors should be able to explain and or defend the general methods and results in the paper.

6. The lead author should take primary responsibility for the publication even if s/he does not have an in-depth understanding of every part of the work.

7. The lead author should invite co-authors according to these criteria, and decide the order of authors in a collaborative way.

8. Recognizing significant constraints on their time that may prevent written contributions to publications, practitioner partners should be invited to co-author publications if their contributions warrant such.