1. Scientists can be authors when they achieve intellectual involvement in both of two areas:
   1.1. They must contribute substantially to one or more of the following:
      1.1.1. Study conception including proposal, syntheses and metanalyses and experimental design
      1.1.2. Study execution (e.g., field and laboratory work, data generation)
      1.1.3. Data analysis and interpretation
   1.2. They must participate actively in manuscript preparation (e.g., writing the first draft and/or commenting on drafts, providing figures or tables, etc.)
2. Being a principle investigator (PI or co-PI) on the project does not automatically grant authorship.
3. Be generous, but reasonable, in inviting co-authors. Everybody who happened to be there isn’t a co-author but when in doubt, talk with the person.
4. Be reasonable in accepting co-authorship. If you really haven’t done much, decline. If you don’t intend to do much, decline.
5. Be responsive. If you really don’t have time to comment in a timely manner, then you probably should not be an author. The first author should discuss tentative deadlines/time-periods early and often with all authors. If you are an author, you have a responsibility to keep the manuscript moving forward. The lead author can, with input from co-authors, remove unresponsive co-authors after suitable attempts to engage them.
6. All authors must approve the final draft of the manuscript before submission. Scientists will not include anyone as co-author who does not accept the content of the final draft. A co-author has a right to remove their name from a manuscript they do not approve of.
7. Scientists will not use or publish unpublished data without contacting the PI responsible for that data. Inviting them to be a co-author is recommended.
8. Once data has been published or is publicly available, the PI responsible for that data is not required to be invited as a co-author on subsequent manuscripts using the data. Although it is polite to inquire.
9. Authorship order varies among papers. Some authors rank authorship in order of contribution (e.g., Deegan et al. 2012 – Nature). Some list co-authors alphabetically after first author (e.g., Deegan et al. 2007 – Ecological Applications). Some list the senior scientist/author as the last author. We do not recommend any one way to order authors. Instead, we recommend that all co-authors agreed to the authorship order.
Other Useful Sources

https://ojs.library.queensu.ca/index.php/IEE/article/view/5484

https://swampthingecology.org/authorship.html
https://lter.github.io/som-website/authorship.html
http://www.pnas.org/content/early/2018/02/26/1715374115