Ethical Code, Data Sharing, and Publication Policy for the Madidi Project

Definitions used in this document:

- The Madidi project is a floristic and ecological inventory project that collects and publishes information on plants and ecosystems found in the Madidi region.
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- Co-director: Manuel J. Macía, Profesor Contratado Doctor, Departamento de Biología, Área de Botánica, Universidad Autónoma de Madrid, Calle Darwin 2, 28049 Madrid, Spain. (<u>manuel.macia@uam.es</u>)
- Local coordinador: Alfredo F. Fuentes, Research Associate, Missouri Botanical Garden and Herbario Nacional de Bolivia, campus Universidad Mayor de San Andrés, Cota Cota, calle 27, Cajón Postal 10077, La Paz, Bolivia(<u>alfrefuentes@gmail.com</u>)
- Members are defined as a grant holders (PI, co-PIs, and senior personnel), current employee, fellowship students, former employees (for five years after terminating a contract), and project associated researchers (for definition and procedure see below). Members are responsible for maintaining a current valid email address on file with the project director, co-director, and the coordinator in La Paz.
- Associated researcher (AR) status is granted upon written request that include a brief project description to the project directors and local coordinator. Such requests are normally granted if mutual benefits can be established and conflict of interest is avoided. AR status is valid only for the proposed research. All AR's will be required to sign a copy of this document, which requires them to follow this ethical code. For former employees, after five years of terminating a contract, we encourage, recommend, and welcome request to obtain AR status to continue working on research questions related to floristics and ecology in Madidi that include project data.
- A project description include: (1) name of principal investigator, (2) co-authors, (3) preliminary title, (4) a brief summary of the research idea or questions to be answered by the research (max. 500 words), (5) a detailed description of the data needed, and (6) a brief summary of the methods to be used for the analyses (max 500 words). The project description will be posted on our website (http://www.mobot.org/MOBOT/Research/madidi/).
- 1. All members of the Madidi project commit to these general principles and code of conduct, which are designed to promote trust and co-operation among members.
 - a. The data covered by this policy are all quantitative inventories established by the project and large floristic datasets (defined as more than 2,000 specimen records) from the area defined by the geographical polygon between latitude -12.43 and -15.72, and longitude -69.48 and -66.66.

- i. The member that retain intellectual rights of any quantitative data is indicated in the database as "Installed and evaluated by" as long as membership is maintained.
- ii. For large floristic datasets sharing will be evaluated by taxonomic group and area as well as interest by members to form part of such floristic research.
- b. The ability to download or receiving a transfer of any data between project members does not imply the transfer of rights to publication of the data or publication based on the download or data transfer. Therefore all members in the project agree to:
 - i. Obtain the consent of the member that maintain intellectual right to the data, the directors, and local coordinator through a project description (as defined above) before submitting any work for publication.
 - ii. To involve other contributors (e.g. in the analysis and writing) when this is appropriate.
- c. Co-authorship is not automatic:
 - i. If a request for consent (in the form of a project description) is not answered within 4 weeks, the intellectual rights are waived and the person will not be included as a co-author.
 - ii. If a person has given consent, but does not within 4 weeks respond to a request for comments on a draft manuscript. Co-authorship is waived and the person will not be included as a co-author.
 - Proper attention to field work or other absentees needs to be considered here.
 Auto reply to a request for consent or comments, constitutes a postponement of the time limits.
 - iv. It is recommended that previous members either falling under the five year rule, or if requests are not answered (see 1d i–ii) are thanked for their contribution of data in the acknowledgements.
- d. Madidi members will endeavor to:
 - i. Encourage junior participants to develop Lic., Ing., Masters and PhD theses.
 - Ongoing research projects are required to provide a project description as soon as possible. These project descriptions will be presented on our website (<u>http://www.mobot.org/MOBOT/Research/madidi/</u>).
 - iii. Publish their work and publish cross-site syntheses in national and international journals and presentations.
 - iv. Members responsible for a plot are encouraged to publish their findings, both in site-specific and comparative studies.
 - v. To promote transparency and properly reward contributions, the lead author of any paper using Madidi data has responsibility for ensuring that all co-author contributions are defined in their paper (either on the title page or acknowledgement). We recommend that it be clear who was responsible for: conceiving the idea, designing the experiments or sampling design, collecting the field data, performing the laboratory analysis, contributing materials or analysis tools, analyzing the data, and writing the paper.

- vi. Contribute to national and international science conferences and promote recognition of project findings in the national and international policy process.
- vii. Contribute to protected areas management plans, as the Bolivian government become interested in quantifying biodiversity and ecological processes in protected areas.
- viii. Acknowledge financial support to all participating co-authors as well as funding agencies for the project in general.
- 2. The Madidi project need to strike a balance between adequately rewarding the efforts of the member's intellectual property rights, and ensuring the broader goods that come from sharing data for synthesis research, including the impact on the policy process of timely exposure of results. A too restrictive policy would isolate important data from the research process, and a too open a policy would be unfair for partners who have worked for years for their hardwon data. Balancing these perspectives, and recognizing that many funding agencies requiring that data are publicly available on the internet, the following code of conduct for managing data generated during this project will apply.
 - Outside, non-members, users will need to confirm that they will respect the full terms of this code of conduct, and solicit AR status. Only then will they for the purpose of this document be considered research associates and thereby have to follow the clauses 1ad.
 - b. Voucher and specimen data are available in Tropicos® at http://www.tropicos.org/SpecimenSearch.aspx, we strongly recommend that outside users contact the directors and local coordinator to obtain specimen information, particularly for large dataset to maintain the balance between collectors and use of their data.
 - c. The Madidi project will make plot data available at <u>http://www.tropicos.org/Project/MDI</u>. Non quality controlled data will be available soon after field work has been finalized, but we have currently no way of indicating caveats for potential outside users and require that users to only use downloaded data in consultation with the responsible member, in country coordinator, or directors, who will be able to advice about quality control issues.
 - d. Plot data are held within Tropicos[®] a custom-built SQL-based, password-protected, internet accessible system database designed and implemented, to enable better integration of the data with corresponding vouchers and nomenclature knowledge. The database is currently not available for outside users as far as download of multiple plots.
 - e. Data will be strictly quality controlled, since errors or biases in diameter measurements, nomenclature, and database coding can impact ecological analysis. Quality control will be applied in the field, at the data entry stage, and at the final database checking stage. Secondary quality control will happen following this outline:
 - i. Final control of data entry will happen within 24 months of making an inventory plot.

- ii. Control of the identification of vouchers, nomenclature, and homogenization of identifications across plots will happen every 36 months, and include all plots inventoried prior to this point.
- f. Data quality control is the responsibility of the member holding intellectual rights indicated in the database as "Installed and evaluated by" and his onsite collaborators.
- g. This document takes effect from 1 April 2012.