

PROTOCOL FOR USE OF 100-ha PLOTS AT Tiputini Biodiversity Station

Two ~100-ha plots, one located off the Harpia Trail and one off the Puma-Harpia-Maquisapa, were established in 2001 for studies on long-term dynamics of bird populations. Installation and maintenance of these plots have been supported by grants to John Blake and Bette Loiselle (University of Missouri-St. Louis). Both plots are gridded, with 1000 m EW transects every 100 m and 900 m NS transects every 200 m. PVC tubes mark every 50 m along the transects, with tags to indicate the location.

The plots are a valuable resource for many types of research and other researchers are welcome to use the plots as long as that use does not conflict with the goals of the projects which supported (and support) those plots. Plots were established to facilitate long-term research and, as a consequence, they generally are not open to student groups (including independent student projects), short-term research projects, or tourists. Researchers who desire to use one or both plots must have research proposals approved in advance of arrival at the site by TBS (and by John Blake and/or Bette Loiselle); project proposals must clearly state why use of the plots is necessary. Copies of all proposals must be given to the station manager (Jaime Guerra) to help ensure that the proposed research will not conflict with any ongoing projects.

Some general guidelines apply to the types of research that are suitable. For example, most observation-based studies that do not require any manipulation of the plots will be fine. Projects that already have made or continue to make use of the plots include studies on primate behavior and distribution, distribution of tent-making bats, fruiting phenology of *Virola flexuosa*, ant and dung beetle community composition, and foraging behavior of birds at fruiting trees. On the other hand, some types of research might not be compatible. Plots were established for long-term studies of bird populations (community composition, species diversity, population dynamics, genetics and behavior of manakins [Pipridae]), so any proposed studies must not interfere with the goals of that research. Ongoing bird studies, for example, use mist nets to capture birds at a series of locations (96) on each plot; all birds are banded with numbered aluminum bands and with unique combinations of color bands. Any research activities that might affect bird behavior and, thus, likelihood of capture/recapture would not be compatible with those ongoing projects. For example, no additional netting activities (for birds) are permitted, except under special circumstances and only after receiving explicit permission. No research activities should be conducted near netting sites during the main sampling periods for birds (netting is concentrated in January and March).

Established transects occur on a 100 x 200 m grid system and no additional transects or trails should be cut. Similarly, there can be no large-scale manipulations (disturbances) to the vegetation. Flagging or other types of markers can be used but must be clearly marked with the researcher's name and date and must not conflict with permanent markers. Excessive use of markers should be avoided; all unlabeled markers are subject to removal at any time without notice. All flagging or other markers must be removed at the termination of the study; failure to do so will preclude future use of the plots.

Much of the research being conducted on the plot is based on observations of birds and other animals. To minimize disturbance to animals and to other researchers, loud voices or other noises are discouraged; if someone can hear you from the next transect (i.e., at least 100 m away), you are talking louder than necessary. Researchers are encouraged to use 2-way radios as necessary to minimize noise. For similar reasons, research projects that require activity by many people (e.g., permanent plant plots) are best conducted elsewhere.

Topographic maps that give general locations of drainage and streams as well as locations of all plot markers have been prepared by B. Loiselle and J. Blake and may be available for others to use. Use of such maps does not imply that all the data (e.g., stream locations, elevations) are completely accurate - they are accurate to the best of our ability and will be updated as new data are gathered. Anyone desiring to use such maps should contact Bette Loiselle; proper acknowledgment in any reports or publications is expected. Similarly, any projects that use the plots should acknowledge the funding sources that made the plots possible (see possible wording below). Copies of any papers or reports that are based, at least in part, on work conducted on the plots should be sent to the station and to Blake and Loiselle at UM-St. Louis (such information will help ensure continued funding to maintain the plots).

If you have any questions, feel free to contact John Blake (blakej@msx.umsl.edu) or Bette Loiselle (loiselle@umsl.edu), Dept. Biology, Univ. Missouri-St. Louis, 8001 Natural Bridge Road, St. Louis, Missouri, USA, 63121 (phone: 314-516-6578[JB], 314-516-6224 [BL]).

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