

10 Bad Excuses for Not Georeferencing. (Oral Presentation)

K. W. Bridges, Y. Han Lau

Botany Department, University of Hawai'i at Manoa, Honolulu, HI 96822, USA

Introduction

Historical information is particularly valuable when it permits comparisons with current data. Our practice of precisely designating locations with names has had little alternative until now. Global Position Systems (GPS) provide sufficiently-accurate, digital locations for most ethnobotanical studies, however perceptions of GPS technology have generally discouraged its use. As a result, ethnobotanical records (locations of study, collection and photography sites) are often recorded with insufficient precision to maximize their future use. We discuss an alternative way to use a GPS receiver that has been made possible by recent technology developments. This new data recording methodology is likely to be more acceptable to ethnobotanists than previous ways GPS receivers have been used.

Objectives

Test whether a GPS receiver can be used to track daily activities. If a detailed track log can be obtained, determine if it is possible to link the track log to important locations using time information.

Methods

Compare track log reliability using three GPS receivers (Garmin etrex legend, GPS 76 and GPSmap 60CSx) in simulated extreme field conditions, including under a dense canopy in a canyon, inside a vehicle, and with a GPS receiver stored in a pack. Test georeferencing by automatically linking a track log to a set of photographs.

Results

The newer GPS receiver technology (e.g., Sirfill GPS engine) had the strongest signal strength, was the only unit able to build a continuous track log under all conditions, and produced a sufficiently complete and accurate set of time-based locations for use in most ethnobotanical field studies.

Conclusion

GPS receiver technology has matured sufficiently that track logs can be used for location references under typical ethnobotanical field conditions. This should simplify the process of georeferencing many types of data, including locations of study sites, plant vouchers and photographs.

Selected References

None

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Presenting Author: K. W. Bridges, kim@hawaii.edu
