

DIGITAL ELEVATION MODEL^{*}

John Janovec

This work is produced by OpenStax-CNX and licensed under the
Creative Commons Attribution License 1.0[†]

Abstract

A digital elevation model of the los amigos conservation area.

^{*}Version 1.1: Aug 14, 2003 3:21 pm +0000

[†]<http://creativecommons.org/licenses/by/1.0>

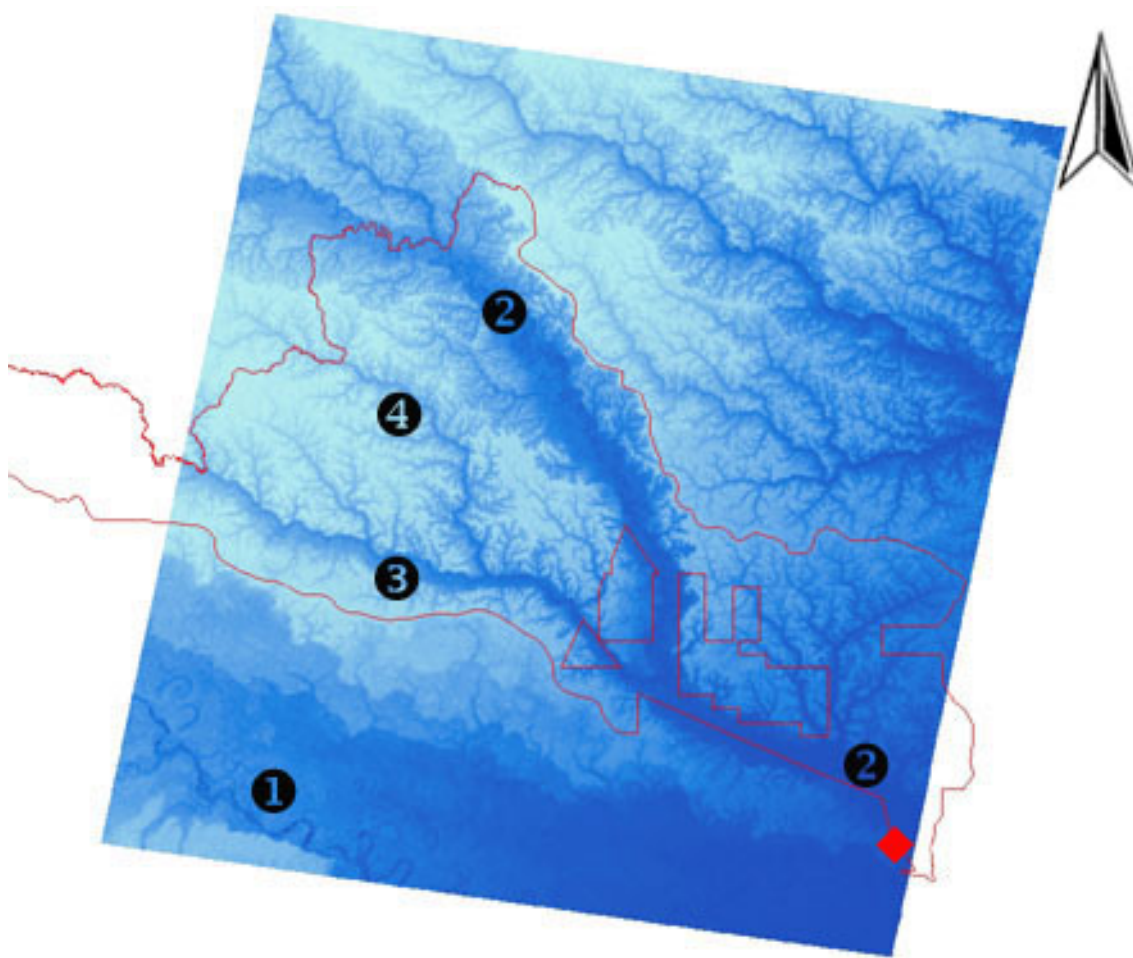


Figure 1: By viewing this Digital Elevation Model (DEM), it is clear that one of the dominant factors of our study landscape is its hydrological complexity. Like arteries and veins, the complex hydrology has driven landscape change, which has in turn driven the evolution and diversification of the rich flora and fauna of the region. The Amazon Rivers Program have discovered a highly diverse aquatic fauna in the region and are testing landscape-scale hypotheses regarding the evolution and diversification of the aquatic ecosystems. Faced with a high diversity of plant species in the study area, Los Amigos Botany is still in the stage of exploration and discovery. Collections have been made in the region of the station property (red diamond), and in selected areas along the Madre de Dios (1), Los Amigos (2), Amiguillos (3), and other (4) rivers. In collaboration with Mathias Tobler, team members of the Los Amigos Botany project will intensify focus on quantitative inventory and monitoring of plant diversity built within a framework of GIS and other tools for organization, analysis, visualization, and presentation of biotic and abiotic diversity patterns (betadiversity) across the landscape. For the systematic inventory and monitoring of plant diversity, we will apply the Los Amigos GIS to design, guide, and manage an intense collection strategy that maximizes the heterogeneity of habitats sampled. We will use this type of approach to test some on-going hypotheses about the evolution and diversification of plant diversity in the study area and region.