Anabel Ford is the Director of the MesoAmerican Research Center at the University of California at Santa Barbara, as well as President of the nonprofit organization Exploring Solutions Past (ESP–Maya). She is a distinguished Maya archaeologist who has decoded the ancient Maya landscape. Her discovery of the ancient Maya city center of El Pilar on the contemporary border of Belize and Guatemala promises to be the first cultural and natural Peace Park of the world. Her passion for the common people of the ancient Maya together with contemporary international politics, conservation and development, and interdisciplinary research has inspired the vision of Archaeology Under the Canopy. With decades of field experience and a broadly inquisitive mind, she sees the Maya forest as a garden created by the ingenious Maya. Ford has developed the Maya forest GIS with her geography colleague, Keith Clarke, and their first version was archived in the Alexandria Digital Library. Since 2000 research and development of the Maya forest GIS has expanded original data collection and compilation from diverse fields and sources in MesoAmerica and the Maya area. The analytical results and integrated data sets increase the value of these focused regional, local and site specific spatial data.

Presentation Abstract:
Discovering the Complexity of Spatial Data: Evolution and Organization of the UCSB Maya Forest GIS

Initiated as a working base for the Maya forest research of Anabel Ford and Keith Clarke, the project has collected spatial data sets in the Geographic Information System format for Belize, Guatemala, and Mexico. Familiar with the concept of layers and the use of scale in the paper scheme of things, the creation and development of digital layers into the UCSB Maya Forest GIS has proved a challenge in maintaining consistency and tracking of sources. Particularly difficult is the establishment of metadata that meets our uses and adheres to standards, particularly with changing student and intern users! We are now teaming with the UCSB Library to develop our metadata and descriptions for our growing and valuable compilation of digital data for the Maya forest.

The foundation of the Maya Forest GIS was based on a regional data set developed by USAID in 1996 for the Maya forest under the auspices of Paseo Pantera Consortium at University of Florida. Our specific agenda was to bring together data to test geographic bases of Maya archaeological site location. On the Paseo Pantera regional scale of 250K, we began to accumulate GIS data sets at the 50K local scale by digitizing relevant maps and acquiring data from government institutions of the Land Information Center in Belize and the Consejo Nacional de Areas Protegidas in Guatemala, as well as academic institutions in Mexico.
Through the course of the integration of diverse data sets, we developed our own site-specific data, (≤10K) focused at the binational protected area of El Pilar, including detailed LiDAR and air photos for the 20 sq km protected area in Belize and Guatemala. We can now manage geographic data organized at the regional, local, and site-specific scale for soil, hydrology, roads, protected area boundaries, topography, air and satellite imagery, cities, as well as archaeological sites. In addition, we have created analytical layers with these geographic inputs aimed at understand land use change past and present as we discover the complexity of spatial data.