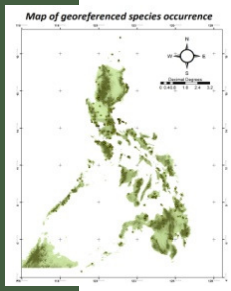

The use of geo-referenced biodiversity data and species distribution modeling in Climate Change impact studies

Participation is OPEN TO EVERYONE!

19 April 2012, Thursday 1:15-4:15 pm

College of Science (COS) Room 102

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Abstract

Climate Change (CC) models predict changes in average temperatures and rainfall in the future. CC is expected to have an influence on vegetation and natural habitats and thus on associated biodiversity. This impact is difficult to predict but computerized species distribution models could help in providing educated forecasts of changes in the distribution of species as a result of changes in habitat under impact of climate change.

Species distribution models are spatially explicit, i.e. they link the occurrence data of a species to habitat and other spatial variables such as elevation, forest type, soil type, canopy cover etc. Some of these spatial variables are correlated to climate variables such as rainfall and temperature. Current climate data, habitat data and species occurrence data can be used to construct a climate-habitat species distribution model. Changing climate variables in the model according to CC scenarios predicts changes in habitat variables and the associated distribution of model species.

A prerequisite of the use of biodiversity data in habitat–association models, and so in climate-habitat models, is the availability of geo-referenced data. Biodiversity researchers should try to acquire GPS positions for each species observation in addition to a set of spatially explicit habitat variables in order to link habitat associations of species to CC models. There is also a need for more climate data in the Philippines, especially at higher elevations and along the Eastern seaboard.

This workshop will explore the possibilities of the use of species distribution models in CC related biodiversity studies. Our goal is further to discuss the setup of a national database of geo-referenced biodiversity data, preferably online and with unrestricted access. The availability of climate data, and the need for more data, will be another topic.

AGENDA AT A GLANCE

1:15-1:45	Workshop introduction and self introduction
1.45 - 2.45:	Introduction to species distribution modeling in CC impact studies
2.45 - 4.15:	Open forum

21st Annual Philippine Biodiversity Symposium of the Wildlife Conservation Society of the Philippines (WCSP)
at the Philippine National Museum (Manila) and De La Salle University - Dasmariñas (Dasmariñas City, Cavite) co-hosted by Fauna & Flora International