Research in the News: Tracking changes in biodiversity worldwide

Yale UniversityYale University

Yale's Walter Jetz and an international group of scientists have proposed a system for monitoring recent changes in global biodiversity as part of a broader effort to preserve ecological richness.

Modeled after an existing climate change monitoring system, the group described its proposal [1] Jan. 18 in the journal Science.

The biodiversity system would define a set of essential biodiversity variables, the record and analysis of which would help determine biodiversity loss or change in a standardized, globally representative way. The tool would serve both scientists and policymakers.

Essential variables could include population abundances for groups of species, the three-dimensional structure of habitats, or the nutrient retention rate in sensitive ecosystems, among other examples, the scientists said.

"Biodiversity research is woefully behind the environmental sciences in measuring and modeling key characteristics of this planet that are now changing rapidly," said Jetz, associate professor of ecology and evolutionary biology at Yale. "While we may capture climate and land cover globally at meter resolution, the geographic distribution of many species with relevance for humans is known at country-level at best, with little to no systems for monitoring change."

Jetz leads the Map of Life [2] project, a major tool for tracking biodiversity. He also heads the new Yale Program in Spatial Biodiversity and Conservation [3].

(Image via Shutterstock *[4])*

Links:
[1] http://www.sciencemag.org/content/339/6117/277.short
[2] http://news.yale.edu/2012/05/10/map-life-aims-show-all-living-things-planet
[3] http://sbsc.yale.edu/
[4] http://www.shutterstock.com/pic-97767239/stock-photo-cattle-egrets-bubulcus-ibis-mpala-research-center-laikipia-kenya.html?src=http://news.yale.edu/2013/01/22/csl_recent_image-1