

## **ACES 2016 Pre-Conference Workshop**

**Monday, December 5, 2016 | 8:30am - 12:00pm**

### **Title: *National Biodiversity Metrics & Mapping Workshop***

**Description:** The ability to assess, report, map, and forecast the life support functions of ecosystems is absolutely critical to our capacity to make informed decisions to maintain the sustainable nature of our environment now and into the future. Evaluating trade-offs in terms of ecosystem services and human well-being provides an intuitive and comprehensive way to assess the broad implications of our decisions and to help shape policies that enhance environmental and social sustainability. In answer to this challenge, the U.S. Environmental Protection Agency (EPA) has created a partnership with other Federal agencies, academic institutions, and Non-Governmental Organizations to develop the *EnviroAtlas* (<https://www.epa.gov/enviroatlas>) an online national Decision Support Tool that allows users to view and analyze the geographical description of the supply and demand for ecosystem services, as well as the drivers of change. As part of the *EnviroAtlas*, an approach has been developed to quantify and map various metrics within an ecosystem services framework that are representative of vital functions and support services such as A) Biodiversity Conservation; B) Food, Fiber, and Materials; and C) Recreation, Culture, and Aesthetics (<http://case.nmsu.edu/CASE/ES/Biodiversity%20Metrics%20Fact%20Sheet.pdf>). The project has progressed incrementally and first focused on the Southwest U.S. (Arizona, Colorado, Nevada, New Mexico, and Utah) then later the Southeast U.S. (Kentucky, Virginia, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, and Florida) covering 817 and 606 spp., respectively. Once complete, the project is anticipated to include 1787 terrestrial vertebrate species for the conterminous U.S. (686 bird spp., 475 mammal spp., 322 reptile spp., and 304 amphibian spp.).

### **Goals & Objectives**

The purpose of the workshop is to get direct feedback from wildlife professionals and natural resource planners regarding the selection and deployment of a core set of National Biodiversity Metrics. We are targeting a focused group of individuals to gather stakeholder input regarding proposed terrestrial vertebrate biodiversity metrics that can measure and map biodiversity conservation at the national, regional, and local scales.

### **Target Audience**

For the purpose of this workshop, we are interested in meeting with wildlife biology and ecology decision-makers regarding potential habitat and biodiversity metrics to help us ensure we are developing a useful approach for the nation within the *EnviroAtlas* framework. The review workshop and its findings could be especially helpful for State Wildlife Action Plans, refuge and special use plans, Landscape Conservation Cooperative conservation plans, National Park Service Vital Signs planning, and for anybody that is interested in large area strategic planning and assessment for biodiversity conservation.

This workshop is especially targeting:

- Wildlife Practitioners
- National Resource agencies
- Policy-makers
- NGOs

## Agenda

DESCRIPTION	TIME	LEAD
<b>Welcome and Introductions/Objectives of the Workshop</b> Purpose and structure of the workshop will be outlined for attendees.	8:30-8:45 (15)	<b>Bill Kepner &amp; Ken Boykin</b>
<b>Background on the EnviroAtlas</b> Overview to the EnviroAtlas ( <a href="https://www.epa.gov/enviroatlas">https://www.epa.gov/enviroatlas</a> ) as a national ecosystem services decision tool.	8:50-9:15 (25)	<b>Anne Neale</b>
<b>Background on Deductive Habitat Models (terrestrial vertebrates) and Metric Construction</b> National habitat modeling approach and the subsequent construction of preliminary metrics that reflect elements of A) Biodiversity Conservation; B) Food, Fiber, and Materials; and C) Recreation, Culture, and Aesthetics.	9:15- 9:35 (20)	<b>Ken Boykin &amp; Alexa McKerrow</b>
<b>Preliminary National Metrics</b> Introduction of draft national metrics and their function relative to measuring and mapping biodiversity conservation at the national, regional, and local scales.	9:35-10:00 (25)	<b>Bill Kepner &amp; Ken Boykin</b>
<b>Break</b>	10:00 - 10:30 (30)	
<b>Open Discussion and User Feedback</b> Round-robin discussions, review, open feedback, and suggestions among participants regarding acceptance of proposed metrics.	10:30 – 11:45 (75)	<b>Bill Kepner &amp; Ken Boykin</b>
<b>Conclusions and close-out Q &amp; A Session</b> Open forum and close-out discussion based on questions from the audience.	11:45 – 12:00 (15)	<b>Bill Kepner, Ken Boykin, Anne Neale, &amp; Alexa McKerrow</b>

### Workshop Organizers

**William G. Kepner<sup>1</sup>, Kenneth G. Boykin<sup>2</sup>, Anne C. Neale<sup>3</sup>, and Kevin J. Gergely<sup>4</sup>**

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