

sDiv working group meeting summary

“sUrBio2050 – Assessing globally important areas for biodiversity preservation and human well-being”

Context

Natural systems play a crucial role in maintaining the diversity of life as well as an integral role in human well-being. Urban areas continue to grow at an unprecedented rate, and by 2050, 70 percent of the world's population will be urban. If unplanned, this rapid urban growth can degrade natural systems, imperiling a significant fraction of the world's biodiversity and decreasing human well-being. Yet, natural systems are often not fully integrated into sustainable urban design and planning efforts, nor into the decisions of national and international policymakers. If we do not adequately plan for urban growth in places of high biodiversity value, the world may fail to meet its ambitious targets under the **Convention on Biological Diversity**. And without considering the important role natural systems play for human well-being, the international community may fail to meet its **targets under UNFCCC** (such as goals for climate change adaptation), the **SDGs**, and the **New Urban Agenda**. While there have been pioneering projects detailing the importance of drawing linkages between growth in cities and natural systems, there is a lack of a global and coordinated assessment of where natural systems are crucially important to protecting biodiversity or providing for human well-being.

Goals of this sUrBio2050 working group

To **close this knowledge gap**, scientists from multiple institutions applied to sDiv for a working group to lead an ambitious scientific assessment. The aim of this assessment was to identify places where urban expansion will significantly impact essential ecosystem services and biodiversity.

Results from first meeting

From 4 September to 7 September 2018, we held our first working group meeting as a group. By the end of the first meeting, we had achieved two major outcomes:

1. We collectively conducted analyses, created figures, and wrote text for a November white paper. We left the meeting with a close to full draft of the white paper, with an itemized to-do list of remaining tasks and names associated with each task. The white paper was released November 13 at the Convention of Biological Diversity, and is available online at: <http://nature.org/urban100>.
2. We brainstormed potential future analyses of this working group and prioritized which ones we will do. We will leave the meeting with a list of three key analyses the sDiv wants to work on together. Our sDiv postdoc, Andressa Mansur, was involved in the brainstorming and will play a key role in leading these analyses. The three analyses are focused on:
 - a. Direct and indirect dimensions of urban biodiversity change for the 21st century
 - i. Goal: To create a publication (building off assessment results of white paper). This will be a prospective in Nature Sustainability, to be submitted first quarter of 2019.
 - b. Connect cities and Biodiversity: Municipalities that think locally and engage globally
 - i. Goal: Policy piece that presents visions/targets monitoring an assessment that informs planning - action and government to connect cities and biodiversity. Idea of eventually developing a better version of the City Biodiversity Index.
 - c. Alternative scenarios of urban form and their ecological implications
 - i. The question we want to address is: Does urban form drive synergies & trade-offs between ecosystem services and biodiversity in cities?
 - ii. Goal: We envision an initial paper on US cities, leading to a proposal that expands upon the ideas to a global scale, and including more considerations of the distribution of benefits, equity, and access.