

2020 NACCB Interactive Session:

Accelerating Connectivity Conservation During Rapid Global Change: Science into Action

Thursday 30 July, 2020 (2:30-4:30pm MDT)

Conserving ecological connectivity across intact and human-modified landscapes helps mitigate the effects of fragmentation by enabling the movement of species and flow of natural processes that sustain life on Earth. Connectivity has increasingly become a focal concern for sustaining biodiversity and improving natural resilience to climate change. In recognition of its importance, the science of connectivity planning has advanced rapidly over the past 30 years, and connectivity conservation plans have been developed at all scales throughout North America and much of the world. However, it is sometimes unclear whether these science-based connectivity plans are being translated into practical, on-the-ground solutions as rapidly and effectively as seems warranted, given the rapid rate of landscape change. Time and time again scientists and stakeholders have mapped sets of landscape linkages and connectivity improvements, such as road-crossing structures, that should be conserved to achieve ecological and climate adaptation goals. However, too often such maps are not adequately translated into on-the-ground action, and we often are unclear on metrics of success and whether they are being achieved. What can we be doing better? Where are our success stories? What is hindering plan implementation?

This Interactive Session brought together several experts to present their own work and discuss these big questions. The session opened with an international perspective. Annika Keeley (Delta Stewardship Council) presented findings from her recent paper “Thirty years of connectivity planning: factors influencing plan implementation,” which analyzed connectivity plans from around the world and the commonalities among those successfully put into action. Jodi Hilty (Yellowstone to Yukon Conservation Initiative) and Gary Tabor (Center for Large Landscape Conservation) then introduced the newly published IUCN *Guidelines for Conserving Connectivity through Ecological Networks and Corridors* (<https://doi.org/10.2305/IUCN.CH.2020.PAG.30.en>), a primary output of the IUCN WCPA Connectivity Conservation Specialist Group. As Chair and Deputy Chair of the group, Tabor and Hilty stressed that these Guidelines are the culmination of over two decades of effort by IUCN, and the result of contributions from more than 100 experts in 30 countries. The Guidelines should now provide managers, policy-makers, and experts across the globe with best-practices and recommendations for achieving more connected terrestrial, freshwater, and marine ecosystems. Participants had the opportunity to ask questions of these first speakers.

Additional short presentations by John Gallo and Wayne Spencer (Conservation Biology Institute) showcased the power of “co-producing” connectivity maps to get stakeholder and decision-maker buy-in (Gallo), and highlighted case studies of success and failure in the implementation of multi-scale connectivity plans in California (Spencer). Finally, Zack Wurtzebach (Center for Large Landscape Conservation) provided insights on how policy changes may help overcome socioeconomic and legal constraints to translate connectivity science into successful implementation.

The session then turned to a more interactive format, where a group of approximately 10 participants engaged with the presenters to discuss issues such as bottlenecks in planning, policy and implementation; efforts to accelerate uptake, co-design and ownership of connectivity plans; emerging and existing tools to support connectivity planning and implementation; and North American contributions to reporting, monitoring, and evaluating ecological corridors and ecological networks. Participants ranged from students just entering the conservation field, to seasoned professionals. All were eager to examine their own projects and initiatives and point out strategies that have worked, and those that have failed. This is a growing and rapidly changing field, and the session concluded with the acknowledgement that work must continue, despite the obstacles and challenges, to maintain, enhance, and restore ecological connectivity.