Methods and Tools to Engage Collaborators **and Enhance Conservation**
Capacity Building Working Session

Session Host(s):   John Sanderson, Ch'aska Huayhuaca
Session Facilitators: Kristin Legar, Conservation Leadership Through Learning graduate student

Description of Session:
This session will allow you as attendees to learn about and dig into the application of maps, social network analysis, and adaptive learning and decision making to engage collaborators working towards conservation outcomes (see panel presentation descriptions below). The goal of the session is for you to leave with insights into how you can use these methods and tools to make your collaborations more effective. We have designed this session to give you the information you need to get over the learning and resource curves and to apply these methods/tools.

Each of the three presenters of methods/tools will address:
- What are the core elements of the method/tool, why is it valuable, and what is an example of where it has been used?

With basic introductions complete, presenters will pivot to how the method/tool can be useful to practitioners. Specifically, they will address these themes:
- How does the tool/method facilitate the understanding, use and integration of science and local knowledge?
- How do we use the tool/approach to advance and evaluate the processes and impacts of collaborative conservation?
- How can we apply the method/tool in a variety of settings, especially if we have limited resources and expertise?

Outline the session: (the session is 90 minutes long)

5 minutes: Introduction and Framing

48 minutes: 3 Case Studies presented by practitioners, oriented around the themes above. Presentations will be ~12 minutes, each followed by 2-3 questions from the full group.

30 minutes: Breakout sessions: based on your interests and needs, you will join the panelists at one of three tables dedicated to each method/tool in order to engage in a deeper discussion about its application. You may choose to move between tables, but you will be joining ongoing conversations. In addition to the presenter(s), one facilitator/notetaker will be at each table. Through questions and discussions, each table will create two lists: (1) what are the most important and valuable things to know about this method/tool, and (2) what are specific actions that individuals or groups (e.g., the WCCN) could take to advance and apply this method/tool.
Questions that will launch discussion include:
- What struck you (the attendee) as potentially valuable about the method/tool that might have you thinking about how to apply it in your work?

- What might you want to know more about to be able to use the method/tool, and how might others help you see a path toward application?

5 minutes: Brief report out from each breakout group and session wrap up.

During break that follows, facilitators will prepare notes and slides for report out.

Case Studies in the Session:
1. Collaborative Adaptive Rangeland Management (CARM)
   - Presenters: Dr. David Augustine, Research Ecologist, USDA Agricultural Research Service; Angela Dwyer, Grassland Habitat Coordinator, Bird Conservancy of the Rockies
2. Using social network analysis to understand and catalyze collaboration. A case study of the Texas Hill Country Conservation Network
   - Presenters: David Baker, Founder and Executive Director, Wimberley Valley Watershed Association and Steering Committee member of the Texas Hill Country Conservation Network; Dr. Patrick Bixler, Assistant Professor, University of Texas
   - Description: Texas is home to several of the fastest-growing cities in the nation, with much of that growth occurring in a unique ecological region: the central Texas Hill Country, which encompasses some 17 counties in central Texas. The unprecedented population increases are giving rise to significant environmental challenges: The fast pace of development in and between Austin and San Antonio is stressing the region's natural resources—and regional stakeholders' capacity to plan and adapt. Researchers and practitioners worked together to utilize social network analysis (SNA) as a tool for stakeholder analysis and formal network development (The Texas Hill Country Conservation Network). We have employed the tool to identify a range of organizations central to local conservation efforts that represent a diversity of organizational types, and to inform the creation of an executive committee, steering committee, regional strategic plan, and attract philanthropic investment to the region. In this session, we'll discuss social network analysis and how it provided strategic direction for collaboration.

3. Put your Collaboration on the Map to Build Capacity and Connect
   - Presenter: Joe Zebrowski, Director of Geospatial Technology, New Mexico Highlands University
   - Description: Maps are a proven way to bring partners around the table and identify areas and issues of common concern. Everything happens somewhere! This case study will examine some approaches to using maps to communicate the needs and opportunities to collaborate. What information is useful to show on a map? What are some concepts for organizing that information useful in collaboration? How hard is really to get your information on the map? A variety of approaches will be showcased, from basic hard-copy maps or on-line static maps, though interactive webmaps, to more sophisticated Story Maps. At the end of this discussion, you should feel confident enough to jump in and map your collaborations.

Technology & Materials: Flip charts and pens, PPT template slide, Screen/projector for presentations

Bio of Host(s) and Case Study Presenters:
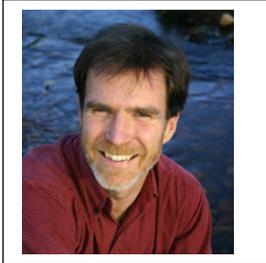
John Sanderson is the CCC's director. He has been doing conservation work in Colorado for 25 years, most recently as the Director of Science at The Nature Conservancy. At TNC, he led a staff working to protect land, manage rivers, restore forests, and mitigate and adapt to our changing climate. He earned a B.S. in engineering from Purdue University, an M.S. in botany from the University of Vermont, and a Ph.D. from the Graduate Degree Program in Ecology at Colorado State University.

Ch'aska Huayhuaca is a policy instructor in the Department of Forest and Rangeland Stewardship at CSU and former researcher for the CCC. She led the CCC's Colorado Atlas of Collaborative Conservation project, and her dissertation focused on the origins, form, and function of collaborative conservation initiatives across the state. She received her B.S. in natural resources from Cornell University, and both her M.S. (in human dimensions of natural resources) and Ph.D. from the Graduate Degree Program in Ecology at CSU.

Dr. David Augustine is a Research Ecologist with the USDA's Agricultural Research Service, based in Fort Collins, CO. His research has examined the influence of a diverse array of herbivore species, particularly those with hooves, on the structure, function, and diversity of rangeland ecosystems in Africa and North America. He received his MS in Wildlife Conservation from the University of Minnesota, and PhD in Biology from Syracuse University. Dr. Augustine's current research focus is on tradeoffs and synergies in managing rangelands for livestock production and biodiversity conservation in the western Great Plains.

R. Patrick Bixler is an Assistant Professor at the LBJ School of Public Affairs at The University of Texas, Austin. His work focuses on environmental governance, resilience, and the ways that cross-sector networks influence policy and on-the-ground outcomes. His work is theoretically informed and he work closely with practitioners on conservation policy and strategy. A sociologist by training (PhD, Colorado State University, 2014), his research program emphasizes a variety of ways to better understand dimensions of "social" in social-ecological systems from local to regional to continental scales. One thread of research utilizes social network analysis to research, evaluate and design collaborative conservation efforts.
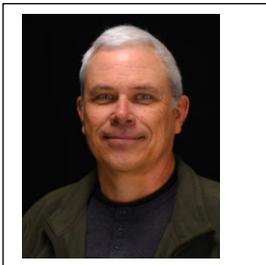
Joe Zebrowski is NMHU's Director of Geospatial Technology at New Mexico Highlands University in Las Vegas, NM. As a Visiting Instructor of Forestry, he teaches remote sensing and geographic information systems courses at Highlands. He also facilitates collaborative conservation groups such as the Mountainair ranger District Collaborative and the Estancia Basin Watershed Health Restoration and Monitoring Program. Joe's research and applications interests center on the use of geospatial technologies in the support of collaborative conservation and watershed management. Landscape-scale restoration is particular interest. Joe received a Bachelor of Arts in History and a Master of Sciences in Geography, both from Texas A&M University.

David Baker has been responsible for planning and executing the Wimberley Valley Watershed Association (WVWA) conservation programs and services in accordance with their mission and goals since 1996. He envisioned and conceived of the Texas Hill Country Conservation Network (THCCN) in 2015 after 20 years of working to protect Jacob's Well, Cypress Creek, the Blanco River, and serving for over a decade on the Hill Country Alliance Board. His service on numerous other boards and founding of several NGO's and public agencies, including the Hays Trinity Groundwater Conservation District, has led to collaborations with diverse agencies in ongoing efforts to conserve land, water, and to adopt science-based public policy. The Mitchell Foundation grant to the WVWA in 2015 to study the THCCN launched this collaborative effort and has led to the development of numerous joint funding proposals including the successful Regional Conservation Partnership Program and Water Funders Initiative grants. WVWA will continue to serve on the THCCN steering and executive committees and work to increase investment in conservation across the region.

(insert presenter photo below)   (insert presenter bio text below)

Angela Dwyer moved to Colorado in 2010 and began working for Audubon Rockies on habitat restoration and at Colorado State University on several GIS vegetation mapping projects. She studied waterbirds in graduate school and received a Master's Degree in Wildlife Management at Stephen F. Austin State University in 2006. Prior to moving to Colorado, she was the Conservation Biologist for Audubon North Carolina from 2007 to 2010, chasing shorebirds on the beach. She has been with Bird Conservancy of the Rockies since 2012, and oversees collaborative grassland research and management projects, along with supervising several Private Lands Wildlife Biologists in partnership with the Natural Resources Conservation Service. She has been a member of the Collaborative Adaptive Rangeland Management Stakeholder Group since 2015.