Southern Appalachian Spruce Restoration Initiative

First Meeting Highlights and Next Steps

December 4, 2012

North Carolina National Forest Supervisor's Office, Asheville NC

Meeting began at 10:00 am with welcome and brief introductions of meeting participants. Katherine Medlock gave a brief background of the Cherokee National Forest Landscape Restoration Initiative (CNFLRI) which resulted in, among other things, a recommendation that the Cherokee National Forest restore approximately 40 acres of Spruce annually. During the same timeframe, Evan Burks from the Monongahela National Forest and Central Appalachian Spruce Restoration Initiative (CASRI), reached out to Katherine and other partners in the Southern Apps. This culminated with a conference call held in July of 2012 where participants determined the need to hold a larger meeting inviting multiple stakeholders from all Southern Blue Ridge states (VA, NC, TN, SC, and GA). The meeting today is the result of that decision.

Katherine gave a brief overview of the purpose and goals of the meeting. First, we want to discuss current opportunities and obstacles for spruce restoration. Second, we want to determine if there is a need for a SASRI and, if so, determine the group structure.

Evan Burks, with the Central Appalachian Spruce Restoration Initiative (CASRI) gave an overview of their efforts, where they started, how they are structured and the success that they have had. Andrea Brandon provided an overview of the needs for broad regional coordination between CASRI and SASRI as well as the need to effectively communicate our story of spruce restoration in the Appalachians in a way that resonates with policymakers, funders, and decision makers for garnering support. Andrea proposed forming a subcommittee that bridge between CASRI and SASRI that can develop communications with focus on needs for increasing connectivity and resiliency of Appalachian forests. Please see the Power point presentation given by Evan Burks and Andrea Brandon.

Stephanie Connolly, Monongahela Forest Soil Scientist, joined us via conference phone and shared information about the soil mapping and Ecological Site Inventory (USDA-NRC) that has been done in the Central Appalachians. This could be duplicated in the Southern Appalachians. There was some discussion about whether we can differentiate the source of carbon in soil (e.g., hemlock vs. spruce). Her recommendations for the Southern Apps are as follows:

- 1. Partner with a soil entity such as Virginia Tech, NC State, Soil Professional Society, etc...
- 2. Invite NRCS Soil Sciences Program to provide a Steering Committee Member this could be the current ESD coordinator or a Soil Scientist. Contact David Kingsbury, NRCS Soil Survey R6 Director, Morgantown, WV (304-284-7589) and ask for recommendations. Contact any universities that have soil data sets from research that has been done in the Southern Apps. Let them know about the initiative and how you would like to potentially use the data in the future.

3. Get a copy of the soil information published for the Great Smoky Mountain National Park Project. Anthony Kheil, NRCS TN Soil Survey Project Leader, also road a document that describes the models for soil development in the park. This would be very helpful in determining historic reference conditions along with prioritizing restoration on multiple landforms.

Mark Ford followed giving a presentation about the past 15 years of Flying Squirrel research and how spruce restoration efforts are critical to protecting and expanding Northern Flying Squirrel habitat. Please see Powerpoint presentation given by Mark Ford.

Cordie Diggins gave a presentation with recommendations for restoration efforts. Please see Powerpoint presentation for details. Some discussion followed regarding spruce restoration vs. ecosystem restoration (other needs such as hemlock and fir). CASRI work goes beyond spruce and they are thinking about other efforts as well.

Barbara Crane gave a presentation about the genetics of spruce, the work the Forest Service has done thus far and the possibilities for future collaborations. Red spruce restoration is on the USFS top 10 list for tree restoration. Spruce populations here very genetically robust. Please see the Powerpoint presentation given by Barbara Crane for details.

Dave Casey briefly discussed his experience with lifting wildlings, which were transplanted to natural gaps. Collected trees 18-30 inches tall and maintained pancake root ball. Very labor intensive, but excellent survival (299/300). Discussion on seed sources/collection followed. Cone crop every 5-8 years (2009/2010 great cone crop) - don't collect in off year because seeds not viable. Red spruce starts to produce cones at 25+ years of age. Don't want to use WV seed source given climate change. Camcore at NC State is a potential partner – might do field work, cone collection, build seed bank, etc. EFETAC developing new range maps for a lot of tree species.

Kelly Holdbrooks from the Southern Highlands Reserve shared her experience cultivating spruce seeds. She brought in specimens grown inside a hoop house and those grown outdoors that showed a remarkable difference. The Southern Highlands Reserve currently has 1300 seedlings and is at maximum capacity. These seedlings are "spoken for" by the NC Wildlife Commission. It was agreed that any future efforts should include a small group of people dedicated to increasing the capacity for cultivating spruce seeds. Some discussion followed regarding lack of spruce in the Great Balsams. Might be explained if spruce there are from WV stock. Other potential options for growing: Grandfather Mtn. has some nursery space (for healing in); Long Hope; Pond Mtn. CASRI offered to provide technical assistance for seed collection and discuss possibility of augmenting their growing contract to include S. Apps spruce.

Josh Kelly gave a brief overview of the spruce landscape scale mapping efforts that have been done in the Southern Blue Ridge. Josh mentioned that a great project would be to geo reference maps from Pyle and Schafale paper. Also would be good to have a centralized library of historical papers and forest maps. This spearheaded some discussion about potential additions to our knowledge base. Please see

the Powerpoint presentation given by Josh Kelly for details of his presentation. It was agreed that any future efforts should include a small group of people interested in doing further mapping.

There was some discussion on funding and potential restoration areas. Climate change and forest heath are two hooks for funding. CASRI has used WHIP on private lands. Perhaps identify small test sites where we know spruce should be while at same time working on method to determine other appropriate areas for restoration using various filters. Suggested areas to start: Craggies (for release work), along NC/TN border from Big Bald to Pond Mtn.

The discussion at the end of the meeting was centered on the structure of a newly forming SASRI group. Please see the Powerpoint presentation for additional information. Some discussion on developing a working plan/document: explore opportunities to formalize partnerships and work with CASRI, ID "no regrets" areas, develop suite of strategies for implementation, work with partners to implement plan, communicate regularly. The group decided that there was a need to establish a steering committee with a representative from each interested agency. The group decided there was a need to develop standing committees for 1) Seeds, Seedlings, and Nurseries 2) Mapping 3) Communications and regional coordination and 4) Science Needs working group. The volunteers for those groups follow:

Steering Committee:

Robert Lewis (Cherokee National Forest)
Lisa Huff (TN Natural Heritage)
Ron Myers (NC Forest Service)
Sue Cameron (USFWS)
Todd Fearer (Joint Venture)
Katherine Medlock (TNC)
Kelly Holdbrooks (Southern Highlands Reserve)
Jesse Pope (Grandfather Mountain SF)
Chris Kelly (NC Wildlife Commission)
Representative from NC National Forests
Representative from GW/Jeff National Forests
Representative from FS Research Station (Barbara Crane will let me know who)
Representative from NRCS?? (possible contacts are Hank Henry and Dave Kinsbury)

Seeds, Seedlings, and Nurseries Committee:

Barbara Crane (USFS Region 8)
Kelly Holdbrooks
Ron Myers (NC Forest Service)
Chris Kelly (NC Wildlife Commission)

Mapping:

Josh Kelly? Need volunteers

Communications Needs: Andrea Brandon

Todd Fearer

PR Representative from Region 8 (Barbara Crane will put person in touch

Science Needs:

Mark Ford

Possible additions include Peter Bates from WNC, Appalachian State, NC State

Next Steps: Distribute notes from this meeting. Convene meeting/call of Steering Committee members and begin reaching out to additional partner agencies/organizations including NRCS, and private landowners.