

# CASRI

## The Central Appalachian Spruce Restoration Initiative

2012

### Central Appalachian Spruce Restoration Initiative

#### Meeting Agendas and Minutes

**Wednesday Feb. 8, 2012 - Monongahela National Forest Office - 9 a.m.**

#### **AGENDA**

Please review Year-End Report.

**9:00 – 9:10**

**Introductions/Welcome**

**9:10 – 10:30**

**Year-End Report Review**

- Comments
- Brainstorm applications for report

**10:30 – 10:50**

**CASRI Goals for 2012**

- Actionable items for 2012
- Continued support for on-the-ground projects-**Ten Minute Break-**

**11:00 – 11:20**

**Goals for 2012 Continued...**

**11:20 – 12:00**

**Spring Projects & Other Updates**

- April 21<sup>st</sup> Refuge/Timberline planting
- Private land planting
- Ecological Site Descriptions
- Blister Swamp and other projects

#### **MEETING MINUTES**

**Reply due:** Final comments on the 2011 Year-End Report are due to Evan no later than **February 17<sup>th</sup>**.

**April 21-22 meet at Refuge Visitor Center 10 A.M. for CVNWR/Timberline spruce planting**

2011 Year-End Accomplishments Report

Group was directed to closely review the partners list on page 4. It was suggested we add OSMRE as a new partner due to their involvement on the Mower Tract. It was also suggested we acknowledge any funders and volunteer efforts that contributed to projects.

Dave Saville reviewed the planting numbers in the document and will coordinate with Evan Burks to get them up to date.

Once report is finalized, the group will distribute through USFS channels, CASRI website, F&WS ARS system, LCC website, and other outreach avenues. Report will also be used for funding initiatives such as the AGO.

## **2012 Goals**

- Ground Truth Photo Science
  - Ground truthing to get a current spruce map will be a priority for 2012.
  - Elizabeth Byers and KC Love are working to gather large amounts USFS botanical and stand data. This data should be processed by early March and will allow the group to pin point areas that still need surveyed. We will focus on these areas in 2012
  - Shane Jones will check for additional WVNFS capture and nest box stand data and send to Elizabeth Byers.
  - Kumbrabow State Forest has additional timber cruise data to send to Elizabeth.
  - KC Love met with geocaching community and has 18 volunteers interested in collecting points. Dave Saville offered to help organize a volunteer event to get more people interested and collecting data.
  - Jason Teets offered to collect points while doing ESD work.
- **Plan of Action for Ground Truthing**
  1. Elizabeth and KC compile remaining data to pin point specific areas in need of mapping
  2. Specific areas in need are announced to the larger group.
  3. CASRI partners commit staff time (1-2 days) for ground truthing remaining areas
  4. KC, Dave, Elizabeth, and Evan work to organize volunteer data collection event.
  5. Once enough points are collected, data will be processed into a current spruce coverage map.
- Building on TNC Resiliency Mapping for Spruce Restoration
  - TNC has modeled essential forests and key connectors for the Central Apps.
  - CASRI will focus on scaling down this map to the spruce range in WV to identify key habitat connections.
  - Combining this model with our spruce map will help inform our decisions on where to conduct restoration projects.
- **Plan of Action for Resiliency Mapping**
  1. TNC will help form a CASRI subcommittee to work on scaling down the model to the spruce range.
  2. TNC will hire a full-time intern to help coordinate the effort.
  3. A final map product and report will be produced by the intern and subcommittee.

Evan will compile these goals into a document that includes our on-the-ground projects.

### **Upcoming Spring Projects**

Spring Refuge/Timberline Conservancy Planting: CVNWR and Timberline will conduct a joint spruce planting on the Blackwater River April 21-22. The two day event will be supported by an Appalachian Coal Country Watershed NCCC grant, Timberline HOA, and WV Highlands Conservancy. Meet at the Refuge at 10 A.M. both days. We still need volunteers!

Blister Swamp Fencing Project: DNR received an \$8,600 grant to build exclosures and plant balsam fir at Blister Swamp. The project will take place on USFS property adjacent to private land. Tentatively the project is scheduled for May 1-4. A small group is needed to help. Elizabeth will contact group members for help.

Private Land Planting in Red Creek: USFWS Partners Program is evaluating possibilities for a spring planting on private land in Red Creek. If the project comes through, a small group of volunteers will be needed to help plant 2,000 trees. John Schmidt and Evan Burks will keep the group posted.

CVNWR Alder Planting: CVNWR plans to plant 3,000 speckled alder on May 5<sup>th</sup>. Volunteers are needed. Marquette Crockett will contact the group with additional information.

TMI – USFS Trail Building Education Project: Kevin Stitzinger is working on a youth trail building project to improve MNF trails. He would like the project to combine spruce mapping effort with trail building and education. He is looking for high school to college aged students that are interested in attending the service camp. For more information contact [kstitzinger@mountain.org](mailto:kstitzinger@mountain.org).

NRCS Field Week: NRCS will be leading a field week for soil survey the week of June 11<sup>th</sup>. This year they will be digging pits near Bemis to investigate the relationship between soils under spruce and hemlock. For more information contact [jason.teets@wv.usda.gov](mailto:jason.teets@wv.usda.gov).

### **Other Great News!**

TNC received funding from American Rivers and the WVNFS fund to acquire an easement on the Pharis Knob property. This project will include funding for fencing, invasive treatment, and spruce restoration. The restored tract will connect Laurel Fork Wilderness to Spruce Knob. More information and needs for the project will be announced later. Great job to everyone who worked on this!!

## **Wednesday May 9, 2012 - Monongahela National Forest Office - 9 a.m.**

### **AGENDA**

**9:00 – 9:10**

#### **Introductions/Welcome**

**9:10 – 9:30**

#### **Landscape Connectivity & Resiliency Mapping Update**

- Next steps (Amy Cimarolli)

**9:30 – 9:50**

#### **Red Spruce Ground Truthing Update**

- New Maps (KC Love)
- Next Steps (Elizabeth Byers, KC Love)

**-Ten Minute Break-**

**10:00 – 10:30**

#### **ESD Soil Work Update**

- Special E Horizons (Jason Teets)

**10:30 – 12:00**

#### **Spring Project Successes & Other Projects**

- April 21<sup>st</sup> Refuge/Timberline planting
- Private land planting
- Mower
- Pharis Knob
- Blister Swamp
- State Parks
- Upper Williams Road Decommissioning
- Tucker Co. Greenhouse
- **Potential Fall Projects**

### **MEETING MINUTES**

**Next Group Meeting: August 20<sup>th</sup>**

Field trip to Pharis Knob Planting Site: July 27<sup>th</sup> Contact Amy Cimarolli

Soils field trip to Pharis Knob: May 31<sup>st</sup> Contact Amy Cimarolli

#### **Ground Truthing (KC Love)**

- Elizabeth and KC received USFS stand data and are incorporating it into the spruce mapping project
- A new map was created showing green areas on the quads. Most of the unmapped areas are in the wilderness.
- The new unmapped area shapefile will help “ground truthers” identify areas of greatest need.
- Large polygons are more valuable to ground truth than smaller polygons. 2,000-3,000 polygons lacking data.
- KC will email the shapefile to the group

#### **Evidence of Podzolization (Jason Teets)**

- Soils in areas of 50% or greater conifer cover show certain soils characteristics from organic matter and Al & Fe leaching down from the A and E horizons to the B horizon.
- Other areas without conifer component are showing evidence of depodzolization or spodic dystrochets. This is evidence of past disturbance and remnant spodosols.
- There is a possibility that remnant spodosols and evidence of depodzolization can tell us where red spruce once existed. This evidence, combined with ongoing resiliency mapping and spruce ground truthing can help direct future restoration efforts.
- For a copy of Jason's power point presentation contact Evan.

### **Tucker Co. High School Green House (Shane Eakle)**

- CVNWR received a \$10k grant to help fund field trips and greenhouse supplies for TCHS.
- The grant will also allow F&WS to hire 1 student intern for the summer.
- Green house has received over \$60k worth of volunteer hours and enrollment in the VOAG program is up 110%. Green house is expected to be fully operational by fall.
- Green house program is looking for assistance in growing certain native species and training opportunities for the students. Transportation funds for field trips to collect seed will be needed.

### **Landscape Connectivity Map (Amy Cimarolli)**

- TNC report, Resilient Sites for Terrestrial Restoration in the Mid-Atlantic has been published, Amy will email the report upon request.
- TNC is now ground truthing the Mid-Atlantic analysis for WV. They have put together a small team to look at the regional data at the West Virginia scale.
- If the model works, we will be able to lay the resiliency model on top of the spruce layer to get a better picture of the most important areas to conduct spruce restoration in the face of climate change.

### **Spring Projects**

- **CVNWR & Timberline** – 94 volunteers attended the spring planting at Timberline and the Refuge. Nearly 6,000 trees were planted on both sides of the Blackwater River.
- **Red Creek** – 10 volunteers helped plant 1,200 on a piece of private property as part of a Partners for Fish and Wildlife project.
- **Upper Williams** – USFS watershed planted 5,000 spruce trees as part of a decommissioning project.
- **Blister Swamp** – the Blister Swamp fencing project is still slated to happen sometime this summer. Planting of fir and spruce will commence in the fall.

### **Upper Greenbrier Appeal**

- UGN has been appealed. CASRI may think about putting together a group to think about how to prevent future appeals. The group agreed to maintain focus on landscape level projects.

**Monday Aug. 20, 2012 - Monongahela National Forest Office - 9 a.m.**

**Group Meeting  
USFS Supervisor's Office  
Monday – Aug. 20, 2012  
9:00 a.m. – 12:00 p.m.**



call-in #888-858-2144 code: 7620832#

9:00 – 9:10  
Introductions/Welcome

9:10 – 9:55  
**Update on Mon NF Soils Program Activities Related to Red Spruce**

- Upcoming field trip (Stephanie Connolly & Jason Teets)

**-Ten Minute Break-**

10:05 – 10:45  
**UGN Status Update**

- Update on staged decisions (David Ede)
- Lessons learned and moving forward (Andrea Brandon & David Ede)

10:45 – 11:20  
**Renewing/Revising Red Spruce MOU**

- MOU set to expire in January
- Discuss renewing and expanding MOU signatories
- Include multi-state signatories

11:20 – 11:35  
**Update on Spruce Mapping** (Elizabeth Byers)

11:35 – 12:00  
**Fall Projects**

- CVNWR
- Lambert?
- Blister Swamp
- Review of 2012 planned work – preview of accomplishments and plan for next year
- Others

12:00

Set next meeting for November

## CASRI Meeting Notes

August 20, 2012

Attending in person:

Stephanie Connolly, USFS/MNF

Jason Reed, USFS/MNF

David Ede, USFS/MNF

Kate Goodrich-Arling, USFS/MNF

Kent Karriker, USFS/MNF

Jack Tribble, USFS/MNF

Tom Schuler, USFS/NRS

Marquette Crockett, USFWS/CVNWR

Dawn Washington, USFWS/CVNWR

Barbara Douglas, USFWS/WV Field Office

John Schmidt, USFWS/WV Field Office

K.C. Love, Americorps w/USFWS/WV Field Office

Paulita Cousin, WVDNR/Blackwater SP

Elizabeth Byers, WVDNR/NHP

Andrea Brandon, TNC/WV State Chapter

Amy Cimarolli, TNC/WV State Chapter

Kevin Stitzinger, The Mountain Institute

Jason Teets, NRCS/WV State Office

Steve Ritz, NRCS/WV State Office

Randall Lester, NRCS/Appalachian PMC

Attending via telephone:

Joe McGuiness, USFS/CNF

Jeff Matthews, USFS/GW-Jeff NF

Chuck Sams, USFS/R8

Katherine Medlock, TNC/TN State Chapter

Sue Cameron, USFWS/NC Field Office

## **Introductions**

The meeting was called to order at approximately 9:00, and brief introductions were conducted.

## **Update on Mon NF Soils Program Activities Related to Red Spruce**

Stephanie Connolly and Jason Teets discussed recent soil investigations in the red spruce-northern hardwood areas of the Monongahela National Forest. Stephanie covered the following topics:

- Soils investigations in the red spruce communities began as part of the MNF's larger efforts to document soil chemistry as it relates to acid deposition. This grew into more specific investigations of the spodosols and soils with spodic tendencies that occur in conifer and conifer-hardwood communities.
- NRCS and MNF conducted a successful soils field week this summer. Work focused on identifying and describing spodosols and spodic dystrudepts in communities that are (or were formerly) dominated or co-dominated by conifers.
- The MNF is working on incorporating red spruce ecosystem restoration work with climate change and carbon management issues. CASRI restoration efforts are showing what carbon management looks like on the ground.
- Several field tours were held with various groups this summer to explain the carbon – restoration connection. One of these tours included representatives from the Northern Institute of Applied Climate Science (NIACS), which is a partnership between the USFS Northern Research Station and Michigan Tech University. NIACS is in the early stages of the Central Appalachian Climate Change Response Framework project, which will develop a climate change vulnerability assessment and adaptation strategies for a large portion of the Central Appalachians.
- The MNF is beginning soil investigations in a portion of the Cranberry River watershed as part of a future timber project that is currently in the early (pre-scoping) planning stages. This project may provide an opportunity to investigate whether soils with spodic tendencies occur in the northern hardwood communities in the southwestern part of the MNF.

Jason made the following points related to his Ecological Site Description (ESD) work in the conifer-northern hardwood communities in eastern WV:

- The ESD concept relates vegetation communities to soil components.
- In eastern WV, spodosols occur in communities that have a >50% conifer component (red spruce and/or eastern hemlock).
- Spodosols under current northern hardwood stands reflect the historic presence of a >50% conifer component.
- Spodic dystrudepts (soils that show some spodic characteristics but do not meet all of the technical criteria for spodosols) indicate some level of current or historic conifer co-dominance.
- Next steps: (1) go to sites that have an existing description of the vegetation and correlate vegetation characteristics to soil characteristics; (2) correlate historic witness tree data to current soil characteristics.
- Initial attempts to correlate witness tree data to soil characteristics have confirmed the presence of spodic characteristics at sites that had a historic conifer component.



- Future research needs: investigate links between soil properties and habitat suitability for the threatened Cheat Mountain salamander and the endangered WV northern flying squirrel.

Kent Karriker pointed out that the widespread presence of spodic characteristics in current northern hardwood and mixed stands supports the upper-range historic estimates of the extent of red spruce communities in the central Appalachians (c. 1 million acres vs. the more typically cited 500,000 acres). This has implications for our estimates of climate change impacts on spruce communities. Most models of red spruce habitat suitability are based on characteristics of sites that currently support red spruce. The current distribution of red spruce is much reduced and is heavily influenced by past management history (timber cutting and fire), so models based on that distribution may be underestimating the breadth of red spruce's ecological niche.

Chuck Sams asked how the CASRI soils investigations and other CASRI work fit in with the Appalachian Landscape Conservation Cooperative (LCC). (Chuck is the FS Region 8 science representative for the LCC). Marquette Crockett said that there is an LCC effort to capture data needs that may pull in some CASRI information. Elizabeth Byers noted that NatureServe received a small grant from the LCC to conduct species vulnerability assessments. Those assessments will include "habitat foundational species," i.e., trees such as red spruce. Elizabeth is working on this effort and can include species that relate to CASRI interests.

Chuck also asked if CASRI's soils efforts are addressing the connection between soil properties and the underground fungi that form a major food source for the northern flying squirrel. Several people responded that they have noted anecdotal evidence of the occurrence of truffles in spodosols, but most CASRI participants do not have the mycological expertise to conduct a more thorough investigation. CASRI needs to engage with qualified researchers to explore this topic further. (Editor's note: it was not stated in the meeting, but Stephanie Connolly and Shane Jones [USFS/MNF] have partnered with researchers to prepare a proposal to investigate this topic. To date, the proposal has not attracted funding.)

Stephanie solicited opinions from the group on topics people would like to cover during the upcoming CASRI soils field trip (September 18). The following topics were suggested:

- Look at soil pits in a mature and/or old growth red spruce-dominated stand.
- Explain what is currently known about soil properties as they relate to habitat for the Cheat Mountain salamander – share information from the recent field training exercise that was held on the MNF.
- Look at a classic example of a spodosol in a stand with >50% red spruce dominance occurring on the Pottsville sandstone.
- Look at a spruce-northern hardwood mix with some elements of podsolization, perhaps on shale geology that is slightly richer than the typical sandstone sites.
- Look at a profile that exhibits the deep carbon storage that occurs in spodosols (Barton Knob).
- Visit a soil pit at a high-elevation limestone site.
- Visit a former red spruce site where the soil has been degraded due to past logging and fire.
- Look at a low elevation hemlock site – what is the extent of podsolization?

- Discuss ways to synthesize what we are learning in a way that is explainable to the public such that we can use this information in education/outreach programs.

### **Upper Greenbrier North Project Status Update and Lessons Learned**

Upper Greenbrier North (UGN) is an integrated vegetation management project that has been proposed on the Greenbrier District of the Monongahela National Forest. It covers an 85,000-acre project area and includes several thousand acres of spruce restoration, as well as a large watershed restoration component and a large even-aged hardwood timber management component. David Ede (MNF Forest Planner/Environmental Coordinator) gave a status update, which covered the following points:

- Early on in the development of the project, the MNF chose to focus on one proposed action, then revise and adapt to concerns/issues along the way, rather than concoct numerous different alternatives to address the issues. This approach resulted in successive changes and multiple versions of various tables and appendices. The Environmental Assessment (EA) ended up containing an amalgam of numbers that did not match up properly in several places. This was one of the major points raised by the appellants.
- The appellants also raised an issue with Shriver's frilly orchid, a recently-added Regional Forester's Sensitive Species that was not fully surveyed for because it was not officially described as a species until project planning was well underway.
- The appeal review team convened by USFS Region 9 said that the analysis was sound, and there was no indication that an Environmental Impact Statement (EIS) was needed. However, the review team was uncomfortable with the confusing numbers in the EA and the incomplete surveys for Shriver's frilly orchid. Therefore, the MNF Forest Supervisor reversed the decision and instructed his staff to remedy these problems.
- The table/appendix discrepancies were repaired, and additional survey work was conducted for Shriver's frilly orchid. A corrected version of the EA has been prepared and posted to the MNF web site.
- The project is being broken down into three separate decisions:
  - The first decision, which includes all of the watershed improvement and riparian habitat restoration, was issued last week.
  - The second decision will include all of the spruce restoration and probably will be issued some time after the expiration of the appeal period for the watershed decision.
  - The third decision will include the hardwood timber management and timber stand improvement activities.

Andrea Brandon and several others discussed "lessons learned" from the UGN project. The following points were discussed:

- The UGN project illustrates the catch 22 that we run into with landscape scale, multi-purpose "big gulp" projects.  
Pros:

- A large, integrated project presents the opportunity to consider landscape connectivity and other landscape ecology issues that might not be considered when management planning is done in a piecemeal fashion in smaller project areas.
- The analysis is more efficient because the interdisciplinary team can analyze multiple activities at once using the same basic information.
- This approach also facilitates more thorough cumulative effects analyses because all of the reasonably foreseeable future actions are included in the same project.

Cons:

- The EA that results from such an approach is typically a large and confusing document that is difficult for the average person to read and understand.
- A large integrated project is likely to contain something for everyone to dislike, which makes appeals more likely.
- How do we improve public involvement so that we can resolve issues early and reduce the likelihood of appeals?
  - The MNF held a public meeting when the UGN project was scoped. Attendance was very low.
  - Can we engage members of the public in pre-scoping meetings and field tours so we can explain the proposed activities in detail?
  - Can we bring more elements of the public into CASRI? Consensus was that, although we are not barring anyone from participating in CASRI, we do not want to try to cajole participation out of folks who fundamentally disagree with the work that current CASRI participants are doing.
- The MNF intends to keep doing large-scale planning and analysis, although it may re-think the way decisions are reached; i.e., multiple focused decisions vs. one decision containing multiple disparate activities.
- Andrea indicated that she was interested in working further with other members of the group who are interested in brainstorming ideas related to large-scale project planning and analysis.
- David reiterated the importance of the MNF continuing to work with partners on large scale projects, which yields benefits from information sharing, broader funding opportunities, and cross-boundary resource management.

**Reviewing/Revising Red Spruce MOU**

This discussion concerned the “Memorandum of Understanding for the Conservation of the Red Spruce-Northern Hardwood Ecosystem,” which was signed in January 2007. This MOU, which led to the formation of the working group now known as CASRI, was signed in January, 2007. The MOU does not have an expiration date, but it states that it should be reviewed every five years. The MOU was signed by:

- The USFWS (West Virginia Field Office and Canaan Valley National Wildlife Refuge)
- USFS (Monongahela National Forest and Northern Research Station)
- State of West Virginia (Division of Natural Resources and Division of Forestry)
- The Nature Conservancy.

The MOU provides for participation by other entities (“cooperators”), who may participate via an agreement with any one of the signatories.

The geographic extent covered by the MOU is based on the Geographic Recovery Areas (GRAs) shown in the recovery plan for the Virginia northern flying squirrel (aka WV northern flying squirrel, *Glaucomys sabrinus fuscus*). It is roughly equivalent to the high elevation areas of the Monongahela National Forest, Canaan Valley National Wildlife Refuge, and Kumbrabow State Forest and vicinity. It also includes a small portion of the George Washington National Forest in Highland County, VA.

Kent Karriker started the discussion by asking whether anyone sees a need to (1) bring in additional partners by adding them as signatories to the MOU, (2) expand the geographic scope of the MOU, or (3) make other changes to the MOU. The following specific points were discussed:

- Barb Douglas noted that the implementation of this MOU has been more successful than the implementation of most MOUs ever.
- Barb also noted that getting multiple agencies to sign an MOU is very difficult and time consuming, therefore she recommended against making formal changes to the MOU unless such changes are absolutely necessary. Jack Tribble seconded this sentiment.
- Marquette Crockett sees great potential value in expanding to include new partners, especially in the Southern Appalachians.
- Could folks in the Southern Appalachians use this MOU as a template for a parallel restoration effort there vs. becoming official signatories on the CASRI MOU?
- Jason Teets noted that NRCS is not a signatory on the MOU, even though that agency is an active participant in CASRI. He thinks NRCS has much value to add to CASRI, but he has not approached his office's leadership about signing on to the MOU.
- Has anyone officially signed on as a Cooperator using the agreement template in the MOU? Yes:
  - WV Division of Highways signed a cooperator agreement when they provided flying squirrel mitigation money for Corridor H.
  - The Mountain Institute
  - The WV Highlands Conservancy? (Those present were not sure about this one.)
  - Two private landowners have signed USFWS Partners for Fish and Wildlife agreements to facilitate spruce restoration on their properties, although those agreements did not use the template from the MOU.
- We noted that the GW/Jeff NF is not signed on as either a signatory or cooperator, even though they are partly included within the existing geographic area. Jeff Matthews suggested that we talk to Fred Huber (Forest Botanist) or Russ MacFarlane (Forest Silviculturist) about involving the GW/Jeff in CASRI.
- Several people noted that the MOU makes specific references to outdated information and tasks that have been completed. Do we want to make minor changes to deal with those, as well as mention CASRI by name somewhere in the MOU?
- Does CASRI want to formalize itself as an organization? Right now CASRI is a collection of independent entities that work together, but within the limits of their own authorities, on projects that are of common interest to all or most of the participants. The general consensus of the group is that we do not want to organize more formally. Although organizing as a non-profit could bring fundraising advantages and a higher public profile, the federal and state agencies that participate in CASRI would have to give up much of their control over the work that gets done under the CASRI umbrella. Participants felt that it is easier to be effective by working within each agency's existing authority.
- The general consensus of the group is that we do not want to make any formal changes to the MOU at this time. We can and should continue to coordinate informally with folks in the

Southern Appalachians. Several participants agreed that we should make a greater effort to sign up more people/entities as official cooperators.

***Follow-up task: Evan needs to poll the group to (1) identify past and current cooperators (whether officially signed up or not); and (2) identify those we want to cooperate with in the future.***

### **Update on Spruce Mapping**

K.C. Love presented a brief power point presentation on the progress of the spruce mapping validation:

- Over the last year, K.C. made numerous trips to various places within the WV spruce zone to collect ground truthing data. He also coordinated with volunteers and FS employees to gather additional data. Nearly 500 data points were collected in hard to reach areas.
- Extensive data from existing sources were also used:
  - MNF stand inventory plots, Kumbrabow State Forest
  - Nathan Beane's Ph.D. research
  - UGN project site inventory data
  - WVDNR breeding bird point counts
  - Northern flying squirrel monitoring sites (WVDNR, USFS, and CVNWR)
  - WVDNR-NHP vegetation plots.
- The map validation is mostly done, although there are still some gaps in the larger remote areas and private land areas. Over 70% of the polygons have been classified.
- An estimated 10 person-days of effort are still needed to finish attributing about 5,000 polygons.
- The draft product still needs to be reviewed by the larger CASRI group.

### **Fall Projects**

#### **CVNWR**

- The Refuge will hold a spruce planting volunteer event on the North Lakes property (recent acquisition) on September 15.
- Work will start at 9:00 am this time instead of the usual 10:00 am start time.
- Evan Burks is helping to coordinate the event, and Dave Saville will be bringing a contingent of WVU students.

#### **Lambert Run (MNF, Greenbrier District)**

- Contractor starts on Wednesday of this week on an \$85-\$100K road decommissioning and planting project.
- The contractor is having trouble finding enough trees. Can the NRCS Appalachian PMC help?
- Can the Tucker Co. High School greenhouse help? The RAC money they received is supposed to set them up so they can produce plant material for the MNF and surrounding land. However, they are still trying to get up and running and are still in the process of learning how to grow trees and shrubs. It may be a while before they can provide any significant amount of plant material. Also, the effort is primarily

educational and small scale, so they are not likely to be able to supply a large number of plants. The PMC and MNF are collecting seed this week and may be able to provide TCHS with some easy-to-grow species like elderberry and bee balm to help get them started.

#### Blister Swamp (MNF, Greenbrier District)

- Project partners (MNF, WVDNR) met on-site in May to go over logistics and access issues.
- Fencing materials have been purchased, and Evan will set up some work days to construct the fence and plant about 1,500 trees (1,000 spruce and 500 balsam fir).
- A primary component will be fencing out cattle that are coming on to the site from adjacent private land. Although the landowners are ultimately responsible for keeping their cattle on their land, the MNF and WVDNR have chosen to use RAC project money to build the fence because of the need to maintain good neighborly relationships in the Blister Swamp area, which is vehicle-accessible only through adjacent private lands.
- Project partners are still working on the administrative mechanism for getting the fence built. No formal agreement with the landowner is in place, nor is one likely to be forthcoming due to the delicate nature of relationships between the federal government and landowners in the area. Without a landowner agreement, neither USDA cost share programs nor the USFWS Partners program can be used to build the fence. If the landowner simply gave permission, Trout Unlimited and the USFWS Partners program could work together to build the fence.
- Should WVNDNR apply for more RAC money to continue future implementation of this project? They would have to apply right away, because the deadline is coming up quickly in September.

#### Priority Restoration Area Mapping (TNC)

- Amy Cimarolli will set up a meeting in late September or early October for the subcommittee that is working on this project.

### **Review of 2012 Work – Action Items for the November Meeting**

- Much of the November meeting will be set aside for reviewing work that CASRI participants have accomplished during calendar year 2012, and for developing work plans for 2013.
- We will be developing an annual report similar to the one we compiled last year. This year's report should be easier to prepare because it will only cover 2012 instead of being a cumulative compilation of everything we have done since the group's inception.
- All CASRI participants should pull out the strategic action plan and begin assembling information on all the work they did that relates to goals, objectives, and key actions in the plans.
- Also, consider what work your organization could do in 2013 that will help work toward unfinished goals, objectives, and actions.
- We need to consider how we want to outreach this report to the public. Simply posting it on the CASRI web site and sending it to the CASRI mailing list is not enough. We want target it to a particular audience, rather than making people go look for it. Kate Goodrich-Arling will advise us on outreaching to elected officials.

***Follow-up task:*** *Evan will work with everyone to assemble the basic information prior to the November meeting. That way the meeting can be focused and productive, rather than everyone trying to brainstorm items for the report during the meeting.*

The meeting adjourned at approximately 12:10 pm.

**Next CASRI Meeting:**

**Tuesday, November 13, 2012**

**9:00 am to 12:00 noon**

**Monongahela National Forest Supervisor's Office**

**Conference Room A**

***Monday Nov. 13, 2012 - Monongahela National Forest Office - 9 a.m.***

**Group Meeting  
USFS Supervisor's Office  
Tuesday – Nov. 13, 2012  
9:00 a.m. – 12:00 p.m.**



**9:00 – 9:10  
Introductions/Welcome**

**9:10 – 9:55  
Lessons Learned From Other Landscape Scale Restoration Initiatives**

- Cordie Diggins (Virginia Tech, PhD Candidate)

**-Ten Minute Break-**

**10:05 – 10:45**

**2012 Report Review**

- Review and approve 2012 accomplishments report
- Outline some goals for 2013

**10:45 – 11:30**

**Focusing on the Next Restoration Landscape**

- Preliminary discussion on the best places to work collaboratively
- Review TNC private land map and update on prioritization process

**11:30 – 12:00**

**Spring & Fall Project Updates**

- Blister Swamp
- Lambert
- Pharis Knob
- Canaan Valley

**MOU Update**

**CASRI Meeting Notes**

**November 13, 2012**

Attending in person:

Kent Karriker, USFS/MNF

Andrea Brandon, TNC/WV State Chapter

Marquette Crockett, USFWS/CVNWR

Amy Cimarolli, TNC/WV State Chapter

Dawn Washington, USFWS/CVNWR

Dave Savile, WVHC

Kristin Haider, Americorps w/USFWS/WV Field Office

Shane Jones, USFS/MNF

Cordie Diggins, VT

Elizabeth Byers, WVDNR/NHP

Kris Hennig, Americorps w/USFS/MNF



### **Update from Cordie Diggins on Carolina northern flying squirrel**

Cordie Diggins, a PhD candidate from Virginia Tech, gave a brief update on the Carolina northern flying squirrel.

- Another VT student, Andrew Evans, has been mapping N. hardwoods in S. Appalachia and finding spruce in the understory similar to WV.
- Telemetry and trapping shows Carolina NFS has same dependence on spruce as WVNFS.
- Cordie will be tracking squirrels and comparing soils in confirmed habitat based on new information from soils ESD work (i.e. spodosols and folistic epipedons).
- New acoustic technology (same used for bats) will be used to track squirrels in 5 different states across Central and Southern Appalachia.

Shane Jones hopes to use same acoustic technology in WV as funding becomes available.

### **Presentation by Cordie Diggins: Techniques for Ecological Restoration**

Cordie provided an overview and background information on ponderosa pine restoration in the Southwest. Euro-American settlement in the late 1800s resulted in land clearing for grazing and fire suppression. This led to higher regeneration rates, more canopy cover, increased ladder fuels, less biodiversity (herbaceous layer), and increased susceptibility to disease. When climate change was added to the equation the problem amplified causing large stand replacing fires. Restoration ecologists decided to take a two pronged approach: thinning (structural) and burning (processes). Mt. Trumbull experimental forest provided a landscape scale monitoring plot to determine if treatments would be effective in reducing pondo density.

Cordie discussed "lessons learned" from ponderosa pine restoration. The following points were discussed:

- True restoration must start with reference conditions from pre-disturbance
  - Reference conditions can be difficult to determine, but historical accounts and early data sources can provide pieces of information
  - Reference conditions help garner more public support for restoration by having a clearly defined objective
  - Clearly stating reference conditions is actual restoration, anything else is management
- Restoration needs to clearly define treatments
  - Site to site variability exists (captured in Restoration Approach)
  - Blanket prescriptions are inappropriate due to variability on the landscape
  - Small scale experiments are needed before treatments are implemented on the landscape.
  - Strong need to monitor and adapt treatments
- Restoration is evidence based conservation
  - Need to use systematic review to evaluate experiments (monitoring)

Additional discussion relating to CASRI followed:

Cordie discussed how the reference conditions for red spruce restoration have yet to be defined and CASRI should clearly state their definition of reference conditions.

Elizabeth stated that although the red spruce classification papers published by the DNR represent current communities, they are the very best of those communities.

Shane Jones suggested we revive the Restoration Approach committee to update reference conditions and add soil information in light of the recent ESD work.

Cordie stated clearly defining reference conditions based on historical information will help ward off critics. Experiments and monitoring are also needed to determine best practices before moving to a large scale.

Shane thought it would be a good idea to evaluate or assess where we are by visiting areas that have been treated without herbicide.

Kent commented that we probably have little pretreatment data for these sites.

### **Reviewing the CASRI 2012 Report**

Evan compiled the 2012 accomplishments into a report from the information he received from various partners. Rather than go through the report during the meeting, it was decided that Evan would email the draft copy to everyone and accept comments or additions until November 21<sup>st</sup>.

Andrea Brandon brought up the need for distributing this report and the following ideas were generated:

- Marquette will continue to send this report to the USFWS regional office
- Kent will send it to the USFS regional office
- Dave commented that he has a bulk mailing list that could be used for distribution to a wide audience
- Amy stated that should would make sure the report got to TNC Gov't Relations
- Kent thinks we should be sending this to any funding organization
- Elizabeth seconded Kent's comment saying we should send this to anyone who has ever supported us with funding in the past.

***Follow-up task: Send any edits/comments on the Annual Report to Evan by November 21<sup>st</sup>. Once report is finalized, be sure to distribute up the chain to the proper people.***

## **Focusing on the Next Restoration Landscape**

The group intended to discuss the next landscape to focus restoration efforts in, but seeing a need to redefine reference conditions a short discussion resulted in a consensus to focus on other things until we are ready to move forward.

Shane Jones noted that the UGN decision on non-commercial and commercial (in non-WVNFS habitat) restoration is about to be signed. Internally, the USFS is weary of another large scale NEPA project and we have a lot of work within Upper Greenbrier to complete before moving to the next thing.

Kent stated that although that is the case now, it is never too early to start planning the next big project.

Elizabeth agreed with Shane that it may be premature to expand planning when we are just starting to scale up for these larger projects.

Ideas for the next large scale projects were discussed as follows:

- Shane wants to continue a two pronged approach on Cheat Mountain with non-commercial spruce release and strip mine restoration
- Kent would like to continue with small-scale projects for NEPA purposes with more release on Cheat Mtn., Gauley District, and N. Marlinton while also continuing to work on the larger landscape connectors.
- Shane gave an update on Cunningham Knob and the great potential for a spruce release project there.
- Amy noted that it would be good to work in Spruce-Seneca NRA to combine efforts of CWPMA with spruce restoration.
- Shane also noted that Snowshoe would be a great place to do work on private lands.
- Dawn shared information about the AGO in Canaan Valley and the need to get ahead of planning to be ready for potential funding.
- Kent suggested the USFS should look at potential for small scale NEPA projects in conjunction with the AGO so we can be ready if anything comes from the AGO.
  
- Shane suggested we look into funding a spruce strike team, similar to the CWPMA field crew that would be available to do project work for all of the partners. This could be the most cost effective way to get project work done on a larger scale.

Further discussion developed around the availability of native plants as we scale up our restoration efforts in West Virginia:

- Elizabeth asked if the availability of native plants will be our next bottle neck to accomplishing on-the-ground work. It would be great to have someone, like an AmeriCorps member, put together a list of native plant suppliers for the group.
- Shane noted that a small grower outside of Frost, WV is interested in supplying small amounts of native plants
- Kent stated the need to get DEP and DOH involved in native plant propagation to create and steady demand for native plants in the state
- Elizabeth said WVDNR will be rewriting their mining and ROW planting recommendations to include all native plants. This will help increase demand.

***Follow-up: Elizabeth will follow up on the mining and ROW recommendations. Shane will provide a spreadsheet of plants available from Alderson PMC that are currently in Bartow at the district. Evan will continue to work with Frostburg GROWS (greenhouse in Frostburg, MD that wants to supply plants for restoration purposes).***

### **Goals for 2013**

New goals for 2013 became apparent throughout the discussions noted above. The following list captures the upcoming work that was agreed upon by the ground during the meeting:

- Revive "What is Restored?" group to clearly define reference conditions and add new information based on ESD soil work
- Establish a CASRI Communications Plan to identify key messages the group needs to carry forward around things like restoration, climate change, etc. Possibly AGO could be a vehicle for this.
- Complete spruce mapping effort as Elizabeth is available to validate polygons. In addition complete prioritization effort led by TNC.
- Continue to ramp up support for the TCHS Greenhouse. This effort will be led by Dawn Washington, CVNWR.
- As the S. Apps figure out how to form a spruce restoration initiative, offer support and possibly establish priorities based on their work.

### **Fall Project Update**

- Roughly 1,500 trees were planted at Blister Swamp and 35 exclosures were built to protect rare plants on FS land that borders private property.
- The Lambert project got a boost with a 150k American Rivers grant to continue deep ripping, vernal pool creation, and red spruce planting. Implementation will begin this spring.
- Pharis Knob has been surveyed to put together a species composition prescription for work that will begin this spring.
- Canaan Valley NWR planted 2,700 spruce trees on their newly acquired North Lakes property with help from various colleges and universities. Canaan will plan another planting event for the spring around April 20 or 21<sup>st</sup>.

- TNC was awarded a 250k grant from WCS to conduct restoration work at multiple locations across the Central Apps. This work will commence soon and be used as an example project for WCS Climate Adaptation.
- Andrea, Cordie, and Evan will be traveling to TN in December to participate in the first ever SASRI meeting.

### **Continued Discussion about MOU**

- Anne Workman (USFS) updated the red spruce MOU in the FS database to extend the expiration to 2027. However, the MOU is not a FS document and every FS MOU has an expiration date of 5 years maximum. This means if there was an audit; Anne would likely need to remove the MOU from the FS system.
- Previous discussions about the MOU led to a general consensus to not review the MOU due to the difficulties of getting it signed by all of the partners. However, Evan and Andrea reiterated that the MOU is outdated, focused on the squirrel, and needs to be updated with a new message to reflect the work CASRI is actually doing. A new MOU could also capture the new partners that have been participating.
- It was decided that while a revision of the MOU isn't critical to continue working, it is something that needs to be addressed at some point in the near future.

The meeting adjourned at approximately 12:15 pm.

### **Next CASRI Meeting:**

**Tuesday, February 5, 2012**

**9:00 am to 12:00 noon**

**Monongahela National Forest Supervisor's Office**

**Conference Room A**