



2014

**Central Appalachian Spruce Restoration Initiative
Meeting Agendas and Minutes**

Tuesday Feb. 12, 2014 - Monongahela National Forest Office - 9 a.m.

AGENDA

9:00 – 9:10a

Introductions/Welcome

9:10 - 9:25a

Update on Group Coordination (Kent Karriker)

- Introduce Cindy Sandeno and John Barger, discuss coordination

9:25 – 9:40a

Subcommittee updates

- Priority Mapping Project (Ruth Thornton)
- Lambert seed mix (Shane Jones)
- Others?

9:40 – 10:00

Final Review and Acceptance of Documents (Kent Karriker)

- 2013 “long version” annual report
- 2013 “one pager” report
- 2013 “by the numbers” spreadsheet
- 2014 annual work plan

10:00 – 10:20

Ongoing Project Status Updates (All)

- Feel free to jump in and tell us about the progress of your project(s)

Break – 10 minutes

10:20 – 10:50

Update on the West Virginia Restoration Venture (WVRV) (Cindy Sandeno and others)

- Over-arching restoration partnership w/funding from NRCS and FS
- History of the effort
- Area of focus & type of restoration work included

- Partners involved to date

10:50 – 11:05

Soils updates/info (Stephanie Connolly)

- Overview of upcoming NRCS/WVU presentation on Ecological Site Description progress
- 2014 field season and tour opportunities
- Training/assistance needs, SASRI assistance needs

11:05 – 11:25

Upcoming Projects

- 2014 Spring planting and other field work – assistance needs? (All)
- Upcoming grant opportunities – assistance needs? (All)

11:25 – Noon

Short Topics

- CASRI/red spruce sign for high traffic sites (Kris Hennig, others)
- Researcher outreach subcommittee (Kris Hennig, others)
- Friends of Blackwater climate change conference (All)
- Brochure on habitat complexity (Andrea Brandon, Shane Jones, Kris Hennig)
- Building volunteer capacity – group coordination or every partner for itself? (All)
- CASRI photo organization and filing (Kris Hennig)

MINUTES

9:00 – 9:10a - Introductions/Welcome

Attendees – Kent Karriker (USFS), Andrea Brandon (TNC), Dawn Washington (CVNWR), Marquette Crockett (CVNWR), Rachel Fedder (AmeriCorps, CVNWR), Alyssa Hannah (AmeriCorps, USFWS), Melissa Thomas-Van Gundy (USFS-NRS), John Barger (USFS), Cindy Sandeno (USFS), Stephanie Connolly (USFS), Elizabeth Byers (WVDNR), Tim Tallman (USFS), Cherie Hamilton (USFS), Ruth Thornton (TNC), Shane Jones (USFS), Randall Lester (NRCS – PMC), Melinda Brooks (The Mountain Institute), Travis Miller (WVDOF), Mike Powell (TNC), Jason Teets (NRCS), Todd Kuntz (USFS), Becky Keller (AMJV), Jim Rentch (WVU)

9:10 - 9:25a - Update on Group Coordination (Kent Karriker)

- Introduce Cindy Sandeno and John Barger, discuss coordination

Kent introduced Cindy Sandeno and John Barger giving a timeline of events since Evan Burks leaving for another partnership coordinator position in Colorado. Kris Hennig took the role of temporary coordinator during the interim. Cindy has taken the partnership coordinator and will be coordinating CASRI and the Potomac Highlands CWPMA. John Barger will be devoting approximately 20-25% of his time towards assisting with CASRI and CWPMA coordination.

9:25 – 9:40a - Subcommittee updates

- Mapping subcommittee (Ruth Thornton, Elizabeth Byers)
 - Ruth gave a brief overview of development of the Dynamic priority mapping project. The idea in developing this map was to allow CASRI partner to prioritize spruce conservation and restoration projects across the range of red spruce. They started with spruce soils data, historic spruce extent, and integrated this information with present spruce distribution and spruce suitability maps. By overlaying these shape files upon other biotic and abiotic focused shapefiles, this should aid in prioritization. The final map has four different measures for spruce cover and susceptibility (none, low, medium, high).

- The next step will be to integrate Nathan Beane's (WVU) dissertation into this existing network of files.
- Following integration, the geodatabase and shapefile will be made available to partners to allow field testing of the suitability map over the 2014 field season. Group will reconvene after a season of field testing.
- Brief discussion was had about the sensitivity of data within the geodatabase and shapefile. Ruth believed that all sensitive information was removed from the geodatabase. Elizabeth believed everything within the map could be made public if it wasn't already.
- Ruth will post the geodatabase and shp. file onto the Applcc.org website and WVU GIS technical center
- Monitoring Subcommittee (Andrea Brandon, Kent Karriker, others)
 - The Rapid assessment monitoring protocol was all but finalized, however there have been some recent questions about what kinds of cover to record (Basal, foliar, total vegetative cover, etc.), so to address these questions.
 - Rachel Fedder is working on a write-up to go with the Rapid assessment monitoring protocol for volunteers to promote greater consistency of recording between volunteers, to preemptively address questions that may arise during recording. Rachel will also be working on an access database that each partner could use to record monitoring datasheets.
 - An additional meeting, a field day, needs to be scheduled to address above questions that monitoring group has.
- Communications subcommittee (Andrea Brandon)
 - Andrea announced that the TNC WV Northern Flying Squirrel and Red spruce story will be coming out in the TNC's March/April edition of their magazine. Andrea thanked all those that made the story happen include Craig Stihler, Barb Douglas, Cordie Diggins. She says it's really great grouping of photos of WVNFS, researchers in actions, etc. and the story is very well done.
 - The Nature Conservancy will be releasing additional new stories locally to coincide with this story's release.
- Reference subcommittee (Kent Karriker)
 - Good progress has been made with the reference condition document. Group has been stalled for lack of available time of participants. More work is necessary to include additional citations and to integrate this document into the "Restoration Approach" document that is currently available.
- New subcommittee suggestion, Researcher outreach committee (Kris Hennig)
 - Goal of researcher outreach committee, generally, would be to identify questions or topics that the group as a whole would like answered. These questions would not be limited to, but could include those that aid in providing adaptive management abilities to land managers and/or filling information gaps that would allow grant writers to develop even more compelling and competitive proposals for conservation or restoration projects.
 - Once these questions are identified, the group would work towards engaging and soliciting researchers interested in these topics and/or the high-elevation spruce ecosystems, making CASRI's existence known to them, and work towards incorporating these researchers work into ongoing and future CASRI-related projects.
 - Jim Rentch, Dawn Washington, Shane Jones, Melissa Thomas-Van Gundy, Kris Hennig, and Andrea Brandon expressed interest in joining the subcommittee and discussions. Kent Karriker nominated Cathy Johnson to join in. Kris Hennig will speak with Cordie Diggins to see if she would like to be involved. Andrea Brandon expressed desire to act as liaison between SASRI and CASRI regarding these discussions.

- Need to make sure that we have several land managers on this team to make sure we are asking the questions relating to on-the-ground management.
- Marquette Crockett made the point that there are many researchers that are currently working on spruce-related projects that just aren't aware of CASRI. This group could help to bridge that gap. Marquette spoke with Evan Grant from the USGS Northeast ARMI and they are working with several partners including the GWJ National Forests about clean water initiatives. **Marquette will send Cindy his contact information.**
- Lambert seed mix (Shane Jones)
 - Meeting after lunch. All are welcome to join. This meeting will be focused on the Greenbrier's interest in using a seed mix at Lambert ecological restoration area, but the principles should apply to any areas people are interested in using native seed mixes.

9:40 – 10:00 - Final Review and Acceptance of Documents (Kent Karriker)

- Kris Hennig was volunteered as interim coordinator for CASRI, completing the 2013 annual report, a brief one pager of CASRI achievements, put together the 2014 work plan, and an internal "by the numbers" spreadsheet. **The group recognized Kris for his excellent work.**
- 2013 "long version" annual report – Similar format to past years.
 - General consensus is that the document looks really good.
 - Stephanie Connolly brought up that some researchers working in spruce ecosystems "in own back yard" are not represented in document. Researcher outreach subcommittee could help with this by getting our name out and integrating with these researchers.
 - Andrea Brandon thinks the document is really good, but would like a couple changes with formatting to make the document flow slightly better.
 - **Distribution of 2013 accomplishments**
 - 2013 annual report with one-pager will be passed up chain to USFS, TNC, USFWS, and other partners.
 - 1-pager will be posted to CASRI Facebook page.
 - 1-pager and 2013 accomplishments long copy will be posted to restoreredspruce.org.
 - After above changes are made, groups agrees document is ready to go.
- 2013 "one pager" report –
 - Jim Rentch mentioned WVU not being included in "We are CASRI" section which launched a discussion about who we include as partners.
 - It was at least partially agreed that members included in MOU are partners.
 - Also, Universities or colleges aren't necessarily "partners" because they have volunteers that come out to help, but if they have researchers/faculty that attend the meetings regularly, this should qualify that institution of higher education as a "partner". Because of Dr. Rentch's ongoing involvement with the group, we agreed that WVU should be added to the partner list.
 - Once above changes are made, group agrees one pager is ready to go
- 2013 "by the numbers" spreadsheet
 - Internal document for CASRI's accomplishments in 2013
 - Marquette said that a CMS story was posted on the USFWS main website page that included a section on CASRI and 2013 achievements
- 2014 annual work plan
 - Internal document
 - Minor changes needed

- Add J. Rentch, Shane Jones, Andrea Brandon as an additional communication project for CASRI conference, SASRI coordination with this idea
 - Group agreed that if individual agencies or organizations have additional projects to add, they can do this without going out to the larger group as long as they are not requesting time or resources from the larger collective.

10:00 – 10:20 - Ongoing Project Status Updates (All)

- Feel free to jump in and tell us about the progress of your project(s)
 - TNC –
 - Plans to plant 15,000 spruce in the spring, 20,000 red spruce in the fall, and 20,000 hardwoods during 2014.
 - TNC has identified and secured 133 acres of land to conserve on the Dryfork drainage of Gandy Ranch where restoration will eventually occur (2014-2015)
 - Andrea will coordinate with others on restoration actions and set-up field outing to look at site
 - Implementation in UGN of spruce release in 2013 was 199 acres
 - Funding for 300 acres for release in 2014
 - USFS – Shane –
 - Lambert North restoration area has been prepped
 - 15000 spruce seedlings and 3000 + native plants will be put in the ground.
 - Planting crew is in place to do this work
 - There will be a May 9th planting at Lambert, a May 10th show me trip is also scheduled
 - TNC – Also planning a volunteer planting date – No date yet scheduled
 - Question for ALL to consider –
 - Give thought to future planting needs for at least 2 years from now.
 - How many spruce are needed 2 years from now?
 - Jason Teets suggested that plots should be set-up before spruce release occurs and monitored down the line.
 - Kent Karriker noted that the USFS has set up monitoring plots in the UGN release unit that was implemented in 2013. The UGN decision commits to monitoring representative examples of each type of spruce restoration that is included in the project.
 - USFS-150 – 200 acres of treatments are planned for 2014
 - CVNWR – Spring planting – 4,000 spruce will be planted with volunteer help April 12th
 - Same day there will be a Tucker the Turtle book signing after event
 - Dawn has applied for \$15,000 dollars worth of funding that, if successful, will be used for planting efforts in 2015
 - NRCS PMC – aspen root dig will be occurring soon. No date set. Randall or Todd Kuntz will contact others with date
 - WVDOF – Travis Miller – 150 acre commercial timber sale planned – Commercial spruce release effort
 - Timber is marked, 40 acres will be clear cut, but leave large spruce and under and mid-story spruce for release. 110 acres will be a partial release of spruce.
 - Most will happen is 2014, maybe going into 2015
 - Jason Teets would like to set up some monitoring plots in the Forest and volunteered to help do this.

- Travis was planning on conducting some photo plots and would like to work with Jason.
- Jason and Travis will work on monitoring for the Kumbrabow projects.

Break – 10 minutes

10:20 – 10:50 - Update on the West Virginia Restoration Venture (WVRV) (Cindy Sandeno and others)

- NRCS and FS are announcing the Chiefs' Joint Landscape Restoration Partnership to improve the health and resiliency of forest ecosystems where public and private lands meet. WVRV was one of thirteen applications selected
 - USFS will receive \$850,000 to implement – Need on-the-ground results by November to ensure money continues into future years.
 - Focus areas are in Greenbrier, Cheat, and Potomac Watersheds and include activities such as prescribed fire, invasive species removal, watershed restoration, wildlife habitat enhancement for focal species, spruce restoration, and soils/ESD inventory.
 - NRCS will receive 2.19 million for private lands near National Forest Service lands.
 - For all of the same above listed topics
 - 5.6 million dollars were listed as work that could be done
 - USFS received 850,000 for first year and hope to receive additional funds in the future.
- History of the effort
 - Andrea spoke to the resurrection of CARI and that WVRV may be away to accomplish these same goals.
- Beneficial for all parties
 - Use the WVRV as leverage point for additional monies and to sell projects as collaborative and far-reaching.
 - Key will be to tell the story of a greater landscape effort to restore a region.
 - Need to take many photos and document these projects well.

10:50 – 11:05 - Soils updates/info (Stephanie Connolly)

- Overview of upcoming NRCS/WVU presentation on Ecological Site Description progress
 - There is an upcoming seminar to highlight research that has been undertaken in the soils world around this region. Full day event with facilitated Q+A session.
 - Would CASRI want to be a sponsor of the seminar?
 - Group consensus is yes!
 - Depending on number of attendees, may need to find location to host (CVI or DNR conference room in Elkins).
 - Stephanie will follow-up with emails
 - Would be good to have a CASRI poster and information up at the event or maybe even a poster session to get more engagement and discussion. Could be a good opportunity to bring together researchers involved in spruce work that aren't engaged in CASRI.
- 2014 field season and tour opportunities
 - Stephanie asked if group would like a daylong soils day.
 - Shane thinks it would be great to have a comprehensive day including soils, fungi, squirrels, etc.
 - Shane agreed to help coordinate and arrange this day with Stephanie's assistance.
 - Set meeting for August to coincide with completion of soils field season and quarterly CASRI meeting.
- Training/assistance needs, SASRI assistance needs
 - SASRI could participate with April 9th soils seminar

- ESD work (Jason Teets)
 - ESD document has been approved by NRCS, but Jason still needs to add Rec and wildlife input to turn approved copy into certified ESD version.
 - Jason and Kent will get together to help move along the section on Rec and wildlife.

11:05 – 11:25 - Upcoming Projects

- 2014 Spring planting and other field work – assistance needs? (All)
 - Dave was wondering about the use of round-up or some other herbicide in pastures to allow red spruce planted in pastures to grow faster, decrease mortality
 - Mike Powell said TNC has tried vegetation mats and compared to non-vegetation mat spruce and found no difference in growth. Not sure if mortality decreased or not as survival rates were over 95%.
 - CASRI should take the opportunity whenever available to experiment with small treatments to ensure better success in the future through adaptive management
 - Success against invasives may depend on the site. Are you in prime habitat for spruce such as Bear Rocks or habitat with less potential?
- Upcoming grant opportunities – assistance needs? (All)
 - Andrea – WCS Grant – Would anyone like to participate with WCS grants - Proposal is due March 13th.
 - Andrea, Dawn, Shane and other USFS members, Elizabeth Byers will get together to discuss WCS.
 - Meeting to be set.
 - Andrea – “Plant a Billion” tree program through TNC is North American version of Brazilian plant a billion program that was wildly successful.
 - Red spruce ecosystem in Appalachians was 1 of 4 selected to participate
 - Monies could be used for spruce planting, spruce release, fire, invasives...whatever was needed for restoration work in spruce systems
 - Lot of irons in the fire, not everything set in stone, but the program is getting legs under it.

11:25 – Noon - Short Topics

- CASRI/red spruce sign for high traffic sites (Kris Hennig, others)
 - Cindy Sandeno, Kris Hennig, Mike Powell, Dave Saville, Maybe Molly Swailes could be contacted to see if she’d like to help design
 - Schedule meeting to talk about basic design, focus, where to place signs, where monies could be gotten to set-up signs, size of signs, etc.
 - Signs should be about importance of red spruce and should be geared towards the general public.
 - Marquette has a technical poster that might have some ideas that could be transferred over. Also Cindy Phillips has a great spruce poster that she uses on a pull-up display.
- Researcher outreach subcommittee (Kris Hennig, others)
 - Already discussed earlier
 - Meeting to be set up
- Friends of Blackwater climate change conference (All)
 - Should CASRI participate in this?
 - Kent met with Judy and Tom Rodd last week.

- Great Agenda for the conference and it would be really great to get involved.
- Spruce ecosystem is very important in terms of climate change and it would be good to have information about CASRI at this event.
- Andrea will follow up to find out how CASRI might get involved (i.e. table of information, poster, etc.)
- Brochure on habitat complexity (Andrea Brandon, Shane Jones, Kris Hennig)
 - TNC has money for development of some kind of brochure
 - What will brochure look like? How many? Who are they geared towards?
 - Probably several brochures for public, land managers, etc.
 - What will the focus of these brochures be?
 - Habitat Complexity
 - Landscape concepts
 - Elizabeth would love to see a brochure geared towards DNR wildlife managers
 - Cindy says that because of time it takes to develop these brochures we should prioritize the order of importance and focus on the most important first.
- Building volunteer capacity – group coordination or every partner for itself? (All)
 - No consensus, but some thought because of regionality of volunteers, partners should maintain own volunteer lists. However, if we want to develop citizen scientists monitoring program or something that is overarching, we would want to have group coordination.
 - Dave Saville suggested that we could speak to volunteer firefighters and suggest they do a spruce planting fundraiser and since they are so connected to community, they could bring in a lot of locals. Maybe use some of our contract funds to help support these events?
 - Act as educational opportunity and volunteer building event
- CASRI photo organization and filing (Kris Hennig)
 - Kris proposed that we collect all CASRI related photos in a given location so they could be accessed by any member of CASRI. Group-batch upload to the Applcc.org website
 - Careful of copyright
 - USFS – Photo Release is needed for all people in photos if it will be used by FS (Cindy)
 - CVNWR – We use volunteer release sheets and have included a clause for photo release. We have every volunteer fill out a form, so should be in good shape.
 - Elizabeth says she doesn't mind photos being used, but credit should be given to organization or individual that took photo.
 - Naming of files
 - Naming will be important so proper credit can be given and so that photos can be picked to highlight certain events or projects from certain dates
 - Project_Location_Five_Words_To_describe_Photo_Month_Year_Photo_Photographer/Photo_Credit.jpg
 - Group suggested we only pick best photos to include in Communications folder
 - Also, any CASRI-related photo that has value could be included. Just make sure to label and place in a descriptive folder with descriptive name for photo.
 - Send photos to Kris and he can group them and place them on the Forest Service server and then upload to Applcc.org – due March 31st (if possible)

Wednesday May 28, 2014 - Monongahela National Forest Office - 9 a.m.

AGENDA

9:00 – 9:10

Introductions/Welcome

9:10 – 10:00

Report from Reference Conditions Subcommittee

- Review draft reference conditions framework (Cordie)
- Plan for next steps incorporating HRCs into Restoration Approach

10:00 – 10:15

Spruce Mapping Update

- Spruce cover map completed (Kristin)
- Progress report on overall mapping effort

10:15 – 10:35

CASRI Communication Planning

- Update on planning process (Andrea)
- Next steps and implementation

10:35 – 10:45

Monitoring Protocol Update

- Progress report on Rapid Assessment Monitoring (Marquette)

-Ten Minute Break-

10:45 – 11:00

Spruce Strike Team

- Utilizing a strike team approach for spruce restoration

11:00 – 12:00

Project Updates/Plans for Fall

- Lambert
- UGN
- Canaan Valley
- Thunderstruck
- Pharis
- Others?

MINUTES

- Subcommittee Update
 - Priority Mapping Project
 - Members: Jason Teets (NRCS), Elizabeth Byers (WVDNR - heritage), Kent Karriker (USFS - MNF), Dawn Washington (USFWS – CVNWR), Marquette Crockett (USFWS – CVNWR), Ruth Thornton (TNC)
 - Marquette & Ruth Gone- Possibly Restructure?
 - Kent probably not on this committee in the future due to new job w/the MNF – replace w/new Forest Ecologist when that person arrives?
 - “Magic” Done with GIS using multiple layers
 - Gave priorities for restoration
 - Layer sent on April 3rd
 - Goal: incorporate soils & eco layers
 - Priority Mapping “iteration” completed
 - Early planning for restoration project started on Gauley- worked well for management – Jane Bard
 - Revisit Annually
 - Monitoring
 - Members: Dawn Washington, Andrea Brandon (TNC), Elizabeth Byers, Jason Teets, Rachel Fedders
 - Needs: Twofold-
 - Developed CASRI Rapid Assessment Datasheet
 - Took basic, simple ideas, designed for a volunteer to do it (in approx. 15 minutes)
 - Rachel working on protocol- more detail (materials needed, safety information)- should be done soon
 - Red Spruce Planting and Monitoring plan for this? Chris Barton (Univ. KY) and the FS have established monitoring plots at Barton Bench and Lambert to track restoration work. Possibly work through Jeff Skousen? (Possibly bring a grad student on board to complete this monitoring)
 - 5 Years Ago CASRI developed Rapid Assessment (20 pgs)
 - Should we formalize this document for use? Is it reasonable to use the 20 pg document?
 - Who would ‘resurrect’ this document?

- Discussion about the level of detail in this document (too much/just enough?)- Since this monitoring report is viewed as a FS document- it was agreed that the level of detail was adequate
 - At the next meeting it will be decided whether or not to 'resurrect' this longer monitoring report
 - Consideration must be given to how the data gathered through this effort will be stored and processed
 - Should a database be developed (like the biocontrol database through VTech)
 - Could we drop the data onto the Vegetation Classification Website
 - Could we drop the data right onto the CASRI website?
 - Decided that the Monitoring Group should pursue database
- Lambert Seed Mix
 - Members: Shane Jones (USFS – MNF), Kris Hennig (FWS – CVNWR/USFS – MNF Americorps)
 - 65 plots at Lambert
 - 3 seed mixes were developed using native seed
 - This native see was hard to collect, store and produced limited results
 - Seed mixes were obtained through Alderson PMC
- Communication & Outreach
 - Members: Andrea Brandon, Cindy Sandeno (USFS – MNF)
 - Through wildlife conservation society- Underspending (8000)
 - How should we spend this money? (short film)
 - Goal: High Quality Video (In 6-8 months this will be done- Andrea)
 - Northern Institute of Applied Climate Science and the USDA Climate Hubs are planning to do video on road decommissioning (youtube style- 3-5 minutes)
 - American Rivers Grant- new money for sign design for on Lambert
- Researcher/Research Outreach
 - Members: Kris Hennig, Melissa Thomas-VanGundy (USFS – NRS), Shane Jones, Dawn Washington, Cordie Diggins (VPI)
 - Kris Hennig has started a six month term Biotech position (at the Refuge)- but going to continue working CASRI

- ID specialist ?'s/ Research for resiliency
 - Will Act as Liaison for researchers in Central Appalachians
 - Objectives will be sent out to group from Kris
 - Restoration Approach Committee
 - Members: Elizabeth Byers, Jason Teets, Kent Karriker, Shane Jones, Amy Cimarolli (TNC)
 - Amy no longer w/TNC; not sure of future participation in CASRI
 - Kent probably not on this committee in the future – replace w/new Forest Ecologist?
 - Sub Committee: Reference Conditions
 - Members: Jason Teets, Melissa Thomas-VanGundy, Cordie Diggins, Kent Karriker
 - Kent probably not on this committee in the future – replace w/new Forest Ecologist?
 - Evaluate Reference Conditions for Red Spruce
 - Should we have an implementation committee?
 - Give a “lessons learned” perspectives for future projects?
 - Yes we will create this committee:
 - Members include: Mike Powell TravisMiller, Andrea Brandon, Shane Jones, Stephanie Connolly (USFS-MNF), Dawn Washington – This committee will be led by Shane Jones.
- Essential to communicate between subcommittees: Choose Lead within each committee, require a more frequent meeting where fewer are required to participate
 - Priority Mapping: Elizabeth Byers
 - Monitoring: Dawn Washington
 - Communications: Andrea Brandon
 - Researcher: Kris Hennig
 - Restoration Approach: no resolution on a lead for this committee
 - Reference Conditions: Cordie Diggins
 - Implementation: Shane Jones
 - Email all leaders with list of members in each committee
- Upcoming Grant Opportunities
 - TNC applied to the Wildlife Conservation Society for 2014 funding, but was not selected - Andrea
 - “Will run out of money for many projects in the upcoming year”- Shane
 - NRCS partnering with NGO...opportunity here? (Jason Teets)
 - 70:30 cost division (NRCS bears 70%)
 - Could spruce release be funded by NRCS?
 - Talk about: release without commercial benefit?
 - Release with commercial benefit?
 - Conservation Easements?

- Soil Survey Partnership Field Week (WVRV)
 - Worked on Elk River and Gauley Mountain
 - Will be opportunity to do more transect work if anyone is interested contact Stephanie Connolly
 - Travis Nauman gave talk about his research
 - Questions about soil survey/mapping update- next three months, the wildell soil series will be seen on WebSoilSurvey
 - Jason's group continued with ESD work (Travis Miller plot data on kumbrabow)
- Kumbrabow Forest: Travis Miller
 - Possible tour? (late summer- Aug/Sept)
 - Discuss projects (Potatohole) Could see both commercial and noncommercial red spruce restoration
 - Kumbrabow has more heavy handed management than MNF
- WVRV
 - Eco Restoration Team – 2 year position with 2 ameri-corps
 - Focus: spruce restoration, running buffalo clover and NNIS
 - Could we add wooly adelgid treatment?
 - USFS Dave Cleaves, Rob Harper- lots of field tours on MNF to look at the projects that WVRV has funded
 - Trisha Higgins, D&E Student documenting this projects from beginning-middle-end through photography (Contact her if a WVRV project you are working on needs documentation)
- Project Updates
 - CVNWR planted about 3500 plants (Dawn Washington)
 - Williams Forestry helped to complete a large planting (Gandy Ranch – TNC)
 - Upcoming Planting (25000 trees) in September (Gandy Ranch – TNC)
 - 4000 Spruce planted in Cranesville Swamp (TNC)
 - Fall vs. Spring Planting? Should we aim for one over the other given past failures/successes. MNF has often had trouble with frost heave pushing fall-planted trees out of the ground.
- Cordi Diggins
 - Working on VA Flying Squirrel
 - Located small mammal digs, found truffles- confirmed the squirrel-truffle relationship

Wednesday November 4, 2014 - Monongahela National Forest Office - 9 a.m.

AGENDA

9:00 – 9:10a

Introductions/Welcome

9:10 – 9:20a

Update on Group Coordination (Kent Karriker)

- Introduce Dawn McCarthy and Kristin Stockton, discuss coordination

9:20 – 9:50a

Subcommittee Reports

- Priority Mapping Project (Elizabeth Byers)
- Monitoring (Dawn Washington)
 - Rapid Assessment
- Communication & Outreach (Andrea Brandon)
- Researcher/Research Outreach (Kris Hennig)
 - Spatial database/research resource documentation
- Restoration Approach
- Reference Conditions (Cordie Diggins)
- Implementation (Shane Jones)

09:50 - 10:00a

Overview of Kumbrabow Field Trip

10:00 – 10:10a

Update on the West Virginia Restoration Venture (WVRV) (Stephanie Connolly)

10:10 – 10:20a

Soils update/info (Stephanie Connolly)

Break – 10 minutes

10:30 – 11:15a

Input for 2014 Annual Accomplishment Report

- Review of 2014 Annual Work Plan
- Products developed

11:15 – 11:30a

2015 Work Plan

11:30 – 12:00p

Short Topics

- Funding opportunities
- Social media - information sharing
- Building volunteer capacity – group coordination or every partner for itself? (All)
- Connecting with SASRI

MINUTES

Meeting began at 9:00 A.M.

- Introductions:
 - Dawn McCarthy is on detail until January from Wayne National Forest and will be working as acting coordinator for CASRI and CWPMA, as well as working with Stephanie Connolly on WVRV.
 - Kristin Stockton is one of the new AmeriCorps members with the Forest Service and will be working primarily with CASRI.
 - Cindy Sandeno is still on detail in Milwaukee and her long term status is still unknown.

- Subcommittee Reports:
 - Priority Mapping Project (Elizabeth Byers)
 - The habitat suitability and spruce restoration priority site mapping project has been ongoing for 5 years. Elizabeth has it on a drive if needed.
 - Since this map was the main goal of the mapping committee, should the committee now be disbanded or should more layers be added to the map?
 - Monitoring (Dawn Washington)
 - Last meeting was in September.
 - The rapid assessment protocol for plantings has been tweaked. It should now take 10-20 minutes per plot.
 - A newer form of spruce release monitoring and protocol needs to be tested. This can also serve as training in spruce monitoring. Right now, the date for that is November 14. Andrea Brandon will send details soon.
 - Current monitoring includes quick vegetation plots, % cover, and 3 strata. Takes place within 2 months – 1 year after first planting, then 5 and 10 years later.
 - Addressed the need for a centralized CASRI database .
 - Communication & Outreach (Andrea Brandon)
 - Appalachian Voices published an article about CASRI 2 weeks ago. (<http://appvoices.org/2014/10/13/rescuing-the-red-spruce-ecosystem/>).
 - SASRI hosted a red spruce symposium at the Southern Highlands Reserve at Lake Toxaway. Andrea presented on CASRI updates and lessons that might be applicable to SASRI.
 - SASRI planted 1000 trees at its first planting and still has 23000 trees!
 - SASRI is making a lot of progress. CASRI and SASRI should consider joint proposals and address mutual research needs.
 - The Nature Conservancy is developing a short video about 4 minutes long focusing on what a resilient landscape is. The video will define and explain landscape complexity and connectivity. Although it focuses on a broader scale, the spruce ecosystem definitely comes into play. The video will be shared once finalized.

- Dawn McCarthy and Kristin Stockton want to revive the biannual CASRI newsletter as an email with a series of links and short summaries, directing readers back to www.restoreredspruce.org.
- Dave Saville is working to update the website with a new content management system. Expect to see the new platform around January.
- We have a Facebook page! When applicable, tag the page in your posts or share the page. The CASRI page should reference related pages when possible to become more connected.
- Don't forget to check out the 12th annual Wreath-Making Workshop on November 30th, the Sunday after Thanksgiving, at White Grass Ski Center. Bring your own holly berries, pinecones, etc. There's an event on the Facebook page and a post on the website for more info.
- Dave is setting up an internship for Matt, a Kenyan student from the University of Nairobi, who has worked with African blackwood restoration through an organization called Clarinets for Conservation (because blackwood is used to make clarinets and oboes). The organization has had a lot of success, reaching 5000 school children this year. Dave thinks that it would be a great opportunity for Matt to see the restoration being done here. Should his Visa come through, Matt will be here from January to May. He will need host families. If you are interested or want more info, contact Dave.
- Researcher/Research Outreach (Kris Hennig)
 - The first research committee conference call was held on October 20. Representatives of both CASRI and SASRI were present.
 - More collaboration between CASRI and SASRI is desired. There needs to be more research across the range.
 - The need for a spatial database and research resource document to facilitate researcher interest and encompass current research was discussed. This would include a database with polygons that indicate where research has occurred or is occurring, and a list of contacts and links to papers.
 - Dawn and Kristin will be working on the project above and will need the cooperation of our partners to get the necessary data.
 - Planning for the 2nd High Elevation Conference is in effect. The 1st conference was very CASRI focused, and this one will be more general.
 - Stacy Clark has suggested hosting the 2nd conference down south. Knoxville, TN and Boone, NC were tossed around as possible locations.
 - Opportunity to create an interdisciplinary team that will identify shortcomings and priority needs regarding research.
- Restoration Approach & Reference Conditions
 - These committees are currently dormant.
 - Possibly job for new forest ecologist?
- Implementation (Jack Tribble)
 - Working with TNC and Dave Saville to release spruce on Upper Greenbrier.

- TNC has released 500 total acres using Wildlife Society grant; focus on Snorting Lick.
 - Ecological restoration team has released 44 acres in last 8 days; goal is 1500 acres.
 - Mower Tract and Lambert's Run are in progress and looking good.
 - Three steps to strip mine restoration: 1) dozers, 2) wetlands, 3) plantings.
 - Pilot project at Barton's Bench from 3 years ago looks good.
 - Consider collecting ideas for future projects so that if funding opportunities arise, there is already a rough draft proposal.
 - For future projects, pay more attention to priority map; possibly add more dimensions to narrow options (connectivity, flying squirrel habitat, volunteer accessibility, etc.).
 - American Rivers is planning a field trip in May on the Potomac and wants delegates; tie in to CASRI.

- Kumbrabow Field Trip
 - Continue integrating commercial timber into spruce restoration:
 - Upper Greenbrier.
 - Travis Miller has a list of things that do/do not work:
 - Good operator is essential;
 - Timber manager and biologist or ecologist on site.
 - Spruce has been found growing in disturbed areas:
 - Disturbance + seed source = baby spruce;
 - Harvesting adjacent to stands of spruce creates disturbance and leaves seed stock;
 - Not all soil disturbance is good (skid roads can cause compaction);
 - Share lessons learned with partners and educate commercial timber people. Not all goals are the same.

- Soils Update (Stephanie Connolly)
 - Two Chiefs Partnership between NRCS and USFS = West Virginia Restoration Venture (WVRV):
 - Natural Resource Conservation Service (NRCS) has 70 contracts in progress in the Cheat-Potomac, Elk, and Greenbrier Watersheds.
 - Progress in learning to communicate and work together.
 - Productive summer.
 - More funding hopeful due to success in obligating and using all of previous funds.
 - Need to start spending in January.
 - Talk to Stephanie for more details.
 - Soil Survey Update and Ecological Resource Inventory in Red Spruce Ecosystem:
 - Reclassified Mandy soils now on web (Soil Series).

- Where do soils indicate historic red spruce?
 - ESD efforts in FY15 will transition to oak-hickory; 9 plots of spruce remaining in known CMS habitat.
 - 700+ O-horizon soil samples at WVU from Cheat Mountain salamander sites.
 - Jeff Atkins (University of Virginia) has research to present, potentially at next meeting.
 - FY15 Field Week will take place near Huttonsville sometime in late spring early summer.

- Input for 2014 Annual Accomplishment Report (See 2014 Work Plan)
 - I. On-the-ground Actions
 - Most goals accomplished or in progress, some exceeded.
 - Mapping of understory red spruce at CVNWR on hiatus due to aerial photography and monitoring plantings.
 - Balsam fir and red spruce monitoring at CVNWR scrapped.
 - TNC planted 5000 spruce at Craneville Swamp Preserve.
 - There was extensive native plant seed collection. Jack Tribble has seed mixes for both spruce and wetlands plantings.
 - Need to count plantings on decommissioned roads, as well as sales made by Dave Saville to private landowners.
 - II. Restoration Approach Committee
 - Additions to Restoration Approach involving ESD soil info are done but have not been released to the public yet. Roll to 2015 Work Plan.
 - Transfer document reorganization and reference condition tasks to 2015 Work Plan.
 - There is a box of historical vegetation info that needs to be reviewed, scanned and catalogued in Kent's office if anyone gets snowbound and is feeling brave.
 - III. CASRI Communications/Outreach Plan
 - For 2015 Work Plan – create usable tools for talking about CASRI to wider audiences; kiosk planned for April and May.
 - Do we need brochures? Who is the intended audience? Would rack cards with QR codes be feasible?
 - Dave Saville is looking into more rack cards.
 - The SO has a couple hundred rack cards and the template for them. Contact Dawn McCarthy and Kristin Stockton.
 - Andrea Brandon continues to support SASRI and presented at two SASRI engagements.
 - The Tucker County High School (TCHS) Greenhouse effort is in progress; issues to be ironed out.
 - TNC video (as previously mentioned).
 - There have been CASRI related articles in The Nature Conservancy magazine and other publications.

- IV. Spruce Mapping Effort
 - All tasks accomplished.
 - Continuing to build on priority map.
 - V. Rapid Assessment Monitoring Plan
 - All tasks accomplished.
 - Revisit of sites ongoing.
 - VI. Research Needs Identification and Researcher Outreach
 - Task accomplished.
 - VII. High Elevation Spruce Conference
 - Task accomplished.
 - More detailed accomplishments needed for accomplishments report. Expect to be contacted by Dawn McCarthy.
- 2015 Work Plan
 - USFS – What is NEPA ready for red spruce restoration?
 - Input about on-the-ground work plans.
 - A proposed 2nd High Elevation Conference in Fall 2015.
 - Integration with WVRV and CASRI.
 - Should CASRI present at a NRCS State Technical Committee meeting?
 - Work with NRCS to find and connect with willing landowners that would like to incorporate red spruce restoration on their private lands?
 - Need willing participants; educational brochure for landowners?
 - Short Topics
 - Funding
 - Jack Tribble has a list of funding sources pulled from the www.restoreredspruce.org.
 - Stewardship contracting – consistent funding stream.
 - Send info on how many seedlings you will need to Dave!
 - Social Media
 - Work on more cross-posting between CASRI and Appalachian LCC.
 - Partner organizations should include CASRI on their websites, if possible.
 - Volunteer Capacity
 - Dawn McCarthy and Kristin Stockton can facilitate volunteers through the AFHA network and other routes if you contact them ahead of time.
 - Dr. Patch Adams really wants to provide volunteers (like several hundred, plus supervisors) and will accommodate lodging.
 - Consider packaging projects in a way that makes them easier to sell to volunteers.
 - Plan for the coordinator after Dawn McCarthy – Should they coordinate volunteers?
 - Should we call for volunteers on www.restoreredspruce.org?

- Consider using volunteers for more than plantings (i.e., monitoring).
 - Send tentative planting dates to Dawn McCarthy A.S.A.P.
- Connecting with SASRI
 - Andrea will reach out to people for assistance with SASRI as need arises.
- Final Notes:
 - Doug Gross works with on boreal forest birds such as Yellow-bellied Flycatcher, Blackpoll warbler, Swainson’s Thrush, and others in PA and is an avid “spruce evangelist.” Could we extend our geographic range?
 - Send info on how many spruce seedlings you will need to Dave!
 - **Next meeting is scheduled for Wednesday, February 4, 2014 at the Monongahela NF Supervisor’s Office or WVDNR office .**

Meeting adjourned around noon.

Kumbrabow State Forest Field Tour

Tuesday Sept. 16, 2014

AGENDA

9:00

Meet at Kumbrabow State Forest Office (approximately 30 minutes from Huttonsville Exxon; 45 minutes from Slaty Fork)

9:00 - 9:15

Overview of Day and Introductions

9:30 – 10:30

Reference Condition Discussion - Piney Ridge Trail

- What is it (Composition/Structure above ground; Spodosols/organics/fungi below ground)
- What does it mean?
- Why do we care?
- Is it truly restoration or just habitat management?

10:30 – 11:15

Active Management Discussion – Turkeybone

- Incorporating spruce release into timber management
 - Spruce release wasn’t the original plan, but the benefits of consideration.
- Overview of what was planned vs. what was implemented

11:15 – 12:00

First Spruce Release Research Site – Off of Rich Mountain Fire Trail

- Overview of research/publications and update on what is being learned and how it can be applied

12:00 – 1:30

Lunch, Active Management, Spodosols and so much more - Rich Mountain Observation Area

- Lunch at overlook
- Walk through active management one year after the fact
- Soils observations and discussion

1:30 – 2:30

Second Spruce Release Site – Off of Rich Mountain Fire Trail

- Future 'Accelerated Restoration' Area
- Thoughts on Day
- Where to From Here?

CASRI/SASRI Research Subcommittee Meeting

Canaan Valley National Wildlife Refuge

October 20th, 2014

AGENDA

9:00 – Introductions (Kris Hennig (CVNWR), Tom Schuler (USFS-NRS), Jim Rentch (WVU), Cordie Diggins (Virginia Tech), Cathy Johnson (USFS), Stacy Clark (USFS-SRS), Dawn McCarthy (USFS), Dawn Washington (CVNWR), Kristin Stockton (AmeriCorps))

9:00 – 9:25 – Why is a research committee needed for CASRI/SASRI?

- **Everyone took moment to talk about their involvement in SASRI or CASRI and how they foresee this group helping in aspects of research.**
 - Kris Hennig – While with USFS, saw opportunities to answer restoration questions with so many projects and treatments being implemented. Thinks this group could go long way towards identifying those questions and linking researchers with land managers.
 - Tom Schuler – Important to break down artificial barriers of R8/R9 Forests and focus on research possibilities across the more realistic red spruce range
 - Stacy Clark – Southern Research Station not engaged in a whole lot of research on red spruce communities currently. However, going out to look at some old spruce stands in the near future. Possibly implementing various spruce studies including 1) spruce growth rates related to climate and 2) nantahala national forest spruce seedling planting with various treatments. Interested in group to connect with other researchers within spruce systems and to possibly conduct range wide studies related to spruce. Group will facilitate sharing of resources.
 - Cathy Johnson is interested in building baselines for wildlife or vegetation before climate change erases that information.
- **What kind of scope do we foresee this group having?**

- Tom Schuler – Objectives must be broad to encompass different agencies and objectives of those agencies. Need to break the artificial barriers between central/south apps. We are studying essentially the same things.
- All agree that a broad scope is good. It should encompass projects that are similar to south/central apps, but some projects will be very specific to CASRI or SASRI such as Cheat mountain salamander work.

9:25 - 10:35 – Objectives

- **What objectives does this committee feel are realistic and helpful to move forward research between SASRI/CASRI?**
 - Stacy Clark feels that we need to begin conserving genetics and ensuring our seed sources are the correct genetics for specific regions. Region 8 of the USFS is incredibly interested in getting researchers studying their red spruce ecosystems and there could be some other projects that span into the whole range.
 - Cathy Johnson expressed an urgency about climate change and getting researchers out to these spruce ecosystems to document ecosystem baselines. This will aid in adaptive management later on as well as restoration objectives.
 - Stacy Clark believes that sharing resources is incredibly important and could facilitate research in the range. Developing resources that would assist researchers in identifying possible project sites.
 - Jim Rentch – We can't convince researchers to do specific projects, but we can make it more easy for them to do work on our land by providing ready access to resources.
- **Spruce restoration and conservation dynamic map/document, researcher resource document**
 - **Group discussed various resources that could be included in a document/digital map that could be made available to CASRI/SASRI and other researchers to help guide research projects.**
 - **Dawn McCarthy volunteered Kristin Stockton to help put together this spatial map of past projects.**
 - **Kristin may need some additional GIS training to help put together maps**
 - **Everyone agrees that this document/dynamic GIS map should not contain data, but rather have all past restoration projects for Southern and Central Apps related to red spruce and any other resources related to red spruce restoration/conservation. Omit sensitive data, but provide contacts for data keepers and agencies/NGO's so that researchers could collaborate with them to answer various questions.**
 - **Document/dynamic ma would be include spruce-related restoration and conservation information for CASRI and SASRI**
 - **Things to include –**
 - **Restoration treatments – spruce plantings, spruce release, deep ripping, gap creation, native seedings, plantings of other spruce ecosystem plants, monitoring sites, wetland creation,**
 - **Historical restoration projects before CASRI/SASRI**
 - **Conservation aspects – Spruce-related wildlife/fauna,**
 - **(Tentatively) Future project sites to facilitate Before, After, Control, Impact studies**
 - **Contact information to reach data keepers, land managers, people who could give research permits**

- Bibliography of past spruce-related research in these areas
 - Communicate with mapping committee to identify overlap, can we merge these two mapping efforts?
 - Make publicly available on “Restoredredspruce.org”
- Tom Schuler mentioned large “150-ish page” document put together in early 1930’s with a variety of restoration projects that were eventually pushed aside due to other priorities. Could be great resource for southern Apps in identifying past restoration projects that we could study learn from.
- We will bring up spatial database/research resource document at next CASRI meeting and request everyone compile “red spruce restoration/conservation” resources and send to Dawn McCarthy and Kristin Stockton
- Stacy Clark will provide lit review/bibliography to group about past projects in southern Apps

- Next need – Spruce conference

Spruce conference to get researchers from southern and central Apps together to share research. This would be a continuing step to grow a spruce research network.

- Tom Shuler suggests that this should really happen down south so that it is easy for them to attend and get invested in.
- Stacy Clark’s supervisor Katie Greenberg is interested in a red spruce or high-elevations conference. Stacy will speak to Katie about where she is at with this idea and update Kris with where Katie is with this.
- Conference could include convening a panel of researchers (Interdisciplinary team?) to identify questions and prioritize questions for spruce restoration and conservation
- Conference needs to include both southern and central apps researchers to be effective
- How do we distribute conference information to largest audience?
 - List serves
 - USFS, FWS, DNR email lists?
 - What else?
- How do we fund this conference?
 - Past funders included MNF, WVTNC, USFWS, Highlands conservancy, WVU, Northern Research Station
 - Would Forest health protection agency be a good source of funding for conference?
 - Tom or Stacy will investigate

Things to follow- up on post meeting –

- Tom and Stacy will investigate funding sources for spruce/high-elevation conference
- Stacy will speak with Katie Greenberg and see what Katie’s thoughts are and if she’s moved forward with any specifics related to a spruce conference and contact/update Kris about this
- Research committee members will begin assembling past spruce projects related to their agency or non-profit
 - Kris will contact TNC to see if they will do this
 - Send to Dawn McCarthy and Kristin Stockton

- We will request help in compiling spruce related projects, past, present and future, from CASRI members at next meeting
- Someone asked who the liaison between CASRI and SASRI is
 - Kris thought Andrea Brandon (TNC), but thought that might be because of lack of CASRI coordinator consistency. Kris will connect Andrea and Dawn and they can discuss future involvement in SASRI as liaison between groups.
 - Kris will get contact info for Katherine Medlock who is the defacto SASRI coordinator