

CASRI

The Central Appalachian
Spruce Restoration Initiative

2016

Central Appalachian Spruce Restoration Initiative

Meeting Agendas and Minutes

Thursday, February 11, 2016 – Monongahela National Forest Office – 9 a.m.

Agenda

Call in: 888-844-9904, passcode 7620832#

9:00 – 9:15a

Welcome and Introductions

9:15 – 9:35a

Spruce conference update

- Call with SASRI Feb. 17th, 10:30 A.M., 1-866-385-9623 Passcode: 9847245426
- Conference committee participants?

9:35 – 10:45a

CASRI Planning

- Round Robin Sharing – 2016 Work Plan and Out-year Plan
- Connecting CASRI Work Plan to Strategic Plan

Break – 10 minutes

10:55 – 11:15a

Spruce Seedlings – Ordering and Payment

11:15 – 11:35a

Spruce and hemlock restoration at Blackwater Falls State Park (Amy Hill)

11:35 – 11:50a

2015 Reporting Check-in

- Accomplishments
- One-Page
- Website and Facebook

Wrap-up and schedule next meeting

Minutes

Meeting began at 9:00 A.M.

- Welcome and Intros
- Spruce Conference
 - There will be a call with SASRI on Feb. 17th at 10:30 A.M., 1-866-385-9623. Please let Darrin know if you are interested in joining the call.
 - The conference will still take place down south as of this point. If we are unable to make arrangements there, be prepared to plan to host here.
 - A conference is important to bring us together with other researchers and groups.
 - Southern Appalachian Man and the Biosphere (SAMAB) is a group in the Southern Apps interested in working with us on the conference.
 - SAMAB was already planning on having a conference and is willing to partner on our theme of red spruce and high elevation ecosystems.
 - Representatives of SAMAB will be on the upcoming conference call.
- Round Robin – Planning work using Action Plan and prior Accomplishments Reports
 - Three main focuses – Restoration & Implementation, Research & Reference, Coordination & Outreach
 - See CASRI Work Plan for proposed 2016 projects
 - Spruce release paper – Schuler, Ford, and Rentch
 - Wanted to see what worked with partial, full, and no release.
 - Only the full release (all hardwoods overtopping spruce cut) had results.
 - Even full release was 25%; really need 50%.
 - Results have been very useful in serving as a scientific guide for management.
 - Pocahontas County has a senior year mentorship program. Amy Coleman, the new Pathways at the Supervisor's Office could potentially coordinate their help for plantings.

- Darrin recently met with the National Forest Foundation, congressionally sanctioned Forest Service-based nonprofit. Provide aid in coordinating and supporting local organizations to work with the USFS. Also able to hold funds and provide access to grants. Able to use corporate partners for matching. Darrin is working on the Treasured Landscapes designation. If his proposal is accepted, it will increase our national exposure and provide new opportunities.
- Our website is great. Try to make sure that you are sending Dave Saville or Darrin Kelly your press, so that he can put it on the site.
- Spruce and hemlock restoration at Blackwater Falls State Park – Amy Hill (entomologist with U.S. Forest Service, State and Private Forestry out of Morgantown); state collaborator is WV Dept. of Ag.
 - WVDA has been very involved in treating hemlock wooly adelgid at Blackwater State Park.
 - Treatments are essentially putting a bandaid on the problem until another solution can be determined. Beetle biocontrol success has been very limited by a small supply.
 - Set up grid survey and looked at hemlock along roads and trails. 38 grids. 14% of hemlocks surveyed healthy, 40%(?) infected, 20%(?) dead.
 - Treating all hemlocks is not ecologically feasible.
 - Winter mortality has slowed down, but not stopped, the hwa.
 - Meeting Dec. 1st with many of CASRI's partners – want coniferous sustainability at BW Falls with focus on T&E and high priority species.
 - Currently, no resource management plan for the park. Travis Miller is checking into prepping a plan with DOF.
 - Jason Teets pointed out that the park needs updated soil profiles and ESD's.
 - Exploring spruce replacement in infected hemlock groves at Blackwater Falls
 - At CMS sites, discussed treating some hemlock to continue to provide shade, but let others die or girdle others to release spruce. Natural gaps are filling with nothing but spruce. The hemlock is suppressing the spruce; however, many are unhealthy with less than 50% foliage. Once spruce is established, quit treating hemlock.
 - Along trail, treat hemlock, girdle some hardwoods to release spruce. Provide greater connectivity of WVNFS.
 - Areas like the Yellow Birch Trail have CMS habitat potential. Start girdling hemlocks and replacing with spruce?
 - Use as a platform to educate public.
 - Important to control shade component to prevent invasive species colonization.
 - WVDA is the lead agency on proposal; Amy's office is assisting.
 - Great opportunity for research.
 - There have been spruce plantings in the park and on adjacent USFS lands in the past, around 2010. Trees are looking good.
 - Opportunity for spruce seeds for use in direct seeding

- Dave Saville is interested in Amy Hill's work at Blackwater Falls State Park (see below). Dave has a lot of spruce seeds and is interested in direct seeding hemlock stands to replace with spruce. Jack Tribble has asked watersheds group to cross reference areas with infected hemlock with areas that would be viable for spruce. Many places potentially too dry and/or low elevation for spruce.
 - Dave culls spruce seed with a low (20-30%) germination rate. He has bags of these waste seeds, which would be good for experimenting.
 - Amy, Mike Powell, Travis Miller, Whitney Bailey, Kristen Carrington, and others are trying to set up a meeting with Matt Baker, the superintendent of BWFSP.
 - Met with Sam England, Chief of SPs in Charleston. On board but ultimate decision is with Matt Baker.
 - This is a good topic for the spruce conference.
 - Spruce Seedlings – Ordering and Payment
 - We need to decide how to best help Dave manage supply and funding of our red spruce seedling supply.
 - There's a lot of turnover in CASRI.
 - Dave uses plugs, which are a different approach to the traditional bare root and transfer bed methods. Most of the big companies out West use plugs. Plugs are easier to plant, less transplant shock, overall better survival and growth rate (90-95% survival). Unfortunately, there is limited production.
 - It would be great if someone in WV grew them, but there is currently nobody. It's difficult to find someone to grow trees on demand for you.
 - Bob Marshall with WV Highlands Conservancy manages our funds and is a big supporter of our work. Might be a good party to handle conference funds.
 - It's very important for Dave to know demand ahead of time.
 - CASRI needs to consider a large scale, multi-agency approach to planning future plantings.
 - Dave has to pay to grow the trees for future years. For example, he needs to begin growing trees for 2018 now.
 - Letting Dave know an estimate for future projects will help him to better meet the demand for seedlings so that everyone will get their trees.
 - We need a mechanism in our partnership agreement where we can pay for our trees ahead of time. We need better forecasting.
 - Dawn can possibly get her Friends group involved in preordering.
 - Hopefully, knowing how this all works will help partners help Dave to smooth the process.
 - Dave has gotten requests for larger trees. This year, Dave is going to start growing leftover trees in 4" tree bands to start some larger, containerized trees for different projects.
 - Dawn may keep some of the trees at the Refuge and can work with Tucker County High School.

- Dave has a ton of seed. If you are working on a project with ground disturbance, consider tossing some seeds down.
- Closing comments
 - The soils work showing historic spruce distribution has been an immensely valuable tool in moving CASRI forward.
 - We should find a way to get spruce planted at Kumbrabow.
 - The next CASRI meeting will be held May 19th, 9:00 A.M. at the Forest Service Supervisor's Office.

Meeting adjourned at 12:05 P.M.

Thursday, May 19, 2016 – WV DNR Office – 9 a.m.

Agenda

9:00 – 9:15

Welcome, Introductions and Approval of Minutes

9:15 – 9:45

2016 Projects Update (speed round-robin)

9:45 – 10:00

Education & Outreach

- Spruce plantings
- Discover Nature Day
- Forest Festival?
- Carbon sequestrations blog post
 - <http://blogs.usda.gov/2016/05/12/climate-smart-restoration-of-appalachian-forests/>

10:00 – 10:15

Discussion: Expanding the geographic area of CASRI activities

10:00 – 10:15 BREAK

10:15 – 11:00

Research Update & Discussion:

Spruce forests' nitrogen/carbon cycling responses to climate change and air pollution and it's applications to spruce restoration (Dr. Richard Thomas and Justin Mathias, WVU)

11:00 – 11:15

Private properties with an opportunity for red spruce restoration in West Virginia (Leah Howard, TNC)

11:15 – 11:30

Revisit discussion RE: CASRI activities

11:30 – 11:45

Spruce conference committee update

11:45 – 12:00

Wrap-up and schedule next meeting

Minutes

Round Robin

- Whitney Bailey (USFS) – spruce restoration and monitoring through WVRV funding.
 - Revising monitoring protocol and goals.
 - Recent funding opportunity – Secure Rural Schools. Available in 2017.
- Melissa Thomas-Van Gundy (USFS-NRS) – commercial spruce release research.
 - Joint Venture between WVU, NRS, and DOF.
 - Funding for a student for 2 years. Beginning in fall.
- Jeff Vanderhorst (WVDNR) – WV state attribution and association data updated.
 - Co-authoring paper on Carolinas and Virginia.
 - Working on 3 CFA's for wildlife action plan – Greenbrier, Patterson Creek, Cacapon, and Gorges.
- Dawn Washington (CVNWR) – planted 35 acres this spring with 80 volunteers. Potomac State planting the following week. Staff tree planting. 4000 total spruce. 200 balsam fir.
 - Getting air photography for stand data.
 - Also ground truthing, vegt. mapping. Working with J. Teets on site descriptions.
- Kim Tarter, Gauley RD (USFS) - 2,750 acres planned for red spruce restoration.
 - Want to use 2014 Farm Bill.
 - Spruce growing in areas with beech bark disease. Dying beech send out excessive shoots that outcompete spruce.
 - Currently limited to 3,000 acres. Have more acres in mind if restoration is a success.
 - Looking at cutting the diseased beech to release spruce; may also herbicide diseased beech. Might plant spruce in openings. Decision sometime next year.
 - Interested in funding opportunities.
 - Whitney and Ben + ERT can assist. Melissa should also be involved.
- Justin Mathias– established 7 high elevation red spruce sites in WV and VA. Looking at effects of acid deposition and acid rain.
- Travis Miller – May 5th planting with DNR, DOF, USFS, and Dave Saville.
 - 1,500 spruce on KSF.
 - Research with NRS.
- Ben Rhodes – Working on big land deals. 1,000 acres in the Laurel Fork watershed. Putting in permanent restoration scheme.
 - ERT – spending most time on NNIS in red spruce habitat. Finished a few hundred acres and 55 acres of red spruce release.

- Thomas Minney – CASRI has a very impressive track record. TNC donors were impressed with the scale of landscape restoration.
- Kristin Stockton has accepted a position with the WVDNR as a mussel technician. She will stay on as an AmeriCorps with the Forest Service in a very limited capacity until Sept. and will be checking her email at least weekly; however, for any CASRI correspondence, consider Darrin (dpkelly@fs.fed.us) your primary contact.
- Darrin – Has been doing tours with the Washington Office.
 - TNC shared Thunderstruck.
 - Melissa Thomas-Van Gundy and Travis Miller showcased work.
 - WO was very impressed. New model is moving toward outcomes. Thanks to those who helped facilitate tours. Lots of positive feedback for CASRI.

Education & Outreach Updates

- Check out Stephanie Connolly's carbon sequestration blog post. (<http://blogs.usda.gov/2016/05/12/climate-smart-restoration-of-appalachian-forests/>)
- Forest Fest is approaching.
 - This year's theme is Invasive Species.
 - Kate is retiring, so Darrin may inherit some of those responsibilities.
 - Contact Darrin if interested.
- Key to expanding CASRI's work is having a clear narrative that shows how future projects are connected to greater landscape and goals.
 - Be aware of top options for funding.
 - Focus on restoration economy.
 - Apply CASRI-like model to coal fields. Former coal jobs converted to restoration. (Market piece/ vision document)
- CASRI should make a map showing restoration by year.
- New Boy Scout camp in New River Gorge.
 - Next year there will be 40,000 scouts there for jamboree.
 - Big focus on ecology and conservation. Natl. 2017, Intl. 2019.
- Involve CASRI in PowerPlus.
- George Ward Elementary Planting
 - 32 3rd grade students and 3 chaperones engaged
 - Day 1: Lesson on Healthy Forests/Healthy Streams followed by Web of Life activity.
 - Day 2: Students planted spruce on decommissioned road in the Greenbrier RD and visited Guadineer Knob.
- Discover Nature Day
 - 1,300 in attendance.
 - CASRI/red spruce booth led by Dave Saville and the ERT.
 - Visitors learned about spruce ecology and restoration. Dave had spruce seedlings to give away.

Widespread forest recovery across the Central Appalachians following reductions in pollutant emissions

- Dr. Richard Thomas and Justin Mathias started off doing research on old, but small cedars in Smokehole and noticed an unusual growth pattern.

- 450 year old cedar trees. Cross-dated tree cores with WinDendro.
- Spike in basal area increment starting in 1980's.
- Looked at isotopes of trees. (Cave Mtn area)
- Weighing the World's Trees – in many places, trees are growing better than expected.
- Now looking at areas focusing on red spruce. Cored trees at McGowan Mtn, Span Oak Run, and Cranberry Glades.
 - Seeing a similar growth trend.
 - Decline around 1940. Spike in 1980.
 - Growth rate equal to that of juvenile growth.
- Wanted to see if increase in growth was related to decrease in pollutant emissions (sulfur and nitrogen) following Clean Air Act.
 - Questions: What does recovery of trees look like in terms of growth and physiology? What is the time scale?
 - Hypothesis: Reductions in acid deposition will lead to a reversal of the detrimental effects.
- Looked at ratios of carbon isotopes ^{12}C and ^{13}C . Looked at diffusion through stomatal pores. Able to use fractionation to determine ratio. Shows how much carbon is being fixed. How much photosynthesis and stomatal conductance.
- Critical years: MCG 1992, SOR 1982, CGL 1992; Trees on limestone outcrop recovered 10 years faster than spruce. Could be physiology, exposure to atmosphere, or soil buffering.
 - 1940-1991 = 50% decline in tree growth; after 1991 67% increase in tree growth.
 - Red spruce shows 11% decline, then 40% incline. 48% decline stomatal conductance, 60% incline. Saw similar results for red cedar, but smaller decline. Red cedar is less sensitive to pollution, at least in that environment.
- Did analysis of potential environmental drivers – land use change, fire, pollution, change in climate, precipitation changes, drought, increased atmospheric CO_2 . SO_2 , NO_x emissions have declined.
 - Looked at nitrogen ratios to examine ecosystem nitrogen availability. Change significantly after 1991, uniformly across all sites.
 - Before 1991, high nitrogen input, low demand = nitrogen stays high. After 1991, decline in nitrogen input, higher demand. Shows recovery in ecosystem. Retention of nitrogen. No longer leaching from soil.
 - Strong relationship across all sites between isotopes of carbon and isotopes of wood.
 - CO_2 has increased by 13% since 1991. 60% increase in stomatal conductance. Synergistic response. Decrease in emissions related to increase in photosynthesis.
 - Decline in stomatal conductance due to pollution was 3.8x greater than the effect of CO_2 in red spruce. Twice as great in red cedar.
 - .04 degree change in temperature in WV. April has increased by 1.44 degrees Celsius. Could signify change in spring phenology. Tree may respond better to warmer April temps throughout year.

- Less variation when viewed site by site.
 - 4 cm; 25.6% change in above ground biomass assuming no declines in growth. 0.75 Pg of carbon lost due to pollution. 50% greater than the combined mass of every human on the planet...
 - Need to refine model to get a true picture of how pollution is effecting carbon storage of trees.
- Conclusions – Spruce in Central Apps are recovering from centuries of acid deposition.
 - Is the recovery widespread?
 - Is it a transient response?
 - What do other forests in countries like China look like?
 - Air pollution contributes to historical changes in stomatal conductance. Carbon storage is severely reduced by acid deposition.
- Richard wants suggestions for sites in WV with older growth deciduous broadleaf trees (tulip poplar, oak) to core. Would also like to expand into PA, NC, and Southern Apps.
 - Grandfather Mountain (NC) possible option.
 - Thomas Minney has connections in China.
 - Jeff Vanderhorst also has sites of old growth stands.
 - Chestnut oak seems to be sensitive to acid deposition.
 - Best if trees were mature by 1940, since trees behave differently during juvenile period (first 35 years). 115 years or greater.
 - SASRI may be good contact.
- Timing: Red cedar publication is out. Red spruce is in review. Would like to get more cores this summer.
- Success of old growth spruce bodes well for success of newly planted spruce.

Private properties with an opportunity for red spruce restoration in WV (Leah Howard)

- Continuation of previous AmeriCorps, Victoria Woltz's map.
 - First map had errors with property lines.
 - Leah removed public lands, added topo lines, towns, and rivers.
- Categories: Improvement and Protection – mature, high density; Release – moderate density in understory; Release and Plant – low density, scattered trees.
- 3 companion maps.
 - Distribution of private properties by county. Number of properties do not correlate with acreage. Broke down counties – avg., min., and max. acreage
 - Endangered species – looked at properties that overlap with CMS and WVNFS habitat or are essential parcels for habitat connectivity.
 - Private properties that need spruce that are near past or current spruce restoration sites. ERT sites, Refuge, and Dry Fork.
- Excel sheets with all private property owners.

Spruce Conference

- There will be a call on the conference in the next two weeks. Let Darrin know if you are on the conference committee or interested in being on the committee.

The next meeting will be held August 18, 2016, 9:00 A.M. at the Forest Service Supervisor's Office in Elkins.

Thursday, August 18, 2016 – Monongahela National Forest Office – 9 a.m.

Agenda

Call in: 888-844-9904, passcode 7620832#

9:00 – 9:15a

Welcome, Introductions and Approval of Minutes

9:15 – 9:45a

2016 Projects Update (speed round-robin)

10:00 – 10:15a

Education & Outreach

- Facebook
- Website
- Forest Festival
- Other press releases or articles?

10:15 – 10:30

ERT Update and Other Implementation Projects

10:30 – 10:45a

Research Update & Discussion

- WV Northern Flying Squirrel Hair Snares
- Northern Research Station
- Other?

10:45 – 11:15

Spruce conference committee update

- CASRI's Conference Committee chair nominations (with SASRI co-chairs)
 - Conference Location and Logistics
 - Research, Plenary & Proceedings
 - Fundraising and Outreach

11:15 – 11:30 Bin Items and Misc.

11:30 – 11:45 Wrap-up and schedule next meeting

Minutes

Present:

Melissa Van Gundy, Gary Peebles, Dave Saville, Travis Miller DOF, Mike Powell, Tom Schuller, Stephanie Connolly, Chris Haberland - WO , Kent Karriker, Breezy Snyder, Leah Howard, Julie Fosbender – MNF Public Affairs, Whitney Baley—Mon Forest Ecologist, Dawn Washington, Ben Rhodes, Deborah Landau-TNC MD Ecologist, Darrin Kelly, Campbell Moore

Updates

Stephanie—doing a ton of work in soils and spruce. Promoting things thru USFS Climate Change Office. Been continually highlighted at national level for providing guidance for President's Climate Change Framework. "you can sequester more carbon through soil management". "don't ever forget to take the soil carbon into account". Working on how to maximize soil C development within restoration work.

-think of 4.1 as a tool to guide to use spruce to drive belowground processes such as increasing soil C.

Whitney-working on solidifying monitoring protocols on spruce restoration areas. Monitoring on a 3,5,10 year cycle. Focused on ERT restoration areas, but there could be some mineland reforestation stuff. Spruce height, % cover, forest composition, basal area, snags. Ben—"not for doing a research project, but the data could be available for that. Really just to let them know which intervention works best" Darrin—*can you send me her monitoring doc? Also should be sent to Tom Schuller.*

Deborah Landau (TNC MD)-spruce planting (20th year of planting) in western MD. Working on forest connectivity trying to link WV, MD, PA.

Breezy—EVI allows you to see where conifer presence is. Could be useful for future monitoring of spruce presence

Tom Schuller-providing \$ for hair/snare project to ID presence of N WV F squirrel. Saw some Norway Spruce seedlings coming in. Masters student will be looking at relationships between parent spruce and seedlings/saplings. Doing some stem cores to inform a growth and yield model (no model exists at this point). Growth response is modest from the release work they did.

Mike-RES is the mitigation bank on the Dalen property. This closed last week so now they will be doing restoration work. Arbogast property has opportunities for WV balsam fir restoration. Potential for restoration work in Blackwater Falls SP, looking at restoring spruce as hemlock declines, based on a grant with a strong education/outreach component. Good opportunities since Blackwater Falls is such a visible place.

Dawn Washington—Canaan Valley is building a cheat mountain salamander underpass on some of the ski trails (the high elevation ski trails are a huge problem for CMS crossing). Stephanie—cheat mtn salamander wants to be in super low pH (<3.5) soil. Developing a high quality veg map of the refuge. Also, they are doing some girdling for spruce release. Spruce planting on 9/17 at 9am (on the refuge facebook page).

Dave—collecting serviceberry seeds. Has some spruce trees remaining (check on website, both plugs and containerized trees). Dave has 2000 trees for the fall. Will sell containerized plants for \$4.50.

Shane—Mower NEPA is almost done. Objection period closes at end of month—no objections. Only comments which are already resolved. 1,126 acres of mineland restoration. 4,000 acres of young dense spruce. 5,100 acres of mixed forests that could use release. Green Forests Work has potential large

funding for spruce restoration work beyond the Mon on private lands. *I need to catch up with Chris Barton.*

Nick (NRCS? USFWS?)-fencing on Yokum knob to protect stream and 30 acres of spruce.

Darrin-Stewardship agreement stuff. NFF has been able to get Snowshoe to commit to ski conservation fund (\$1/ticket. Up to a couple hundred thousand \$/year). Would go to spruce and trails on the Nat Forest. Whitegrass has also signed up. Snowshoe also has a bunch of mineland restoration work that could be done and would be funded separately, probably with \$ from Green Forests Work.

Kent-WVRV \$ ends at end of FY17. Big gap in funding. Green Forests Works can help fill these gaps some. NFF and American Forests, as well as Stewardship \$. “convincing corporate America that it would be a good investment for them to invest in restoration to stabilize soil and water”.

Education and Outreach

-Website/Facebook—All good

-Forest Festival: Oct 1-9. Thurs Oct 6 is the conservation village. Working on a theme—nonnative invasives had momentum as a theme. Could partner with Dept of Ag which has a lot of good presentations and visuals that could be used. Watershed health as an alternative option—was used 3 years ago.

ERT Update

Most work this year was in Randolph

500 acres of NNIS in red spruce ecosystems. 450 acres of new red spruce release. Added canopy gaps to 200 acres of red spruce release from last year. For rest of year they are aiming for 750 acres for this year. Putting in monitoring plots. Baseline monitoring on 40 plots has been done. Monitoring will be done in future on 8-9 plots. Monitoring looks at stem counts and % cover for each of 5 classes (emerging seedlings up to canopy). The 40-50 baseline plots are available for somebody else to do a bigger research project. Field visit planned for September 7.

Research Update

There is a salamander mesocosm experiment happening, moving salamanders to different elevations (with similar veg) in order to estimate impacts of climate change. (Issue of similarity in soils may not be known.)

-Hair-Snare in upper Greenbrier as well as acoustic detection. This is being used via adaptive mgmt. to see if our work in the upper Greenbrier has any negative impacts.

Chris (Landscape Restoration and Ecosystem Services at WO, working with Luanne Lor): working on national planning tool, or a tool to quantify/qualify ecosystem services spatially. To be able to present benefits/costs of doing a project in a particular area so you could prioritize areas based on tradeoffs of ecosystem services. Compiling data across agencies. Doing pilot with the Mon, hope it will be useful. Services included: water quality/quantity, recreation, carbon. Could add in other things if data is there, like NTFPs or something. “Easy to load GIS layers” is the goal.

Tom Schuller: would be great to have a hands on workshop on ecosystem modelling focused on user friendly stuff.

Conference

-Probably will be held in TN. However, there is a strong feeling at this CASRI meeting that SASRI doesn't have the interest/capacity to actually organize it. It is behind schedule. If CASRI took it over it would need to be Oct probably, but funding can also be tricky at that point.

-Stephanie wants soils.

-Jim Rentsch needs to be involved. Could be potential conference organizer, but depends on when/whether he retires.

-Potential venues in WV are:

-We want a date, location, call for abstracts/proposals. The funding logistics are tricky.

Next Meeting

Wed Nov 16. 9am.

Thursday, November 15, 2016 – Monongahela National Forest Office – 9 a.m.

Agenda

Call in: 1 (888) 844-9904 Passcode 9171244#

9:00 – 9:15a

Welcome, Introductions, Agenda Items and Approval of Meeting Notes

9:15 – 9:45a

Fall 2016 Projects Update (speed round-robin)

10:00 – 10:15a

Education & Outreach

- Facebook
- Website
- Forest Festival report
- Accomplishment reporting

10:15 – 10:45a

Lessons Learned from 2016 Field Season

- ERT
- Mower Tract
- ESH Mulcher – DNR/DOF/MNF/RGS
- Other implementation projects

10:45 – 11:15a

Native plant propagation and spruce seedling ordering

- Current plant propagation methods
 - Alderson Plant Material Center
 - GBRD & nurseries

- Dave Saville (WV Highlands Conservancy and LLC)
- AERI line item (WVRV2)
- Canaan Valley Institute grant proposal – *Jennifer Newland or rep.*
- Discussion

11:15 – 11:30a

Spruce conference committee update

- SASRI/CASRI workshop planning call - Friday 11/18 9:00 EST
 - Call Info: Number (866)640-9282 Passcode 9760757#
 - Gary Peeble's Contact info: gary_peekles@fws.gov (828)258-3939 X234

11:30 – 11:45 Bin Items including staff transition conversation

11:45 – 12:00 Wrap-up and schedule next meeting

Minutes

Present:

Ariel Wauhob – USFWS AmeriCorps, Justin Hynicka – American Forests, Darrin Kelly – MNF//TNC Partnership Coordinator, Owen Peet – TNC CWPMA AmeriCorps, Amy Coleman – MNF Pathways Ecology Intern, Angela Burdell – TNC CWPMA AmeriCorps, Breezy Snyder – TNC ERT AmeriCorps, Lisa Morse – TNC ERT AmeriCorps, Amy Hill – USDA Forest Service State and Private Forestry Entomologist, Mike Powell – TNC Land Conservation Practitioner, Ben Rhodes – TNC Ecological Restoration Coordinator, Melissa Van Gundy – NRS Research Forester, Shane Jones – MNF Greenbrier District Wildlife Biologist, Anna Branduzzi – MNF Greenbrier District Biological Technician, Travis Miller – WVDOF State Lands Manager, Whitney Baily – MNF Forest Ecologist

Updates:

Owen Peet - has been doing fieldwork this fall including spruce release and bush honeysuckle/autumn olive removal, will be assisting local landowners with invasive species removal on private property for AmeriCorps personal project

Amy Coleman – has not been highly involved in seed collection and tree planting this year due to tornado/flood related projects, did get to spend a day with the ERT crew doing spruce release and helped transplant trees to the Mower Tract

Angela Burdell – has also been doing fieldwork this fall including spruce release and bush honeysuckle/autumn olive removal, looking at tamarack trees in Cranesville Swamp for AmeriCorps personal project

Breezy Snyder – has also been doing fieldwork this fall including spruce release and bush honeysuckle/autumn olive removal, will be taking over spruce plot monitoring for AmeriCorps personal project

Lisa Morse – has also been doing fieldwork this fall including spruce release and bush honeysuckle/autumn olive removal, will be mapping and collecting data on resistant beech for AmeriCorps personal project, wants suggestions on the data to collect

Ben Rhodes – Upper Greenbrier North project area hit hard by beech bark disease, currently the ERT crew takes a GPS point whenever they see a healthy beech over 9" dbh (~40-50 resistant beech trees as far), hoping to catalog blight resistance beech

Melissa Van Gundy – suggested measuring four closest trees, crown dieback, presence of wounds (cankers, etc.), will contact Jill Rose

Amy Hill – in search of resistant beech trees on the Monongahela National Forest, mentioned that resistant beech trees are being planted at Parsons, suggested expanding on the current data set, talked about beech tree project along FR 92 ~20 years ago

Shane Jones – Dave Seville took GPS points of resistant beech in Upper Greenbrier North Unit 224, mentioned interest in propagating beech, tried digging roots but unsuccessful on trees that size, would be interested in healthy beech nuts, old-growth beech on border of Laurel Fork Wilderness (Cullen's property)

Amy Hill – WVU graduate student doing balsam fir surveys – taking increment cores to look at the impact of balsam wholly adelgid, mentioned conservation of hemlock at Blackwater State Park - plan to under plant spruce seedlings, funding an issue

Mike Powell – TNC planting ~20,000 trees next year – CWPMA/ERT field crews will plant ~15,000, volunteer Earth Day planting at Blackwater State Park ~3500 trees, Cranesville swamp ~400 trees, Spruce Knob easement ~3000-4000 spruce/mixed hardwood trees (Williams Forestry planted Gandy Randy 3 years ago, missed ~10-20 acres)

Ben Rhodes – AmeriCorps update – Breezy on for another year, 3 new AmeriCorps, busy with NNIS work as well as spruce release – new crew has done ~180 acres and planning to do ~200 additional acres, mentioned AmeriCorps personal projects

Ariel Wauhob – Canaan Wildlife Refuge tree plantings being planned – polling for days this spring

Justin ?? – visited Mower Tract yesterday, discussed funding for Mower Tract in 2017 and longer term commitments

Melissa Van Gundy – graduate student studying commercial spruce release at Kombrabow and the Upper Greenbrier North project area

Shane Jones – TNC doing commercial spruce release in red pine plantations (timber crew marking today) through stewardship contracting, talked about American Forest partnership, meet with Green Forest Works (non-federal match), planning to do ~200 acres mine land restoration per years (cost ~\$2000 per acre), 100 acres of site prep work completed yesterday, ~75,000 trees/shrub will be planted next spring

Anna Branduzzi – finished new and old monitoring plots on the Mower Tract (observed that hardwoods are not surviving at Barton Bench, lots of natives seeding in, some spruce mortality at location planted this spring (~85% survival)), ~340 acres of early successional habitat created with the DNR mulcher, has been collecting seed, potting up plants, and ordering ~50,000 native plants

Travis Miller – 10 positions across the state hired back, seedlings planted in spring at Kombrabow doing well, interested in ordering more for next spring, new project – ~20 acres of commercial spruce release, Boy Scout camp added to Seneca State Forest as mitigation for pipeline, Allegheny Trail being rerouted due to pipeline

Whitney Baily – mentioned Gauley district spruce restoration project – put Kim Tarter in contact with ERT, has been working on restoration seed mix document and spruce restoration plan for pipeline projects, mentioned forest monitoring plan, will be leaving the Forest in mid-December but teleworking through Mid-March

Darrin Kelly – will be leaving the Forest in 2 weeks to be with family and do old growth spruce preservation in Alaska

Education and Outreach:

- Send information for Facebook/CASRI blog to Jason Aerni (AmeriCorps)
- Forest Festival went well, Dave Seville talked about NNIS and brought native seed, private homeowners interested in planting spruce/fir
- Accomplishment reporting CASRI will be done next month

Lessons Learned from 2016 Field Season:

- ERT – doing 50/50 NNIS/spruce release right now, may shift some NNIS work to CWPMA crew and volunteers
- Mower Tract – knocking down trees making a difference, discussed using a dozer to expose mineral soil which spruce seem to like and may also benefit pollinators

Native Plant Propagation and Spruce Seedling Ordering

- CVI large grant for native plant propagation (Summers County)
- Discussed need to make ordering process more sustainable – Green Forest Works may assist
- Forest Service planting ~50,000 spruce per year starting in 2018
- Discussed LSR grant, state nurseery
- Stephanie Connelly discussed AERI (WVRV2)
 - WVRV 3 year accomplishment report will be highlighted nationally
 - Discussed changing language to highlight ecosystem services instead of climate change (don't change intent by perceptive)

Spruce Conference Committee update

- Gary Peeble is taking lead
- Workshop planning call Friday at 9 EST

Next Meeting:

Thursday February 16, 2017 at FS Supervisor's Office