

Minutes
North Carolina Sandhills Conservation Partnership
Steering Committee Meeting
1:00PM – 4:00PM Wednesday, September 15th, 2021
CONFERENCE CALL

➤ **Welcome and Land Acknowledgement**

Jeff Marcus began the meeting by welcoming participants, but the usual round of introductions was not done due to time constraints. Jeff also began the meeting with a land acknowledgement that recognized the historical occupants of the Sandhills. The Native American tribes present before and after European colonization and settlement that were the original inhabitants and stewards of the lands covered by the NCSCP include the Lumbee, the Tuscarora, and the Coharie tribes. We pay our respects to those past, present, and emerging peoples who have long been custodians of the lands and waters of the Sandhills.

➤ **Steering Committee Attendance**

Present

Pete Edmonds	Fort Bragg/Training
David Heins	Fort Bragg/ED
Jeff Marcus	TNC
Brady Beck	NCWRC
Pete Benjamin	USFWS
Brian Yeich	NCFS
Clyde Sorenson	Sandhills Ecological Institute
Jessie Jordan	NCDPR
Crystal Cockman	Three Rivers Land Trust

Absent

Scott Pohlman	NCNHP
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Other attendees:

Jackie Britcher, Jessie Schillaci (Fort Bragg ESB), Barry Hull (Fort Bragg ACUB), Monica Stephenson, Alan Schultz, Rod Fleming (Fort Bragg DPW), Rex Badgett (NCDOT), Dan Hannon, Rhonda Sturgill (ORISE Fellows), John Hammond, John Ann Shearer, Caroline Krom (USFWS), Susan Miller, Alice Cohen (USFS), Kacy Cook, Gabriella Garrison, Mike Martin, Jeff Humphries, Tim Mcfayden, David Mattocks (NCWRC), Debbie Crane, Carmella Stirrat, (TNC), Jesse Wimberley (Sandhills PBA), Jesse Woodsmith, (Southern Conservation Trust), Melvin Ezzell (consulting forester), Alicia Jackson (JCA), Kerry Brust, Jeff Walters, Clyde Sorenson, Anna Prinz (SEI), Jacob Comer (Quail Forever), Laura Prevatte (NWTF), Kim Brand, Michelle Arnold, Deirdre MacNeil (NC Audubon), Sarah Crate (The Longleaf Alliance), Wendy Dunaway (Fayetteville PWC), Lauren Killian, Erich Hoffman (Enviva), Rick Studenmund, Sau Silwal, J. Monroe

- **Speaker and theme introduction** – Dan Hannon, TNC
 - The theme of the meeting is a synthesis and overview of research projects conducted by NCSU faculty and their students on Fort Bragg and other sites in the Sandhills.
 - The purpose of the meeting is to distill the lessons learned from dozens of studies of game and non-game wildlife, rare plants and animals, the effects of forest management and fire management on native wildlife, plants, and natural communities in order to:
 - Identify overarching themes and key takeaways about the state of Fort Bragg management, rare species populations, and other ecological and management considerations.
 - Synthesize recurrent areas/topics where the conservation targets of the natural resource branches overlap in a congruence of management objectives.
 - Discuss the biggest challenges or knowledge gaps to fulfilling a wholistic ecosystem management approach?
 - Distill the most important management actions that partners (e.g., State Parks, WRC, TNC) should be considering in their management.

- **The effects of prescribed burning and forest management on game and non-game wildlife populations and native plant communities at Fort Bragg Military Installation and other longleaf pine dominated landscapes: a synthesis of lessons learned over two decades of field research** – Dr. Chris Moorman, North Carolina State University
 - Chris began his talk by acknowledging his main collaborators including Dr. Chris DePerno (NCSU), Alan Schultz and Jeff Jones (Fort Bragg Wildlife Branch), and Jackie Britcher and Jessie Schillaci (Fort Bragg Endangered Species Branch) as well as the importance of the 12 graduate students, 4 post-doctoral researchers, and countless technicians and interns which led or assisted in the 10 years of research at Fort Bragg that resulted in 43 peer-reviewed journal articles.
 - Chris then provided a brief overview of the many studies he’s been involved in at Fort Bragg which can be found at <https://faculty.cnr.ncsu.edu/christophermoorman/publications/>
 - Several projects were focused on the potential for prescribed fire to destroy nests of ground nesting birds:
 - Wild turkeys
 - Wild turkey nests were more commonly placed in lowlands/ecotones that burn less frequently/less severely and overall.
 - Wild turkey nests were lost due to fire on only 1 occasion out of 33 nests and this was in one of the nests placed in uplands, but of the 10 nests located in uplands 0 nests survived due to other factors like predation. Nest survival rates were much higher in the lowlands and ecotones.
 - Bachman’s sparrow
 - 80 nests were located on Fort Bragg and 50 nests were located in the Coastal Plain (Holly Shelter Game Land), and out of this sample 2 nests were lost due to fire (1 on Fort Bragg and 1 in the Coastal Plain).
 - Bachman’s sparrow nests were most frequently found in 1 year since fire areas (1-year roughs) which coupled with the historical and prescribed fire

regime (2-5 year return interval) means that most Bachman's sparrow nests avoid fire by the bird selecting 1-year roughs.

- Both wiregrass and understory cover were important predictors of breeding season habitat selection of Bachman's sparrow.

Northern bobwhite

- 50 nests were located on Fort Bragg, and only 2 nests were lost due to fire.
- Northern bobwhite nests were most frequently found in 2-year roughs, and nesting frequency declined as time since fire increased to 3 or more years.
- Both wiregrass and understory cover were important positive predictors of breeding season habitat selection of northern bobwhite but maintaining lower threshold of ~25% understory cover appears to be a key target when management seeks to provide nesting habitat for northern bobwhite.
- Northern bobwhite are known to be negatively affected by high basal area (regardless of species or family of tree), but non-breeding habitat selection had a quadratic relationship with hardwood basal area, meaning that selection was lowest when hardwoods were absent or very abundant, with selection peaking at ~20 ft²/acre of hardwood basal area; this association with hardwood basal area during the non-breeding season may be related to the use of lowlands and drains for cover or the seeking of acorns for food.

Ground nesting birds and fire

- There is little to no risk of losing nests when prescribed fire is conducted during the dormant season.
 - Losing nests of early-growing season ground nesters (e.g., wild turkey) is a concern when paired with an early-growing season prescribed fire program, though impacts appear to be minimal
 - Bachman's sparrow nest loss risk is low due their prevalence for selecting 1-year roughs in landscapes where 2 to 3-year fire return intervals are a management objective.
 - Northern bobwhite, and to a lesser degree wild turkey, selecting older roughs could increase the risk of losing nests to fire – if burning is conducted during the respective peaks in breeding activity for these 2 species. Northern bobwhite nesting predominantly in June and July typically avoids the risk being lost in an early-growing season prescribed fire paradigm.
 - If fire programs shift their timing to reflect the peak lightning season in June and July, this would potentially increase the risk to northern bobwhite nest success.
- Chris then discussed the effect of canopy and midstory hardwoods.
 - White-tailed deer habitat selection (both active and inactive deer) peaked when upland hardwood cover was between 5% and 15%, but selection of upland hardwoods declined as hardwood cover surpassed ~20%.
 - Blue-gray gnatcatcher, one example of 6 songbirds (out of 12 species studied), most frequently occupied sites with $\geq 10\%$ upland hardwood cover.
 - Four species including red-headed woodpecker, Bachman's sparrow, brown-headed nuthatch, and summer tanager were negatively impacted by hardwood cover, but the negative impacts didn't occur until hardwood levels reach 15-20% upland hardwood cover.

- Fox squirrels selected areas with more oak trees >4” in diameter located within upland longleaf pine stands as well as areas near riparian zones.
- Chris then discussed the effect of fire on food quality and quantity.
 - The abundance of fruit (hard and soft mass) in areas with 2 or more years since fire was over 500 times that of areas with less than 2 years since fire.
 - Fire season effected the amount of crude protein (nitrogen content) which is critical component of deer forage.
 - In 4 burn season treatments (spring, summer, winter, and previous summer), the highest crude protein levels were found in forage in July – one month following a summer burn – and in May – one month following a spring burn, but all treatments showed that nutritional quality spikes in the month following a burn
- *Key takeaways from these studies include:*
 - Variability in fire return interval & seasonality important
 - Fire mosaic ensures cover and fruit available
 - Woody understory important
 - There is a sweet spot (~10-12%?) for hardwood cover that is enough for many species that need it and not too much for those that don’t
 - Basal area matters most for bobwhite
 - Biennial burns negative for bobwhite and deer but appropriate for Bachman’s sparrow
 - Avoid focusing homogeneously on the mean, which leads to the “precision problem”
- A version of Chris’s slideshow can be found in PDF form on the NCSCP.org site.

➤ **The response of macroinvertebrates and rare flora of the NC Sandhills to prescribed fire, forest management, and pine straw raking – Dr. Clyde Sorenson, North Carolina State University & Sandhills Ecological Institute**

- Clyde discussed 5 studies he and his students have worked on at Fort Bragg and at other sites including the Walthour-Moss Foundation and conservation lands in the southeast coastal plain.
- Surveys of spring-flying dragonflies in the Little River at Fort Bragg and Drowning Creek at Camp Mackall
 - The impetus for these surveys was to investigate whether Septima’s clubtail (a rare dragonfly) occurred on Fort Bragg and/or Camp Mackall.
 - Gomphid dragonflies, like Septima’s clubtail, are stream dwelling species, most being habitat specialists, and like the EPT taxa (Ephemeroptera [mayflies], Plecoptera [stoneflies], Tricoptera [caddisflies]), can be surrogates for assessing water quality (i.e. these species are sensitive to water pollution)
 - Although the survey was unable to verify the occurrence of Septima’s clubtail in the Little River or Drowning Creek, several significant species were documented including American sand burrowing mayfly (significantly rare), banner clubtail (watchlist), sparkling jewelwing, and Appalachian jewelwing.
- The effect of prescribed fire on native bee communities in longleaf pine forest the Walthour-Moss Foundation property in Moore County.

- Four treatments of time since fire including recently burned (0 years), 1 year post-fire, 2 years post-fire, and a control (>50 since fire) were sampled with bee bowls (pitfall traps with colored water; yellow, blue, and white).
 - Over 2,000 individual bees from 106 species were captured (135 species if hand-netting results are included) during the 2 seasons of sampling which represent approximately 20% of all the species found in North Carolina (~530 species).
 - The greatest abundance and species richness was found in the areas with 0 years since fire, with abundance and species richness declining moderately in both the 1 and 2 years since fire sites, and a dramatic decrease in abundance and richness in the fire-excluded control sites.
 - One caveat was that at the time of this study the foundation was primarily burning during the dormant season, so growing season fire may have somewhat different affects. Gabriella Garrison (NCWRC) is addressing this knowledge gap by repeating a similar effort to document bee abundance and species richness in relation to growing season fire on Sandhills Game Land. For more information on NCWRC's bee monitoring please review this project summary: [NCWRC Native Bee Pollinators](#).
- The effects of pine straw harvest on insect and herbaceous cover in longleaf woodlands on Fort Bragg.
 - Pine straw is an important secondary revenue source for landowners throughout the region including Fort Bragg.
 - One caveat to this study's relevance to pine straw raking practices was that Fort Bragg uses a hand raking system to collect straw, but mechanical raking is becoming more widely used and likely has dramatically different effects on both soil dwelling insects and herbaceous cover compared to the less intensive hand raking system.
 - The study included three treatments: 1 year post burn, in rake rotation; 2 year post burn, in rake rotation; and 2 years post burn, not in rake rotation
 - Clyde's student, Sam Buzuleciu, spent three field season doing very intensive surveys on vegetation, wood roaches, and other soil-swelling insects in straw raking stands on Fort Bragg. Sam also attempted to use image analysis to detect changes to understory vegetation following raking and how raking influenced Bachman's sparrow and the herpetofaunal community
 - Vegetation was sampled using a nested Carolina Vegetation Survey (CVS) approach and soil-dwelling insects were sampled using linear pitfall trap arrays.
 - The study found very little effect of raking on insects > 3mm in length including wood roaches, so a lot of insects that may be constitute a prey base for red-cockaded woodpeckers, wild turkey, Bachman's sparrow, and northern bobwhite seemed not to be affected by raking.
 - Small insects < 3mm like small flies (Diptera) were more abundant in unraked sites, while small ants and bees (Hymenoptera) and spiders (Arachnids) were more abundant in raked areas.

- Regarding plants, the results suggest no change in plant species richness due to raking; the image analysis effort suggests some loss of blueberry, huckleberry, and horsenettle following raking.
 - No measurable effects of raking were found for Bachman's sparrow and herpetofauna.
- The reproductive ecology of 3 endangered plants found on Fort Bragg: Michaux's sumac, American chaffseed, and rough-leaved loosestrife.

Michaux's sumac:

- The project was started in 2017, but COVID-19 had a big impact on the final phases of the project.
- Michaux's sumac has a very diverse community of generalist pollinators that visit the inflorescences, and the vast majority are bees.
- Many pollinators were found to pick up pollen on male flowers, but far fewer pollinators were found to actually be delivering this pollen to the female flowers – even in areas where female plants were in close proximity to male plants.
- The best pollinator for Michaux's sumac appears to be 2 species of bee: Nude Plasterer Bee (*Colletes nudus*) and the Texas leafcutter bee (*Megachile texana*).
- Compared to other flowering species in the vicinity around Michaux's sumac that bloom at the same time, Michaux's sumac appear to be a very attractive plant to pollinators
- all-female plant sites were not found to receive pollen or set seed when male or mixed-sex sites were greater than 300 m from all-female sites.

American chaffseed:

- This species had very low pollinator visitation rates, but most of the pollinators found to visit American chaffseed were either bumblebees or sweat bees.
- A population genetic assessment revealed very little genetic diversity for the American chaffseed population on Fort Bragg.
- Interestingly, this species appears to only flower after being burned which has a big impact on the occurrence of flowering and the subsequent pollinator visitation rates.

Rough-leaved loosestrife:

- Populations on Fort Bragg are very small and sparsely scattered across the base, and pollinator visitation rates were extremely low compared to Michaux's sumac and even American chaffseed.
- The final phase of completing a population genetic structure is currently in the final phase, but there's currently no results to report from this effort.

The low number of occurrences and scattered nature of both American chaffseed and rough-leaved loosestrife may be driving the low rates at which these 2 species are visited by pollinators

- The reproductive ecology of Venus flytraps in coastal North Carolina

- The top 7 pollinators found to visit Venus flytrap flowers included 1) green sweat bee; 2) checkered beetle; 3) longhorned beetle; 4) soldier beetle; 5) flower scarab (beetle); and 7) tumbling flower beetle.
- Clyde's student, Laura Hamon, determined that Venus flytraps are pollen limited meaning that plants are not generally receiving as much pollen as needed to maximize seed output.
- Laura also found that Venus flytraps are self-fertile within the same plant – they're just not self-fertile within a single flower of the multiple flowers an individual flytrap produces in a growing season.
- Another interesting finding from Laura's work is that Venus flytraps are successful in not eating their pollinators. When assessing which species pollinator the flowers and which species end up in the trap, ~87% of the pollinators fly to the flowers while the majority (80%) of the prey species walk or hop into the trap (only 20% of prey species can fly).
- Clyde finished his talk by providing a list of publication from the various studies he reviewed which can be found in PDF form on the NCSCP.org site. Clyde and his collaborators and students are currently working on another 4-5 publications.

➤ Working Group Reports and Discussion

- **Resource Management** (Jessie Jordan)
 - Jessie recently took over chair position for the NCSCP – Resource Management Working Group. The first event of the revitalized resource management group will be held next week (Tuesday 9/21/2021), and we will meet at TNC's Calloway Preserve to view and talk about 3 wetland restoration sites.
 - We'll see 2 upland depressional wetland sites at which TNC collaborated with NCWRC to recontour and clear duff in order to restore the hydrology of the sites and also promote native herbaceous cover and the ability of these wetlands to carry fire through their basins.
 - The third site at which TNC collaborated with Nick Haddad to set up treatments and plant the native sedge that is the host plant for Saint Francis' Satyr. The field trip will be open to all members of the NCSCP and Jessie is still hoping to recruit additional members and identify additional restoration/management sites that would be of interest to resource managers in the Sandhills.
- **RCW Recovery** (Kerry Brust)
 - Kerry provided an overview of the 2021 monitoring efforts, plans for fall/winter 2021-22, and an update on Avian Keratin Disorder.

Nest Monitoring

- The 2021 nesting season was significantly improved compared to the 2020 season, and the 2021 season was quite prolonged. More nestlings were banded in 2021 and more nestlings fledged as well. Although conditions were ideal for double brooding, the RCW team did not observe as much double brooding (2 nests/1 season) as expected.
- Sandhills East population –
 - The number of PBG have not yet been determined on Fort Bragg

- 1 new PBG was found on western Fort Bragg in 2021.
- No gains in the number of PBG were observed for TNC's Calloway Preserve (n = 11), NC Department of Agriculture's McCain Research Forest (n = 8), or the Walthour-Moss Foundation property (n = 16).
- The Southern Pines/Pinehurst area experienced a marked decline in PBG in 2021 (n = 38); there were 46 PBG in 2020 and this area now has lost 8 PBG.
- Western Moore County increased by 2 PBG making the total in this area 13 PBG, Weymouth Woods added 1 PBG for a total of 4 PBG.
- The losses and abandonment issues in the Southern Pines/Pinehurst area is an area of concern. Kerry cites several explanations for these losses including increased development and habitat fragmentation as well as high mortality during the 2020 season.
- Fortunately, stability and gains in the western Moore County area have resulted in greater overall population viability in Moore County.
- Sandhills West population –
 - The number of PBG on Sandhills Game Land A-block has yet to be determined, and the outer blocks of Sandhills Game Land outer blocks were not assessed in 2021.
 - The number of PBG on Camp Mackall increased by 2 PBG for a total of 20 PBG.
 - The number of PBG on Blue Farm increased by 1 PBG for a total of 10 PBG.

Private and conservation lands work for fall and winter 2021-22

- Assess suitable cavities in Recovery (WEWO, CALLOWAY MCCAIN) and Safe Harbor Baseline Groups - add artificial cavities and restrictors as needed.
- Refurbish abandoned clusters or create new recruitment clusters where desired and spatially appropriate.
- SOPI: Whereas last year effort and funding secured specifically for Pinehurst Golf Courses No. 1 through No. 9, target clusters to stabilize historic groups on the Country Club of North Carolina.

Avian Keratin Disorder

- Through annual monitoring, the RCW working group has been noticing an apparent increase in the number of Sandhills RCWs displaying signs and symptoms of the disorder (long bills)
- AKD may be a seasonal phenomenon: normal bill length returns through breakage and/or wear, but prevalence of condition may be under-represented.
- Seemingly afflicting RCW only in the Carolinas, for now.
- 2019 buccal /cloacal swabs tested negative for Poecivirus – USGS lab has 2nd more thorough screening for virus scheduled.
- Future work – possibly more swab sampling and examining impacts on the family group level.
- For the full RCW Working Group report please refer to the PDF on the [NCSCP.org](https://www.ncscp.org) site.

- **Communications** (Debbie Crane)
 - No significant updates from the Communications Working Group were shared, but Debbie did note that the 20th anniversary which came and went last year without celebration due to COVID-19.

- **Land Protection** (Jeff Marcus)
 - Crystal Cockman of Three River Land Trust began with an update on a 100-acre donated easement in Cumberland County in the town of Stedman, east of Fayetteville. This is the first successful land protection project completed by Three Rivers Land Trust in Cumberland County since SALT merged with Three Rivers.
 - Brady Beck of NCWRC gave an update on the Tuckertown deal associated with Yadkin River Game Land, along the western boundary of Uwharrie National Forest. This project is located along the east side of Yadkin River corridor. The total acreage of Yadkin River Game Land is now ~11,000 acres and NCWRC owns ~4,900 acres of the game land.
 - Jeff Marcus of TNC updated the partnership on land protection applications submitted to the NC Land and Water Fund that had recently been scored including the Caddell property adjacent to the NCWRC Sandhills Depot as well as the hope that additional budget appropriations would lead to some significant land protection wins for Three Rivers Land Trust along Drowning Creek.

- **Reserve Design** (Dan Hannon)
 - RLUAC and Reserve Design. In August 2021 Jeff Marcus and Dan Hannon have met with NCNHP and RLUAC to coordinate conservation data updates, additions, and possible updates and changes to the [JLUS 2018](#) rating system map and the other conservation data hosted and displayed on the [RLUAC GIS](#) resources web map. If all goes to plan, NHP will be assisting RLUAC in facilitating automatic updates to all layers developed and maintained by NHP.
 - Dan Hannon presented an overview of the conservation data and our recommendations for updates and changes to the most recent meeting of RLUAC on August 19th
 - Conservation layers for updates, additions, and alteration:
 - RCW foraging areas – within the 5-mile buffer around Fort Bragg – Camp Mackall, we’re hoping to work with USFWS and Jay Carter and Associates in updating the active v. inactive statuses and adding newly established RCW groups to the map.
 - We’re considering including NCNHP’s Biodiversity and Wildlife Habitat Assessment, with rankings of 7+ being included in the highest conservation priority tier, and rankings of 5-6 being included in the high conservation priority tier.

➤ **Partner Updates**

NC Audubon – Kim Brand, Michelle Arnold, and Diedre MacNeil

- NC Audubon is hoping to initiate a new Sandhills Chapter of the Audubon Society.
- Organizing bird outing, advocacy for bird conservation, and increase inclusivity of the bird conservation community are among the goals of NC Audubon and their prospective Sandhills Chapter.
- Members can sign up for Audubon NC emails & action alerts here https://act.audubon.org/onlineactions/_OVE5SsMLEiXx11UCe60qg2
- Members can register for Audubon Convention Oct. 1-2, all virtual here: <https://2021.audubonconvention.org/>
- Email kim.brand@audubon.org for more information on their activities both in NC and our Sandhills.
- Locals can join Michelle Arnold & Kim Brand for a bird outing Saturday, Sept. 25, 7:30 a.m. at Reservoir Park in Moore County

Enviva – Lauren Killian

- Ben Larson recently left Enviva to work for the Ruffed Grouse Society. Lauren has stepped up into his role on working on conservation and restoration projects.
- Enviva is currently looking for partners to collaborate with on restoration and conservation projects.

Jay Carter and Associates – Alicia Jackson

- As this was Alicia first meeting, she quickly introduced herself and notes that she would be working with Dan Hannon and others within the RCW recovery working group to update RCW partitions and activity statuses.

NC Forest Service – Brian Yeich

- NC Forest Service is currently accepting cost-share application through October 29th.
- A new cost-share program wherein a NC Forest Service employee or a consulting forest service can write a forest management plan, tree farm plan, or a stewardship plan for a landowner and the landowner can be reimbursed for the cost of the plan/plans.

NC Parks – Jessie Jordan

- Jessie shared an update on the restoration work at Carver's Creek. NC Parks has been approved for a commercial forest thinning project on the park and will be moving ahead with those restoration efforts in upcoming months.
- State Parks has been focusing on intensive invasive species control efforts on Weymouth Woods and some work has been done on Carver's Creek.
- Since the June NCSCP meeting, State Parks has burned ~550 acres between the 2 parks.
- Effort to locate wetland sites for restoration and management towards increasing the habitat suitability for Saint Francis' Satyr.

TNC – Carmella Stirrat & Jeff Marcus

- TNC is currently in the processor of hiring their seasonal burn crews, and Carmella Stirrat shared that there will be 10 position available, with 1 newly created position for a burn crew member that will split their time between the Sandhills of NC and the Minnesota TNC burn crew.

- TNC is still looking for a Fire Program Manager to replace the recently retired Margit Bucher.
- TNC recently completed timber work and site preparation for planting native warm season grasses at TNC's Griffin Preserve (~450 acres adjacent to the Blue Farm).
- Fire in the Pines Festival, Saturday October 8th and Sunday October 9th in Wilmington, is now a hybrid virtual and in-person event

Three River Land Trust

- No update

Quail Forever and National Wild Turkey Federation – Jacob Comer and Laura Prevatte

- Quail Forever has started funding landowners through EQIP and the deadline is October 27th.

USFWS – John Ann Shearer, John Hammond, & Pete Benjamin

- No update

SEI – Kerry Brust, Clyde Sorenson, Jeff Walters, and Anna Prinz

- No update

Fort Bragg DPTM – Barry Hull

- No update

Fort Bragg ESB – Jackie Britcher

- No update

Fort Bragg WB – Alan Schultz

- Alan shared that the number of hunters on Fort Bragg has increased substantially over the last 2 years and reminded everyone that during hunting season all people in the woods should stay safe by wearing blaze orange.

NCWRC – Brady Beck, Mike Martin, David Mattocks, & Kacy Cook

- Mike Martin gave an update on work related to WRC herpetofauna projects including:
 - 2021 was not a very productive year for herpetofauna surveys.
 - Mike thanked Jeff Marcus, Tim Mcfayden, and David Mattocks for their collaborative work on the Calloway Preserve wetlands restoration.
 - Hatchling snake season is coming up and before the next meeting we should be seeing the start of the winter breeding amphibians
- David Mattocks gave an update on the push to control invasive species and the timber harvests that are currently being planned on Sandhills Game Land.

USFS – Susan Miller & Alice Cohen

- Susan introduced Alice Cohen who will be working for the US Forest Service as a Forest Partnership Specialist based in Asheville to coordinate with government and non-government partners across all 4 national forests in NC.
- Alice Cohen introduced herself and expressed appreciation for the NCSCP. She provided her email for anyone that wants to reach out to her: alice.cohen@usda.gov.
- Susan provided an update on USFS activities including wildfire details out west and hurricane related damages in Pisgah National Forest.
- The NC Wildlife Society is offering a tree ID hike on Uwharrie Nation Forest on Tuesday September 28th and registration can be completed through Eventbrite.

NCNHP

- No update.

Sandhills PBA – Jesse Wimberley

- Jesse gave a shout out to the featured speakers, Clyde Sorenson and Chris Moorman, and shared that their recommendations of mosaic burning, and heterogeneity driven by mosaic burning lines up nicely with how many landowners burn on private lands with support from the Sandhills PBA.
- This year marks the 5th year of the Sandhills PBA and the association now counts 500 landowners among their network of private landowners that get support for burning by the PBA.

RLUAC

- No update

- The next meeting of the NCSCP will take place on **Wednesday December 8th, 2021 from 1:00 pm – 4:00 pm**. The theme of the meeting is currently an update on Red-cockaded woodpecker recovery status. This will be a virtual meeting and we plan to switch to Zoom for the meeting platform. A link will be sent before the meeting.