**Ali Crofts asks:** Would that style of bog bridging be appropriate use in a state park for a wet/muddy spring fed trail that has access to cedar?

**Bailey answered:** If you have it, absolutely, understanding what soil you have and making sure that you know the history of the water in there. We run into places where you might not know that it sort of used to be a part of a bigger pond and then it's bottomless and then if you are base logs aren't long enough, you are not going to have proper flotation. It will literally just eat it. I would say make sure know what your soil type is. But if you do have Cedar, fantastic. It will last 15 to 20 years depending on the conditions. Which is not necessarily long enough but that is a pretty good shelf life for that kind of terrain.

**Ann Marie Chapman:** Has Bailey ever used an AmeriCorps NCCC crew? I'm in the process of applying for one and would love to hear any lessons learned she might have to share.

**Bailey answered:** That's a great question. I haven't worked with an NCC crew but AmeriCorps comes in so many different formats. The one I know of locally that is starting up now that might be a good resource to reach out to as the Appalachian Mountain club, Alex to Lucia is starting a new one there. And work with a bunch of other ones in the past so he might be a good resource to reach out to. – – Is also a good model they've been around I think 20 or 25 years now. Those are both good resources to reach out to in my area.

**Annette Parsons asks:** I gather that the trail was originally created 200 years ago for hiking and horse riding and packing? But it also appears that it is no longer open to equestrians, even though they undoubtedly helped build the original trail. Why is this?

**Bailey answered:** We don't have a lot of equestrian use here. I think there were four or five bridle paths that were initially built to get to the summit of Mount Washington. The history is really neat but there has always been a history of hotels up there and hotels these grand hotels in the region so initially when they were building, the horse use was much more common. But that use once the road was built and the card Cod Railway was built that was the main use for the people that were not hiking. None of the bridle paths that we have are still maintained for that kind of use. It's hiking. I think it's just too hard on the horses. I also know that equestrian just is not a huge use in our area. I think it's growing. But horses are not allowed on the Appalachian Trail.

**Cate Watrous asks:** How do volunteers fit into your trail maintenance plan?

**Bailey answered:** Volunteers are critical to my district’s trail maintenance plan! We have built a robust Adopt A Trail program over the past 15 years hosting about 200 volunteers via about 80 Volunteer Agreements annually. On average our volunteer’s hours are the equivalent of 2-GS04 seasonal employees. We initially train folks in a one day “Skills Day” after helping them choose a trail section and getting all paperwork done. After that, we ask they do additional Skills Days every 3 years. This way the group is always a mix of new and returning volunteers who teach each other tips and tricks as well as creating community. These folks perform critical annual or Level I trail maintenance only.

**Cathy Corlett asks:** What is the White Mountain Trail Collective? What organizations are represented and how did that happen?

**Bailey answered:** I'm glad to hear people asking about that. Definitely go to our website. They have a fantastic website with all kinds of information about this. As far as how, they represent a larger group of organizations, they are managing trails project by project whereas the groups they represent have that long term commitment they've been doing it for a long time so those smaller organizations also need individual volunteers and help with individual projects. Definitely kind of shop around, there's a lot of trail organizations in the White Mountains in particular. A lot of them predate the forest. As far as how it came to be prior to the Crawford Path in 2018, there are couple of efforts on my forest and beyond that allowed employees and partners to speak up and say, what are your biggest priorities, what you working on in trails kept rising to the surface. So a small group of us within the Forest Service and then with all of those partners that I keep speaking of, not all of which are represented here on this project, we had a series of meetings over I think about three years where we had everybody comes together and we took the time to listen to all the people that maintain trails, largely volunteers. And herded them out, what do you need? What are your concerns? We kind of boiled it down to a group of working groups like trail projects, data, marketing, web, and then development of course and a lot of that stuff we can't as the Forest Service we can't manage those things but we do obviously as land manager have a huge role so over the series of meetings a small group of people worked on it outside of the meetings and eventually came to be on the Crawford Path on the ground for the first time but that was a very critical part of the process was making sure that the people that maintain the trails and the land managers had a voice in what it should all look like. So now it's up and running so I definitely encourage you to check out their website and get in touch with them.

**Charles Ashby asks:** How are you managing the trail usage. Do you require permits for events?

**Bailey answered:** We do not. We don't we are not managing the use, we require permits for events so they are two different things. You can get a special use permit for a gathering I think under section 5 people are something in certain areas, not everywhere. But as far as use we have outfitter and guides are required to have a permit if they are profiting from taking people out on the national forest but we currently do not limit use anywhere other than the confines of parking and then we overlap into state or town Road where they have parking limits are not. Forest plan revision is coming up.

**Cheryl Lea asks:** I'm sorry but I'm not as familiar with the Appalachian Trail. Is this segment the last 'end point' segment of the AT, or does it extend further?

**Bailey answered:** The Crawford Path is 8.5 miles in length; 5 miles being AT.

**Chris Maron asks:** Do you recommend tread work of raking or blowing leaves off of the trail?

**Bailey answered:** We do not rake or blow leaves since they eventually turn into much needed soil.

**Cozea Stephens asks:** Is there a separate group that maps out where the wildlife are located or is that done in-house?

**Bailey answered:** We both comply with state and federal requirements concerning wildlife. But we do have each district has a wildlife biologist. Depending on the complexity it's either within the district or we might reach out to the supervisors’ office or if it was something of concern they might reach out broader for collaboration purposes. Things like lynx habitat and in this case it was mostly the plants. Same thing, there isn't necessarily a survey done everywhere and a full understanding of exactly what you might find out there and that's why we go through that pre-Nebo process and run everything by the specialists to see what they already know and if they need to gather any more data to make sure we are cautious.

**Dan Little asks**: Do you have issues with illegal trail use (ATV, dirt bike, 4x4 vehicles) and if so how do you deal with that?

**Bailey answered:** That's a great question. Our motorized use is on the rise. In certain areas it continues to be on the rise. But it's mostly non-motorized and I would say that we certainly have a good amount of illegal trails or trails that have not been put in our system yet. We are starting to look at the significance of the mileage that we have that is official versus unofficial, possibly decommissioning some legal trails and trying to find more of a balance but that's all just in conversation. We do have a forest plan revision coming up and I think that is probably where we will start to dig into that stuff.

With improvements to trails do you expect increased usage? If so are there considerations for additional improvements and/or parking capacities at trailheads?

**Bailey answered:** Great question, great points. Yes. Use is on the rise and COVID showed us that like nothing ever seen in my time. We are I am a trails manager semi-focuses largely on trails but we have so much overlap with things like parking and those resources in the front country before you go to that country there's a lot of collaborative groups working right now on things like that. Especially here in New Hampshire the 4000 footers and more premier loop trails get so much use it's overwhelming it's become unsafe with parking so there are a lot of efforts happening among a couple different groups working on that from a trails perspective it's forcing us out of our silos and to come together which is great, places like grand County and not in New Hampshire on the interstate some people are parking on the interstate they go into state park and then they go in the Forest Service lands so it's not only the parking issue is not only the safety issue, it's not the use issue but also the carrying capacity of the landscape so I hope that more of these collaborative groups start to do this work and bring shed some more light on the bigger picture. For me as a trails manager, my focus is trails but it is nice to be brought into those projects to speak for the trails and for the people who care for the trails. It's a really good point.

**Eric Feldbaum asks:** What kind of public outreach/marketing was completed to inform the public about this project and how were volunteers not part of these organizations able to take part in the project?

**Bailey answered:** We definitely had started at that point, even though the trail collective was not a nonprofit yet, they were fiscally sponsored, they hosted some volunteer days for those new volunteers. And then the outreach was ongoing as far as the partners that were working on the project. Everybody was sort of leveraging the social media. The trail collective did have Facebook at that point and we did, I was doing a weekly video of the project overview, treating it like an incident with a little map, it wasn't exactly the best or that high tech but it got a good start and got some good followers and the website the trail collective website I believe got up and running at some point during that and so social media all day long and then having anybody else working on the trail leverage that by posting when they were working on the trail and it went far and wide.

**Isaac Kirk-Davidoff asks:** Hi, I worked on the Path in 2018 with the RMC. Cool to see it all finished. How do you manage coordinating different styles/abilities of trail building?

**Bailey answered:** AMC Camp Dodge volunteers vs. AMC Trail Crew?

**Bailey answered:** Isaac, thank you for attending. That some of the trickiest stuff. I think that's why it was good timing I was able to slide over and jump in there because it was – – I was familiar with all the screws beset within all these partnerships I feel like those relationships were not understanding between each other is absolutely critical. Not every dog screw, not every trail crew is the same. A Dodge crew is an AMC staff led volunteer trail crew. It depends on who you have and that's why figuring out funding for these projects can be really tricky because all the crews cost different and some of the lowest skills crews are the highest costs so you really have to understand all of that and work with each organization individually to describe the projects. It's kind of like matchmaking. And it's fun. I would love to talk to you more about it.

**Jane Wooley asks:** Was there any liaison/communications with Native American tribes?

**Bailey answered:** American Indians and Alaska Native Religious or Cultural Sites; Historic Properties is a category our specialists review during out pre-NEPA process we do twice annually called Small Projects Day. This process was followed in planning the project.

Was $150K enough?

**Bailey answered:** No! [LAUGHTER] More than that was spent the following year. It's not that every trail is in that same situation. It's just the approach was different. We don't often have several thousand dollars to throw at a trail at any one given time but with the significance of the anniversaries it seemed like the right project to make this happen. Our trail projects can be really expensive. I was just on a call today for another, $150,000, spread out over three different trails. Even those are considered kind of big projects for us. But that rock work in particular and especially the more remote rock work at some of the most expensive because of mobilization.

What was the total length of rehabilitated trail?

**Bailey answered:** The Crawford Path itself is about 8.5 miles. We worked I would say easily six miles of those got significant work on them.

Did you say who the primary funders were? REI?

**Bailey answered:** REI was the big donor. I believe they did $100,000 of the 150,000 for this year.

**Jessica Montgomery asks:** Can you explain further why scree walls were just on one side of the trail, botany’s feedback etc.

**Bailey answered:** Scree wall is great in Alpine terrain. Especially if you have the rock available. Not all amp Alpine, we have stuff that's above tree line here that is not actually Alpine. If you can find the rock, it really does work. And it's one of these things it's a visual guide. You are kind of tricking people into going where you want them to go and, honestly, we also use bog bridging above tree line to make people go where we want them to go. Senator whitecap in Maine is a good example of that the Appalachian Mountain club did on the grafted loop trail, that's the only other thing we did locally other than things like string line but you scree wall you just needed to be kind of as wide as it is high you need to put the light up so it can live and doing that reveling on the outside of it to encourage vegetation to grow back in really does work. The only thing that is tricky is if you have a lot of shoulder season and hiking the monorail tends to get established within the scree wall might cause people to jump out of it when it is starting to melt. But if you have the rock it's very effective.

**Jessica Wineberg asks:** How to ensure that we can do maintenance of any new trails?

**Bailey answered:** Very good point; it should be ALWAYS part of the planning process! A commitment among land owners and partner organizations is the best approach.

**Jonathan Schilk asks:** How much landscape architectural or engineering involvement was there during the planning of the project? Or was it mostly problem solving in the field?

**Bailey answered:** Both, and good question. Our landscape architect was involved in that process right along with all of our other specialists. They were part of that planning probably at least a year if not two before I came in to manage the project. And then botany being the biggest concern, they were the ones on site, much more hands-on than any project I've ever worked on. But every day problem-solving, if we need to call a specialist we will.

**Josh Kloehn asks:** how often is heavy rehab work planned for this section? Every 5 years? 10?

**Bailey answered:** I wish. Number honestly, the rock work we do especially we are hoping that in the last 100 years or more. That's why the standards are so critical. The bog bridges are more than 15 to 20 year lifespan. We do not have the capacity or the resources currently to have that good of a planning cycle but I wish we did. We kind of work with each individual partner that maintains trails with us and get the top priority projects annually and then try to prioritize something for everybody as much as possible.

**Karl Dietzler asks:** Am assuming subalpine/alpine vegetation restoration is ongoing in these recently trail restored areas for the foreseeable future?

**Bailey answered:** Yes.

How did you address accessibility concerns for trails on the ground? How did you address trail accessibility at the project level? What were the large ticket item concerns?

**Bailey answered:** Because this is a historic trail, we did not we are not required to meet those accessibility standards so, and again, also dealt with in the pre-Nebo, accessibility is one of the topics we go through. Because it's an existing trail we don't have to go by those ADA’s, or the Forest Service accessibility guidelines.

Is the Deanabh Sr Ceart volunteers international?

 **Bailey answered:** Sorry I don’t understand this question!

**Kathryn Wrigley asks:** I'm over in Vermont and thinking of a major revamp for a beloved trail. I missed the beginning - how long did you plan for this?

**Bailey answered:** I think it was at least a couple years leading up to this actual project that it took. Every project is different. I have a lot of questions, are there partners? Sometimes although Crawford Path is an anomaly, it's not maintained by one of our partners regularly. Most of our trails are. It's a real partnership. But off-line I would love to ask you a bunch of questions so I could give you some better answers.

**Lisa Carnahan asks:** Are there Deaf crews in northern California that the Speaker has knowledge of? If so, can she please send me the contact information?

**Bailey answered:** I do not. That was the first one I worked with. That was Vermont youth conservation Corps. I would look on their website and contact them.

**Liz Reardon asks:** The trails we are responsible for are in very urban settings, not mountainous. Do you do any community input sessions prior to making adjustments or is that more specific to municipal land?

**Bailey answered:** That's more of an urban situation like you are saying. We work with the partners. Otherwise it's just annual trail maintenance. It's sort of assumed.

**Melissa Gill asks:** Did you gather all your partners together or do you have a coordinator to do that or help you?

**Bailey answered:** This happened the way it happened because of the resources that were available to us at the time. The national Forest foundation and REI came through with the funding and we had some existing challenge cost shares with some of our partners so that was kind of a conglomerate itself just the funding. Then we had a position as a supervisor's office before I came into the detail who worked with the district and put a lot of extra effort into organizing who would be available and interested. One of the nice things about this project was there was not a match required which is not really common. That was motivating so by the time I came into the possession, unfortunately in May, which was a little late in the game, I got all the contacts, I had a huge map and a bunch of Post-it notes made a lot of calls and puts all the puzzle pieces together. I got to decide who was going to work where, which was helpful. Because not every crew is suited to every project. I did work through the application of putting them on the ground but there's a lot of work done before I got in this position, thankfully.

Some of your pictures showed what you called “scree walls” that seem to border the tread. Can you explain that function? We have the same type of trails and I’m interested in your solution.

**Bailey answered:** Scree wall is great in Alpine terrain. Especially if you have the rock available. Not all amp Alpine, we have stuff that's above tree line here that is not actually Alpine. If you can find the rock, it really does work. And it's one of these things it's a visual guide. You are kind of tricking people into going where you want them to go and, honestly, we also use bog bridging above tree line to make people go where we want them to go. Senator whitecap in Maine is a good example of that the Appalachian Mountain club did on the grafted loop trail, that's the only other thing we did locally other than things like string line but you scree wall you just needed to be kind of as wide as it is high you need to put the light up so it can live and doing that reveling on the outside of it to encourage vegetation to grow back in really does work. The only thing that is tricky is if you have a lot of shoulder season and hiking the monorail tends to get established within the scree wall might cause people to jump out of it when it is starting to melt. But if you have the rock it's very effective.

**Melissa Whittington asks:** What is NEPA?

**Bailey answered:** The National Environmental Policy Act or NEPA is compliance with the environmental laws and regulations that guide management of the lands and resources of the National Forest System.

**Owen Hill asks:** What are some ways that I could get involved with WMNF trail projects?

**Bailey answered**: Send me an email to me at cristin.bailey@usda.gov and I can happily help you get involved.

**Rheanna Williams asks:** What is the next big project(s) you are hoping to work on with these partners?

**Bailey answered:** The trail collective, they worked on Crawford Path in 2019 and then this past season are doing some of the same thing. I differently recommend going to their website and checking out what they are doing. They are the ones that are trying to lead these large-scale projects, which is the significance of really getting them on the ground in 2018. So this year they worked with state parks and some other local land owners and groups like the Access fund, some climbing areas, they are going to do the same thing next year in the Mt. Washington Valley and work in the – – regions on some of the higher use trails. And hopefully also bring, we call level I trail maintenance we call the oil maintenance, level II are some of the stuff I just showed you like reconstruction, and we are trying to help bring light to the importance of that level I work and really educate the public and not only get a group like the trail collective to fund and support those level I crews so they can help existing trail partners that have been doing it forever, given a break and help them focus on other things which will also free up some of our Forest Service crews to do some level II projects. Trying to shift around on the whole skill set and yonder this season I'm not sure what projects are planned other than roaming rocks is a big one that is going to receive a lot of work soon, which is one of our premier climbing areas in New Hampshire. Thank you for that question.

**Richard Hartman asks:** Where can a person get trained on building trails?

**Bailey answered:** Yes. More in the business of maintaining than building trails. They are kind of different topics, although very closely related. For this project in particular we focused on that training for rigging both below tree line and then Alpine reading. That's I think what the larger scale projects are going to try to do as well is kind of customize the need for the project instead of offering the same every year. We do the level I trail maintenance training every year, we do ask training every year but really customizing it to the project and the needs of the trail community I feel like is what projects like this have the ability to do.

**Shandiin Nez asks:** Was there any work done consulting local Tribal Nations about the trail or any sacred sites?

**Bailey answered:** That's a great question. That is all covered in our process when we go through in the above, which goes through our trail projects are categorically excluded but we have to do cultural resources evaluations and go through all the specialists and that's one of those topics that is covered before the project happened. So before I started in the project that was all done it if you want to follow up I can put you in contact with the right person on my forest if you want to know more about that.

**Steffen Janikula asks:** Do you have any problems with volunteers working? Any problems with folks doing trail work without permission?

**Bailey answered:** It's kind of hard to call that a problem but, yes we do. We just tried to kind of let people know, this is great, if you want to get involved we would love to have your help but please go through an organization. Social media has really influenced the sort of self-policing of trail maintainers I found. In 20 years I've only had to upset a few people. Otherwise it's just a matter of bringing them on board. And then illegal trails is a whole other thing. Yes we do have problems with that that we are trying to deal with. Trying to reach those people and just to mitigate. We hope it's just a misunderstanding. We just want to keep everybody safe.

**Steven Pytlik asks:** Do you have a rough idea of the percentage of paid trail staff vs. volunteer labor for the project?

**Bailey answered:** I bet somebody else does. They might be on the call. I know we had 35 crew weeks over 300 folks. It was a pretty good mix. I think we probably had more paid crews on this one, there were some workdays and we did have that one volunteer crew and then of course we have the staff led volunteer crew, which is more of a hybrid but definitely more paid crews in this scenario. Because it was so much work. But I think it was somewhere over 10,000 hours’ worth of crew hours that went in, just in the one year. In 2019 the trail club led a whole another season of this.

**Stuart Leidner asks:** Did you design the tri pods and just have a local fabricator produce?

**Bailey answered:** That was Jed Talbot's doing, they came from a crane company. I think I still have the designs in PDF if you are interested. Send me an email and I can send you those specs.

What years was this done? Pre COVID I assume?

**Bailey answered:** Yes. The year I'm talking about here is 2018. And then 2019 was the actual bicentennial year of the Crawford Path and there was a trail collective could do a whole another webinar on that season.

You mentioned not rerouting some fall line trails. And only did stone steps and had another presentation on fall line trails. We have lots of them and need to figure out the best way to deal with them.

**Bailey answered:** That is some of the trickiest stuff we do and I think it's not as well understood in other areas of the country where they were built correctly. We are sort of stuck with what we have and we have found that rock work is absolutely when done correctly it's the solution. But relocation to create more fullbacks construction is certainly more ideal if you can do that. And I'm happy to follow-up and I have a presentation called wicked steep trails of the White Mountains that gets into the details of that.

**Wendy McDonald asks:** Did you add up all the hours spent on the project and calculate the end labor costs?

**Bailey answered:** There were over 10,000 hours dedicated to this project. The project cost was $150,000 aside from my role and the support staff roles.

**William Bardel asks:** Talk about options typically used besides bog bridges in wet trail areas with poor drainage.

**Bailey answered:** That is such a tough one. I complain about following trails but trails in and around water are such a challenge. And then the beavers come in and they change everything. There is a lot of this out there especially boardwalk and these piers and people like pure Jensen and the recon trails, Carl Devereaux, there are all these trail builders out there that are just absolute experts in this sort of stuff. I would encourage you to reach out to some of those folks. Working with your local entity whether it's DES and New Hampshire and making sure you understand environmentally as far as what soil type you are in but whatever decisions you make and understanding the lay of the land. The bog bridging is where we land again and again and again. As long as you have the right soil type it does work for quite some time.