

2020 External Consultants Report Perspectives on research-related priorities of Tribal Nations and Indigenous communities in the Northern Forest Region

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Overview

The Hubbard Brook Research Foundation was charged with convening decision makers and stakeholders in the Northern Forest region to provide guidance to the Executive Committee of the Northeastern States Research Cooperative (NSRC) for crafting the 2020 request for proposals (RFP) in response to broader stakeholder interests and needs. This report is a summary of perspectives from three consultants asked to comment on research-related priorities of Tribal Nations and communities of Indigenous Peoples in the Northern Forest. The three consultants are citizens of Tribal Nations and members of Indigenous communities in the region and they were recruited through their work with the following organizations:

- United South and Eastern Tribes, Inc.
- Northeast and Southeast Climate Adaptation Science Centers
- Vermont Commission on Native American Affairs

Executive Summary

In semi-structured interviews, three consultants discussed their perspectives on the top issues and concerns related to the forests and Indigenous Peoples in the Northern Forest region and how forest-related research might serve those issues and concerns. Key topics that came up during the interviews were: access to forest lands for hunting, gathering, and cultural practices; the importance of the Tribal Nations in the region being seen and recognized by non-Indigenous scientists as vital partners; the need for engaging with Native youth; and interest in specific environmental topics, including the emerald ash borer, sugar maple mortality, and adaptive land management. A theme underscoring all of these topics is the importance of recognizing how pre- and post-colonial history influences many of the current issues and dynamics in the region today. Key recommendations from the consultants for the NSRC are that:

- 1. The request for proposals (RFP) includes language to encourage projects that address Tribal priorities in the Northern Forest.
- 2. Proposals that seek to be relevant to Tribal Nations and Indigenous communities in the region include Tribal partners on the proposal and demonstrate how partners will be equitably involved and appropriately acknowledged.

- 3. The Executive Committee consider funding early-stage projects that are focused on taking the time to build equitable relationships with Tribal partners as a key outcome.
- 4. The RFP encourage proposals that include work with Tribal Nations to support Native youth, either connecting with a Tribal Nation's K–12 program (many Tribal Nations are developing K–12 youth environmental programs e.g. the <u>Wabanaki Youth in Science (WaYS) Program</u> and the <u>Native Earth Environmental Youth Camp</u>) and/or proposals that support the work of Native undergraduate, graduate, and post docs working on projects that support Tribal priorities.

Top Issues

(A) Access: All three consultants raised the issue of access to forest lands as a top concern for Indigenous Peoples in the Northern Forest region. Historically, Tribal Nations were forced or coerced to cede vast tracts of land for natural resources and for the settlement of what would become the states and the United States. Many Tribal Nations in the Northeast have less than 1% of their original land bases. However, Tribal Nations have reserved the rights to access usual and accustomed places, both on and off reservations, to continue cultural practices. Access to forest lands, off reservations, is needed for hunting, gathering medicinal foods and plants, and participating in cultural practices such as teachings, prayer, and reconnecting with the land. There is a need for facilitating agreements with landowners, land managers, and state agencies for securing ongoing access. There is also a need for sharing information about those agreements and places with Tribal citizens in the region.

"We dealt with harassment from environmental protection officers saying, 'You can't be here.' Our Tribal citizens are like, 'This is our land. This is where we're from. This is what we've always done.'"

"We don't buy sage, we don't buy sweetgrass, we don't buy cedar. Those are things we have to go out to collect, and those are part of our daily lives."

(B) Recognition of Tribal Nations by non-Indigenous scientists: The Northern Forest region is home to 12 federally recognized Tribal Entities, as well as several non-federally recognized groups and communities (Table 1). Also, there are Tribal Nations originally from the Northern Forest region, with continued cultural ties to the region, but whose Nations are now located outside of the region because of forced removal or complete loss of land bases (e.g., Mohican, Munsee, and Oneida Peoples) now in Wisconsin¹. There is a need for researchers and scientific organizations to understand and recognize the existence of the Indigenous Peoples and Tribal Nations within the region and the diversity of Tribal communities and perspectives—i.e., Tribes are not a monolith, not a "stakeholder group."

"To be inclusive and working with Tribal Nations, people have to understand that we're here, and where we are."

"It's important to be understood as sovereign nations. What if you wanted to clean up Lake Ontario and the U.S. says, 'We're going to work with our stakeholder, Canada.'? Canada's another nation on that lake. 'Partner' would make a lot more sense."

¹ The "Oneida Indian Nation" is still in Central New York and sought the restoration of lands about 20 years ago, but "Oneida Nation" remains in Wisconsin.

"Indigenous People are kind of an afterthought. There's still a lot of people who don't know we still exist. I think this is a really wonderful opportunity to bridge some gaps and to maybe heal some wounds from a long time ago."

(C) Building partnerships with Tribal agencies and Indigenous scholars: There is a need for non-Indigenous researchers and research organizations to build trusting relationships and establish ongoing partnerships with Tribal agencies, Indigenous scholars, and other Tribal Citizens. Often this takes years. An important aspect of these partnerships is building an understanding of what information is confidential and what information can be shared. It is also critical to recognize the contributions of partners from Tribal Nations in the authorship of scientific publications.

"Build relationships <u>before</u> the deadlines, <u>before</u> the grants."

"There is a lot of history in terms of research not being in the priority of the Tribe. There's good reason why sometimes that relationship is a must before moving forward."

"There's not a protocol for dealing with culturally significant data. The term that gets tossed around is 'data sovereignty.' That needs to be explored more."

(D) *Engaging the next generation is a priority:* More opportunities are needed for young people to engage in scientific education and research, and training in natural resource management and decision making.

"That's always something I hear Tribal leaders talk about: bringing in the next generation of Tribal youth to engage."

"Trying to find support for Tribal youth to do the work, get the scientific experience, and be able to bring that back to their Tribe or work with multiple tribal nations for an organization like USET... that's what I hope to see."

(E) The health of culturally significant species: The threat to brown ash, a culturally and economically essential species for the Wabanaki people, is a key concern. Some Tribal Nations are preparing for the emerald ash borer's (EAB) arrival and are trying to keep it out; others are in "response mode" and dealing with the aftermath. There are concerns about the unintended impacts of biocontrols for EAB and the potential human health impacts of pesticide treatments to brown ash trees, as basket-makers put splints into their mouths. Sugar maple is also a culturally significant priority, particularly in western Maine, where sugar maple mortality at high elevations has been observed.

"Brown ash is the only species we can make our splints out of. It has deep ties to our cultural identity; it's mentioned in our creation story. So it being threatened by emerald ash borer has been a pressing issue for the Tribal community." "Emerald ash borer research often focuses on white ash, because that has commercial value. Brown ash has often been forgotten or not mentioned because of its lack of commercial value."

(F) Forest management strategies: Tribal Nations are working to develop management strategies to adapt to climate change and mitigate the negative impacts of invasive species. There is interest in seed collection and seed banking, particularly with brown ash, as well as techniques for underplanting and assisted migration. Soil surveys are needed, especially north of Bangor where previous efforts did not extend. Tribal leaders are also concerned about the legacy impacts of pesticide use in commercial forestry operations. Penobscot leaders are working on riparian forest management strategies, including dam removal, water quality, and stream restoration. Looking forward, tick-borne illness, from both a human health and wildlife perspective, is an emerging priority.

"A lot of Tribes are concerned with herbicides and pesticides, which are widely used in the northern Maine forest and commercial forest operations. There are not a lot of studies that look at legacy impacts. The Aroostook Band of Micmacs are concerned because they are right next to a lot of these heavily managed forests that use glyphosate. A lot of the studies on glyphosate that do exist are funded by the forest management companies, so there wouldn't be a real priority to understand the impacts."

"Our knowledge base of soils is also lacking. That would help with a lot of different management."

"Biocontrols seem to be something that the State and the U.S. Forest Service are using as a main management option for emerald ash borer. The Tribal community has a lot of pushback—again, you're inviting a nonnative insect to control another nonnative insect. Looking at the efficacy and impacts of those biocontrol impacts is something a lot of folks have expressed interest in."

Federally Recognized Tribal Entities	Some of the State-Recognized Tribal
	Entities and Other Indigenous
1. Aroostook Band of Micmacs	Groups in the Region
2. Cayuga Nation	
3. Houlton Band of Maliseet Indians	- Abenaki Nation at Missisquoi
4. Oneida Indian Nation	- Koasek Band of the Koas
5. Onondaga Nation,	Abenaki Nation
6. Passamaquoddy Tribe – Pleasant	 Nulhegan Abenaki Tribe
Point	 Elnu Abenaki Tribe
7. Passamaquoddy Tribe – Indian	
Township	
8. Penobscot Nation	
9. Saint Regis Mohawk Tribe	
10. Seneca Nation of Indians	
11. Tonawanda Band of Seneca	
12. Tuscarora Nation	

Table 1: Tribal Nations and other Indigenous groups in the Northern Forest region

Attachments:

Appendix A: Summary of Interview Responses

2020 External Consultants Report: Appendix A

INTERVIEW SUMMARIES

The following text is a selection of direct quotes, with light edits for clarity, from interviews Sarah Garlick and Anthea Lavallee conducted with three external consultants asked to comment on researchrelated priorities of Tribal Nations and communities of Indigenous Peoples in the Northern Forest region. The interviews were conducted on August 31, 2020 and September 1, 2020. We have attempted to record faithfully the comments that were shared with us, and we acknowledge the possibility that our own biases may have slipped in as we made choices on what and how to report and synthesize what we have heard. —Clara Chaisson, Sarah Garlick, Anthea Lavallee, Hubbard Brook Research Foundation

Thinking back to the past 3–5 years, what are some of the top issues/concerns/pressures that come to mind for you when you think about the forests and human communities of this region?

It goes back to history and societal understanding. One of the things I've noticed about K-12 and college education is that most people don't receive an education on the geography and history of Tribal Nations unless they take an elective or go into American Indian studies. For example, many people are expected to know the six New England states, but most people—unless you're in the Tribal network—are probably unaware of the Tribal Nations and Indigenous communities in the area.

Specifically looking at the region of the NSRC, the states covered are Maine, New Hampshire, Vermont, and middle-northern New York. Within that space, there are 12 federal recognized Tribal Nations, nine of which are part of the United Southern & Eastern Tribes (USET). We also have nonfederally recognized Tribal Nations and communities in the area. To be inclusive in working with Tribal Nations, people have to understand that we're here, and where we are.

As for the top issues/concerns/pressures: Before my role as the Tribal climate science liaison, I worked for my own tribe. I worked for Mashpee Wampanoag in the Natural Resources Department. One of the issues I dealt with was access of Tribal citizens to the forest for hunting and gathering foods and medicinal plants or forest resources. Our reservation collectively is 320 acres. At the time of 1690, it was about 25 or 30 square miles. The Wampanoag original territory is Cape Cod and all of southern Massachusetts. The reason there were issues of access is that we have citizens going onto lands that might be designated as state lands or other lands outside of the 320 acres that are trust lands, and we dealt with harassment from environmental protection officers saying "you can't be here." Also, historic Tribal "rights of ways" or sometimes referred to as our "ancient ways" to access the water or other resource areas are intersected by private property. These ancient ways, which our hundreds of years old are blocked by fences and boulders by property owners. Our Tribal citizens are like, "well, this is our land. This is where we're from; this is what we've always done."

I bring up the history because it helps understand where we are today. Historically, there were different conceptual things going on. Colonists had treaties, and Tribal Nations understood the treaties as an agreement to share the space. *We'll both use the rivers; we'll both use the forests*. But the understanding on the colonists' side was property. *This is my space; you stay in your space*. That's where there's been a lot of conflict historically, and even still today. We did a lot of education in Massachusetts for environmental protection officers that our folks have Aboriginal rights. We were here before the state was here, so we felt that we should not have to get a hunting license from the state. But we do have to work within our own government. Tribal Nations are playing with things like: should we do hunting licenses in house?

I just wanted to bring this up as we talk about things like "working together," or "cooperative projects." It's important to look at Tribal histories and think of that as we come to the present day.

Access is something that's talked about a lot with Tribal members and other foresters. A lot of times, these traditional foods and cultural resources are gathered off of the reservation on lands whose owners they have agreements with—sometimes a shake of the hand type of thing. We still want to prioritize understanding and protecting those areas even though they're not on the reservation. That's a difficult jump for Tribal forestry departments, because it's not on the reservation. There's been a lot of push for forest management companies giving out permits that would allow you to harvest certain cultural resources on their land. It's a formal document, so everyone feels as if they're not going to be looked at as if they're doing something wrong; they understand the agreement through and through. In other cases, even if they might be open to you harvesting, they might not have that permit available. One concern is trying to facilitate that cooperation between landowners and tribes for gathering of cultural resources. That's something that's come up time and time again.

Another key issue I've heard come up in the northeast is emerald ash borer. Brown ash is the only species we can make our splints out of. It has deep ties to our cultural identity; it's mentioned in our creation story. So it being threatened by emerald ash borer has been a pressing issue for the Tribal community.

Aside from emerald ash borer, invasive species in general are a Tribal priority. I hear it a lot as we develop climate adaptation plans.

Forest adaptation is a priority for a lot of folks. When we went to the Saint Regis Mohawk forest adaptation workshop, there were quite a few tribes represented there. What I hear most is seed collection and seed banking, particularity with brown ash, but also with all ash species. Assisted migration is something I've heard a lot of talk about, but it's a challenging thing to bring to leadership because there's not a whole lot of information on how to find climate adapted areas for these species that are not native to a certain region. You're trying to push a species north, but there's some reservation there that you've invited a nonnative species to your ecosystem. But with the changing climate, these areas might actually be better for certain species. How do you go about finding those areas? That's something I've toyed with at the Passamaquoddy Forestry Department several times.

With brown ash, it's really hard because it's not a commercially valuable species because it's found in wetlands. So even in research on emerald ash borer, it's been forgotten or not mentioned because of its lack of commercial value. Emerald ash borer research often focuses on white ash, because that has commercial value. Studies that look at culturally significant brown ash would be of interest.

Workforce recruitment is another challenge for the natural resource and forestry community for Tribal Nations. A lot of programs have come up to try to invite youth workers to engage with the forestry department, but it's challenging to get them into the forest and engaging in forestry related activities. There's a lot of overhead and safety precautions that make it really challenging to facilitate that.

Follow-up question: It sounds like the challenges are mostly related to costs and logistics. Are you also finding there's a barrier of willingness?

There are students that are interested—whether or not they maintain that interest beyond their first engagement depends. But there seems to be an interest initially; it's just a matter of getting them to a site. A lot of times our work is in western Maine, so it's difficult to bring Tribal students all the way from eastern Maine. There are travel expenses, lodging expenses... if you travel that far, you generally stay for more than one day so you're also having a time commitment. A per diem is associated if they're paid. It's just a challenging feat to overcome, but there's a lot of interest. That's always something I hear Tribal leaders talk about: bringing in the next generation of Tribal youth to engage in these programs.

The Passamaquoddy and many northeast tribes have sugar maple as a Tribal priority. It's culturally significant to many tribes. Western Maine is where the majority of sugarbush operations occur within the state. The Passamaquoddy do have a sugarbush in western Maine. There's been discussion of perplexing mortality, possibly elevation related. From 1500-2200 feet, there's a lot of dieback in sugarbush and talk of it being partially influenced by some climate variable.

There's also not a lot of climate data specific to the high elevation areas in western Maine. If you look for climate data or weather data in western Maine, a lot of the weather stations are at lower elevations. If you are in the town of Jackman and you get your weather data or just write down how you feel about the weather there, if you go into the sugarbush, up in elevation, it's completely different. That's pretty specific to the Passamaquoddy because there aren't a lot of other tribes in mountain regions of the state. We talked about getting tribes, seeing that void in weather data, to submit for a TSCAN machine to get it more specific to their site.

A lot of tribes are concerned with herbicides and pesticides, which are widely used in the northern Maine forest and commercial forest operations. There are not a lot of studies that look at legacy impacts. The Aroostook Band of Micmacs are concerned because they are right next to a lot of these heavily managed forests that use glyphosate. A lot of the studies on glyphosate that do exist are funded by the forest management companies, so there wouldn't be a real priority to understand the impacts.

Biocontrols seem to be something that the State and the US Forest Service are using as a main management option for emerald ash borer. The Tribal community has a lot of pushback—again, you're inviting a nonnative insect to control another nonnative insect. Looking at the efficacy and impacts of those biocontrol impacts is something a lot of folks have expressed interest in.

Another option discussed is injecting pesticides into trees. The pesticides are pretty volatile, but I don't know how long they remain in the stem of the tree. A lot of basket makers have expressed concern about how long it would remain in there. How long do you have to stop treating the tree before you can pound it? A lot of people put splints in their mouth while making baskets.

One last thing: Planting efforts in the northeast are not that common unless you're in a plantation setting. How efficient and cost effective is planting? In particular, I've seen interest in planting brown ash in the aftermath of emerald ash borer to try to promote and bring back some of these sites that basketmakers use. Planting brown ash is a challenge because it's propagated after warming, freezing, saturated soil conditions...there's a bit of a recipe to get it started, and there aren't a lot of studies that look at the success rate of planting brown ash seedlings for direct seed establishment at a particular site.

Our knowledge base of soils is also lacking. That would help with a lot of different management.

For my family community, having access to the woods—to collect our medicines, to do the traditional teachings that require us to be in the woods, to share these lessons. Reconnecting with the land is imperative for keeping our ways alive, and it also enables us to pass down these lessons to the next generations. There are many nations living in Vermont and we all have a connection to the land that we live on and have a need for accessing these medicines in order to pray and keep our traditions alive and honor those things.

For a lot of people that live in Vermont and aren't homeowners, finding places where you can go and collect medicines where you're not going to get in trouble, where those medicines are thriving and not being depleted, are important. A lot of times that happens because people don't know how to harvest birch bark or harvest certain things and end up killing trees that we use for ceremony. Having access to those spaces to where those medicines are growing and thriving.

Of these issues, can you think of a specific case where new, forest-related scientific research or a synthesis of existing research was or would have been helpful? Tell me about the actors, actions, decisions, etc. involved.

There was some concern about a lot of natural resources getting mistreated and then being killed off by research—people going through and not necessarily paying attention to what they're walking on or around. They're focused on the thing they're doing research on and testing, and in the process doing harm

to other important parts of the forest. Really just making sure that when there's any kind of science going on, there's a lot of focus on your entire space, being mindful of where you're stepping and collecting.

It's also really important for researchers and scientists to be in touch with Tribal people. There are four different recognized Abenaki bands in the state of Vermont as well as other nations. There's a lot of us, we're just not as visible as in bigger cities and other states. Having that direct communication with Tribal people, *all Tribal* people—not just Abenaki —is really important. Because we all have different wants and needs from our forests.

Looking forward, over the next 5 years, what issues do you see on the immediate horizon in this region that would benefit from new, forest-related research and/or research synthesis? How can science be a tool for addressing these challenges/opportunities?

From the 30,000-foot level, something to be mindful of is that in my conversations with Tribal natural resources directors or managers, they have mentioned issues around the word "stakeholder." I'm seeing more of a preference for the word "partners." The word stakeholder could mean a community, business, organization, or other group that has an invested stake in the resource—that could be economic, it could be cultural.

Where Tribal Nations come in, it's important to be understood as sovereign nations. For example, let's take Lake Ontario. What if you wanted to clean it up and the US says, "We're going to work with our stakeholder, Canada." Canada's another nation on that lake. "Partner" would make a lot more sense. Stakeholder is so commonly used. It's part of the language. But we've been trying to steer the relationship as tribes as nations. Getting that understanding upfront is important.

For the next five years: We're so focused on the next generation and getting Native youth and Tribal youth into these positions of doing the science, or influence, or being at the table with policy. I think in my own Tribal community it's changing and that's good, but when I went from high school to college, our tribe, relative to other nations, had among the higher high school graduation rates, but still our students weren't going into college. They were going right into the workforce. Trying to find support for Tribal youth to do the work, get the scientific experience, and be able to bring that back to their tribe or work with multiple Tribal Nations for

an organization like USET... that's what I hope to see: development of those opportunities.

One positive example of language use that I've seen in federal grants is "of greatest Tribal concern." We don't speak on behalf of the tribes. If we did speak on behalf of them, we could get it wrong—I like that wording because it leaves it open to whoever does the request for funding to determine what is of greatest Tribal concern. I like that wording, and I've seen that quite commonly in a lot of federal funding opportunities recently.

One thing I didn't mention in the last question was the Penobscot tribe has done a lot with their fisheries—with dam removal and looking at water quality and stream restoration. From a forestry perspective, riparian forests are of concern.

In the next five years, priority would be given to the emerald ash borer and other invasive species. That seems to be a really pressing issue.

Tick-borne illness is another one that I have heard a lot of talk about from the human health perspective as well as a wildlife perspective. Looking at how tick populations are impacting deer or moose herds.

It's worth mentioning that the most useful items for me working with the Tribal forestry department is if there is a guide, or some sort of manual, or some tangible item—a deliverable of some

sort of research synthesis or research product. That has a lot of value in taking your research from a simple project to an actionable item.

Emerald ash borer is definitely a priority for the five-year plan because it could very well be on Tribal land within the next five years, so having some research done to look at early detection or management before the onset or arrival of EAB is something the tribe is expressing concern with now. It's the same with other invasive species. Saint Regis Mohawk is looking at managing aftermath forests.

In Maine, they haven't seen emerald ash borer on Tribal lands yet so the focus is how do we keep it out? Saint Regis Mohawk is in a different position because they have emerald ash borer already, so they're in response mode. From Tribal nation to Tribal nation, research priorities might be different based on where they're at, whether it's prevention or if it's already response.

When we're talking about forest and lands it's always important to consider the impact of any research on the Indigenous communities that live in the region, especially the folks that live closest to the areas where the research is being done. Not just whose Tribal land it is, but all Indigenous residents—reaching out to communities and asking for help or insight would be the norm in an ideal world. There's information that Tribal leaders, elders, and healers hold that could potentially help science. A lot of the knowledge that we carry isn't something that we openly share, but if there were researchers or scientists that were looking into something specific that perhaps an elder holds a lot of knowledge and could go out into the woods and help, I think that would be a wonderful norm to see.

Follow-up question: Could you unpack the idea about sovereignty of knowledge for me?

As you may know, a lot of Indigenous practice and teachings have been exploited over the years by non-Indigenous people. So there's been a lot of elders, especially of a certain generation, really holding on tightly to a lot of information and not wanting to share it with a lot of people because they've seen so much harm done. So this newer generation and younger are really kind of pushing for: let's open up a little bit more, because we can achieve more when we're working together with people that aren't Indigenous, versus cutting ourselves off. I understand where they're coming from. They've all come from a much rougher experience walking in this world, and it's not an experience that I have, so I try to honor the elders but also try to modernize things. Letting them know that science and research isn't a bad thing, and if we are involved in the decision making or just walking around in the woods and talking about these things, then we're involved. I think that's what's important: that our voices are being seen and heard.

Follow-up question: What advice would you give to researchers who want to engage?

First, I think it's important to have a broad swath of people to pull from, a big pool. The thing that I've noticed living here in Vermont, it's a smaller Indigenous community and everybody's spread out more because it's such a rural place. We're spread out all over the place. Casting a broad net, and just being really respectful in the way you approach things. Our way is always to watch and to listen. When we're with our elders or our teachers, we don't talk a lot; we listen. And that's how we learn. So just being respectful. We know that people make mistakes, and the best thing to do when that happens is just to apologize and move on.

Talking to the Vermont Commission on Native American Affairs is a great resource. It's multi-Tribal, and there's some nonnative people that are on the commission as well. We try to open the floor for people to come to our meetings to present. It's a great resource.

In addition to your thoughts about the themes/issues that we might highlight in the upcoming RFP for the NSRC, we are also interested to hear your thoughts on the research approaches,

partnerships, and products that would be most useful. Do you have ideas or recommendations related to: research approaches/frameworks, collaborations/partnerships, timeframes, desired results and products?

In partnerships, I like to do a lot of Venn diagrams to see where the overlap is. I've been doing a lot of that in the space between the research community and the Tribal Nations on the ground. I like to define the overlap, because that's what helps the overlap.

Here's a specific example: in Mashpee, the Mashpee National Wildlife Refuge was established in 1995 or so. Next to our tribe, it's the largest extent of forest. At the time, Mashpee—and all of Cape Cod—was being developed very fast. Both the town of Mashpee and the Mashpee Wampanoag tribe were on the same page—they didn't want to see 6,000 acres of forest mowed down for suburbia. In that instance, they were on the same page and worked with Fish and Wildlife to set aside and lock this area from development. But where the divergence happened was with access. The town's attitude was: protect the area, fence it, put gates on it, keep people at a minimum. But from the perspective of the Tribe, this is one of the last places we can get our resources. That's where the divergence happened. But finding the convergence—finding both Tribal partners and state governments agreeing about wanting to keep ash forests intact, wanting to keep ecosystems intact, is a good starting point.

I'm in the beginning stages of building relationships between research institutions and Tribal Nations. I do see a challenge. We have researchers with minimum timelines to get research proposals in, and that may not have a relationship and are trying to build that in a span of months. Build relationships *before* the deadlines, *before* the grants. Those take a couple years. That's something I'd like to see. This year, right now: go to Tribal workshops, meet people. Not like: "There's a grant due in 60 days and I'd like to list you as a collaborator. By the way my name is..." It's better to have a relationship going already.

I'd like to echo the importance of building relationships for years ahead of bringing a Tribal Nation in as a cooperator or approaching them for insight on something like that. There is a lot of history there in terms of research not being in the priority of the tribe. There's good reason why sometimes that relationship is a must before moving forward, and that might be, in itself, a part of the research: building the relationship ahead of time and understanding when something is said in confidence and is meant to stay with the folks that hear it firsthand and when it can be shared beyond there.

That's something in my research that I've tried to prioritize: putting language in my work that shows that there are certain things that are culturally significant and it doesn't get shared beyond the Passamaquoddy Forestry Department, regardless of who might be funding that research. So then I'm not put under the thumb of "you need to show us where this site is," etc. That's a bit of a gray area right now, because there's not a protocol for dealing with culturally significant data. The term that gets tossed around is "data sovereignty." That needs to be explored more.

Is there anything else you would like to share?

Indigenous people are kind of an afterthought, especially when it comes to nature. There are still a lot of people who don't know we still exist. My kids get picked on at school all the time; they get told that they're liars. I think this is a really wonderful opportunity to bridge some gaps and to maybe heal some wounds from a long time ago.