

Meet the Next Generation of Stewards of Tribal Lands

Recruiting the next generation of foresters and natural resource professionals to manage tribal lands is a goal for many tribes, and there are a number of initiatives underway to accomplish this. [See the *Western Forester* July/August/September 2020 issue.] Two of these young professionals are Elisha Flores and Christopher J Villarruel. Here they share in their own words why they chose a career in forestry and natural resources.

Elisha Flores 'a:wholye. My name is Elisha Flores. K'iwinya'n-ya:n 'a:whte.' I am an acorn eater.

Na:tinixwe 'a:whte.' I am a person of the place where the trails return (Hupa person). Xomilna:whay na:tinixw. I come from the place where the trails return (Hoopa Valley Reservation). Xomilna:whay diysh-da:ng-a'din. I come from the Tish Tang village.

I've worked at Hoopa Valley Tribal Forestry (HVTF) since spring 2018 when I started here as a wildlife technician. At the time I had finished my



undergraduate degrees and was considering graduate school. Since then, my role is constantly evolving. While completing my graduate program, during all of my breaks I returned to work at HVTF, taking on a different position in a different division within the department each time. I was already getting a taste of the need to "wear multiple hats" and think from different disciplines related to forestry, which I was told is often a skill required for tribal foresters.

Most recently, I've become the interim forest planner and hope to settle a bit more here in the Planning Division. In this role I help plan for future timber sales and forest management projects, write environmental documents, ensure our work is in compliance with tribal and federal laws and policies, and oversee forest inventory data collection and analysis.

What sparked my interest to pursue forestry

When I was a kid, there was one thing I was always told that I would do someday: attend college so I could bring that experience home and help my people. My family and community believed in me to do so, and this

became a major goal in my life. It didn't exactly cross my mind to pursue forestry specifically, but some of the significant lessons I learned from my family and community while growing up in Hoopa was the importance of the river and the forests to our people.

The time came when I had to be an "adult," and I chose to attend the University of California Berkeley, still not knowing what I actually wanted to be when I grew up. I found my way to the College of Natural Resources, and honestly just kind of fell into their Forestry and Natural Resources program. I took some forestry classes and realized that when we would talk about broader forest ecosystems and ecological interactions within these ecosystems, they sometimes reminded me of cultural teachings from home. Those ideas of connectedness in the physical world spoke to me, even though the language from the lens of an environmental scientist was different from the stories my grandpa and other elders told me.

As I continued my undergraduate education, I yearned for a program (or even just some individual classes) at the intersection of natural resource management and Native American Studies (NAS), but it didn't exist. Instead, I pursued majors in forestry as well as NAS, hoping I could figure out how to weave the two academic disciplines together myself along with my personal experiences as a Hupa kid who grew up on the river and in the mountains.

My career journey

After deciding on forestry as an educational path, I wanted to continue down that same path in my career. I also knew early on that I wanted to work either for or with tribes no matter where I ended up. Long term, I know I'll always find my way home. In my language, we call our homelands na:tinixw, meaning "the place where the trails return." These forests have meaning and value to my people that's indescribable in the English language.

One of my biggest responsibilities as a Hupa person is as a steward to these very lands. It's important to us to maintain balance and reciprocity in the broader world and with all of its beings. I didn't know if I would begin

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Located in northern California and straddling the Trinity River, the Hoopa Valley Reservation includes more than 87,000 acres of forestland that is FSC certified. The forest is managed for multiple uses including wildlife, hunting and gathering, and timber production.

my career here or take some time to work in other areas once I finished college. However, I saw (and still see) a huge need for young professionals in my Tribe's natural resources departments, as well as more tribal representation in these professional positions. From what I've seen these tend to be common themes for tribal forestry departments across the nation. Holding my responsibility as a Hupa person, and understanding the need for people like me in our Tribal departments now, I decided to begin my career at HVTF.

What I've learned along the way

The biggest challenge both in my education and in my career (to this very day) is learning how to maintain and balance my roles as a Hupa person and modern-day forester. My value system as a Hupa person does not always align so easily with the value systems at the foundations of the modern-day field of forestry. Sometimes they can align, but it takes extra time and effort to translate or crosswalk how I think as a Hupa per-

son with how to think as a college-educated forester. It requires even more time and energy to see if I can take actions or make a decision that feels right from both of those world-views. This is why I've found so much value in this growing idea that Indigenous knowledge systems, particularly Traditional Ecological Knowledge (TEK), and western science can inform each other and be applied together in research and in practice. Seeing this kind of work has always been the breath of fresh air that I need and continues to inspire hope for me.

Advice for future and current foresters

As an early career professional myself, I'm also always looking for advice. For those in a similar position, my advice would be to find your support system, especially if you're an Indigenous person coming into this field. Having friends, colleagues, and mentors who understand the nuances of tribal forestry or who have personal experiences similar to mine has been invaluable to me. Sitting in rooms where the conversation is typically centered on federal, state, or the private sectors of forestry can feel isolating when you're trying to understand how these topics fit (or don't fit) in the context of tribal forestry. Even if you're not an Indigenous person interested in

tribal forestry, I'd encourage you to find those people who are walking in similar shoes.

I also encourage all foresters to take time to learn about tribal forestry and what makes it unique, as it's often left out of the conversation. Speaking very generally, I hope to see more and more people entering forestry-related career paths. No matter who we work for, we're interacting within ecosystems that don't have jurisdictional boundaries, and right now these ecosystems are experiencing fast paced changes. We're up against multifaceted problems, and I think we need diverse perspectives working together to come up with more holistic approaches and options in forest management.

Why increase Indigenous representation in stewardship positions

It's very important that Indigenous peoples have a voice in the decisions being made for our lands and waters, and are represented in the positions with decision-making power. From what I've been told, it seems like Indigenous representation in these positions has increased more recently, but as a young career professional looking for mentors and examples of what it could mean to be an Indigenous person in these positions, it still feels too few

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and far between. Having Indigenous peoples in those positions would have so many benefits, but here are a few that are personally important to me.

First, I believe it would benefit the land to reestablish those relationships that it has had with local Indigenous peoples since time immemorial. Many Indigenous peoples have held stewardship responsibilities to these lands for a very long time prior to colonization and have built a deep understanding of local ecosystems. For me as a Hupa person, it's important to foster reciprocal relationships with the land and always be considerate of that broader balance in the physical and spiritual worlds. These types of worldviews and deeply rooted knowledge systems will help us care for the land,

and ensure that the land can continue to care for us and future generations.

Second, I believe it will be so much more encouraging for our youth to see that kind of representation in leadership positions. There is a need to recruit young people in these fields, and we need to make sure they feel seen and supported. I know too many people who have been told they would go nowhere or never do anything with their lives and it's not easy to find role models who inspire hopes and goals. Representation matters as it impacts how others view Indigenous peoples but also how we see ourselves, especially for Indigenous youth.

Third, I think it would boost tribal sovereignty on a larger scale. Tribal sovereignty is one of the things that makes

each tribal forestry program unique. Expression of our sovereignty can look different for various tribes, but generally the broader lack of understanding of tribal sovereignty has really hindered many of us from having autonomy over our forest management decisions and practices. Having more Indigenous folks in these positions to advocate for tribal sovereignty can help us challenge some of those barriers that have long been in place.

My future goals and vision

I envision a stronger balance between environmental/ecological, social/cultural, and economic considerations when it comes to making forest management decisions. In my generation of forestry education, I remember countless conversations of what it means to practice "sustainable forestry," and I didn't see a single-track definition of what exactly that even means or a golden arrow approach of how to put it into practice—it's complex and complicated across different spatial and temporal contexts. I don't think it's off base to say that the roots of modern-day forest management were very economically driven and that capitalistic ways of thinking have largely led us right to the very problems we're up against today.

We're at the point where it's not just a "want" for new foresters to learn how to make more balanced decisions, but rather a "need" because our lands and our communities are hurting so badly as a result of past decisions. My only career goal is to do right by my people and my homelands. To me that means honoring what my ancestors left for me and ensuring I do the best I can to leave the same for the future. I've heard it described as things like "ecocultural revitalization" or "reciprocal restoration," which to me basically comes down to reestablishing and strengthening those relationships that have always existed between the lands and all the living beings that are connected with that land to foster healthy lands and healthy communities.

Elisha Flores is the Interim Forest Planner for the Hoopa Valley Tribal Forestry. She can be reached at elisha.hvt@gmail.com.

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wee! My
name is
Christopher
Villarruel. I am a
member of the
Ajumawi and Atsuge
tribes of The Pit



River Nation. Our ancestral homeland is located in portions of what's now Shasta, Lassen, and Modoc Counties in California. My field of study is forestry, and I am currently a senior in the hydrology option at Humboldt State University in Arcata, California. Yes, I study under the lovely redwoods of Humboldt.

What sparked my interest to pursue forestry

When I was 15, one of my first real jobs was shadowing a hydrologist who worked for my Tribe as the natural resource director. He introduced me to general natural resource knowledge about riparian areas, noxious weeds, erosion control, and, one day, going to college like he did.

About seven years later after graduating from high school, I was working as a clean-up laborer at the Sierra Pacific sawmill in my hometown of Burney, California. In the breakroom was a poster advertising summer internship work for forestry students. On the poster was a young person wearing a backpack and holding a clipboard, writing down information about trees. I remember at that moment thinking that's what I should be doing.

My forestry journey thus far

I went to Shasta College. Although the campus is located in Redding, Burney served as an extension site, and in a small trailer, I stared over an interactive television. I performed some of my first forest measurements during an agriculture class. And it's where I found out that Humboldt State had a forest hydrology option that qualifies me as a four-year accredited forester and an entry-level hydrologist. Including a year off, it took about four years to obtain my associate degree. With that I applied to Humboldt State University in 2017.

In 2018, my family, which consisted of my girlfriend and our two boys,

acquired a large 5th wheel from a family member. We downscaled our living, and drove four hours to Arcata. At the time it seemed like a good idea, but we didn't realize how it was going to allow us to save money and manage a family of four in Humboldt. During my first two semesters, I obtained good markings in my class and an internship working for Redwoods Rising. I was hired with 15 other students, who were mostly forestry majors from school, to be on a field crew performing exotics management for a large forest restoration project with a lead from California State Parks.

On campus I joined a club called SAFE or (Student Association of Fire Ecology). The club was made up of mostly fire fighters in the fire ecology option. Through the club I learned how to get my basic 32 certifications. I applied to the 2019 Yurok TREX Cultural burning training; this allowed me the opportunity to get on my first prescribed fire and train with experienced tribal fire fighters and their partners. In 2019, I also attended Science in the Sagebrush Steppe workshop at the Eastern Oregon Agricultural Resource Center. There I learned how to manage juniper encroachment by fire and mechanical treatments. The largest reservation that my tribe owns is near the border of Oregon in a similar environment.

During the summer of 2020, I applied to The Center for Tribal

Research and Education in Ecosystem Sciences or "TREES" Internship program that the forestry department at Salish Kootenai offers. They placed me at Hoopa Tribal Forestry as the assistant silviculturist for their timber and tan oak stand improvement projects. Before this internship I just finished dendrology, mensuration, and silvics classes. Now I could apply my new-found knowledge on what I considered my first real forestry job. I learned general silvicultural duties that could be used elsewhere, but it was cool working with other tribal foresters in their homelands. What really got my eye about the position was that I would also be working on a tanoak stand improvement grant the tribe obtained. The work we were doing directly protected and strengthened future food sovereignty of the tribe. That job was really eye opening for me in many different ways.

What I've learned along the way

What surprised me about studying forestry were all the different classes we take: tree species identification, soils, economics, ecology, and forest operations. I enjoy that aspect of modern forestry, because I am a person with many different interests and perspectives, so this gave me a good foundation to decide what kind of tribal forester I want to be. I take all of my

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classes seriously and try to take in as much as I can about the many different aspects.

I see the undergraduate degree as the foundation of knowledge that I apply to my summer internships. The internships are where I can meet different professionals outside academia and figure out what kind of work I want to do when I graduate.

Advice for youth considering forestry

Forestry is a multifaceted field. I would encourage you to get out and get involved in different fields of work. I know some people like to adhere to a strict niche of forestry to specialize in, but to me it makes more sense to get a wide array of experience to scratch the surface of our forests and complex processes that sculpt them. Our ancestors were also multifaceted in their skills so it makes sense for me to try and be so too.

Why increase representation of Indigenous peoples in forestry and natural resources positions

My great-grandfather Raymond Lego was a logger by trade, but more importantly, he was an advocate for our people to reclaim land from private and public holdings that were managing our resources how they wanted. He emphasized that it was important for us to align our efforts with like-minded stewards who under-

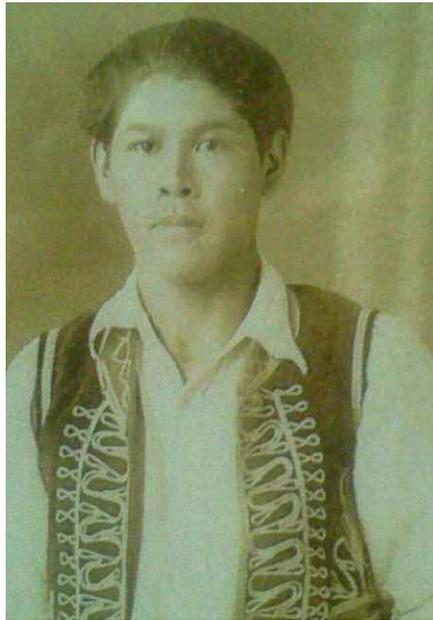


PHOTO COURTESY OF CHRIS VILLARRUEL

Chris draws inspiration from his great-grandfather Raymond Lego, a logger by trade and advocate for the Tribe to reclaim its land and manage it by their values.

stood the environmental, cultural, and ecological conditions of the land like we did as First Peoples.

As somebody close to the land, he felt like our voice and decisions were constrained. To us it is important to build our people on the strength of the land, because if the land is healthy, then the people will be too. The land and our people are one in the same.

This is the mindset that I carry with me as a tribal forester navigating my

education and career experiences. I feel like my role and journey as a Pit River steward is a step forward for the legacy and ideas that my grandfather lived and died by. If he were born in these modern times, I could see him living a similar path to the one I am currently on. This is why I chose the hydrology option, trained in cultural burning with the Yurok, trained under Hoopa foresters, and am obtaining watershed restoration training this summer. The day I move back home I want to have a wide array of experience that can strengthen our voices to obtain a stronger role in forest watershed stewardship. Really, they go hand in hand with each other: Everything you do or don't do above the watershed can have huge impacts below.

My vision of forestry

I would like to see more efforts to recruit tribal students into forestry programs. Having more Indigenous representation in forestry would be a game changer for projects on tribal land and surrounding forests. I would like to see more tribal foresters reaching out to high-school students, showing them what kind of work we are spearheading on the land.

Always learn and seek out new experiences

For aspiring foresters, it is important to get out and get different experiences outside the box that we sometimes put on ourselves. If you are studying fire ecology, go get in on that watershed restoration training. If you are in hydrology, go jump on a prescribed fire. I'd like to see more foresters broadening their experience working for different agencies, tribes, or private organizations. Get out there and scratch the surface. It will only strengthen your knowledge as a forester who truly understands what is needed today while also bridging the gap between large management goals. And for anybody who is interested in tribal forestry it is important to first familiarize yourself with tribal sovereignty. *UV*

Christopher J. Villarruel is a senior at Humboldt State University, where he is studying forest hydrology. He can be reached at Christopher.Villarruel@humboldt.edu.

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