

THE MUCKLESHOOT JOURNAL



PLANT EDITION

Welcome

It is with excitement we share the 6th edition of the Muckleshoot Journal! Our previous issues have all sought to highlight the writing and artistic talent of the student and faculty at Muckleshoot Tribal College, as well as Muckleshoot community members. The 1st edition was created in 2009 by Alicia Woods as part of a Northwest Indian College journalism class. Through the years, it has continued to grow in both scope and content, and we have had the opportunity to create a variety of specialized issues. For the 3rd edition, the journal focused on traditional foods and was shaped in conjunction with the First Annual Muckleshoot Berry Festival; an event that was conceptualized and organized by Valerie Segrest. The 4th and 5th editions both featured an honoring of elders in the community and their teachings through interviews, articles, visual art, and poetry.

This edition is all about plants. Working with plant medicine to improve health and wellness is centuries old and an important part of Muckleshoot culture. It is especially pertinent today as we strive to stay resilient during the current COVID-19 pandemic. I spearheaded this project, along with Amy Maharaj, to accentuate our cultural knowledge and resources while also highlighting the talented members of our community. Our focus, as always, is to share Native knowledge, from our own Native perspective.

We hope you enjoy this special edition of the Muckleshoot Journal, Plant Edition!

Denise Bill
Exec. Director of Adult & Higher Education



PHOTO CREDIT: "HUCKLEBERRY" BY ELISE BILL-GERRISH

Welcome

Our heritage is the remedy to our broken health system. Our Ancestors lived long, well-nourished and riveting lives. We understand that this longevity is inextricably intertwined with our culture and our values as Muckleshoot people. For generations, our Ancestors put forth tremendous effort to uphold our health by perfecting and passing on their recipes full of wisdom and nourishment. These recipes and lifeways are our inheritance, our living legacy and direct link with the lands we derive from. Within it is the power to heal our people and encourage our vitality.

Surrendering our lives and becoming true worshipers of nature is not just a blessing but a calling for many of us. When we stop and begin to practice the “art of noticing” what is all around us, we are better able to connect with our energy and truly examine the gravities of our presence here at this very moment in time. Without a spoken word, we learn from the uncontrollable spirit of nature. With great observation we learn from the plant people how to live in adversity and no matter what be big medicine. We learn from the tree people how to have patience and vision for future generations. We learn from the salmon people how to live a life of such generosity and love for our living world through their relentless homecomings to their ancestral rivers that end in their own self-sacrifice to nurture the next generation. We learn from the winged ones the power and medicine of the wind carrying antidotes and prayer to places beyond our human grasp. We learn from the four leggeds – to be elusive, humble and walk with grace. Our living world has so many lessons to help shape us as humans, and so many teachers waiting for us right outside our door.

Getting in rhythm with the land is truly all about living in harmony with its spirit. It comes naturally to us as Muckleshoot people, because it is who we truly are at the very core of our DNA, at the center of our everlasting spirit. For me, this gift is more than I can express in written word. It is often overwhelming and emotional to think of the depth and fortitude we receive from the plants. All I know to do is to return the love by being present with them as much as possible, bragging about them as much as possible and advocating for them wherever they may lead me to do so. I do this, and we do this as a people, so that we can continue to leave the gift of fidelity through the living world for those to come in the future.

These are the values we hold collectively; they are what will keep us living and strong as a people. That is precisely what this journal focused on traditional medicines offers us. From testimonies of budding young herbalists and foresters to recipes and brilliant illustrations. It is a reminder that our heritage is our medicine, and that the culture we carry is vibrant and when honored leads you to the most powerful self-care imaginable. Be assured that each of us carries an internal light. Stoke the fire, build your light, and nourish the dynamic energy and unwavering spirit power you’ve been gifted so that you may overcome obstacles and press forward to accomplish the work we were put here to do in this life. The answers are all around you, like a puzzle on the landscape- it is up to you to put the pieces together.

With Love,

Valerie Segrest (Muckleshoot)

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BACKGROUND PHOTO CREDIT: "FIREWEED" BY ELISE BILL-GERRISH

Hatso Hau Aim Poi Ohm Daw (Greetings, and welcome everyone)

We would like to send this to acknowledge with gratitude to the Muckleshoot community for the recent partnership with the Muckleshoot Indian Tribe and the University of Washington Tacoma. This relationship and partnership began in September 2019, but it is the result of the heart work of many before us. We would like to acknowledge the Muckleshoot Tribal College, Adult and Higher Education Department and in particular Dr. Denise Bill, Michele Rodarte, and Amy Maharaj for their continued role and connection to the University of Washington Tacoma EdD Program. As a result of the numerous meetings and connections we are grateful to have the Muckleshoot doctoral cohort, if not for the pandemic, would have been one of the only tribally based doctoral cohorts in the State of Washington and potentially, the United States. This is extremely important to recognize and acknowledge the role that prayers, love, medicine and place have in creating tribally based education. We appreciate the tribal leadership, community, family and ancestors who have welcomed us. We would like to acknowledge this creation story and look forward to the lessons and teachings we gain from our relationship and continued connections with the Muckleshoot Indian Tribe. Many heartfelt thanks.

Many Ah-ho's (thank you's),

Dr. Robin Minthorn

Kiowa/Apache/Nez Perce/Umatilla/Assiniboine

Associate Professor

Director of Doctoral Program in Educational Leadership

Director of Indigenous Education Initiatives, School of Education

University of Washington Tacoma



Rose

5 Ways to Eat a Rose

<https://www.yesmagazine.org/issue/coronavirus-community-power/2020/05/09/how-to-eat-a-rose/>
By Valerie Segrest

The resilient rose is legend, the royalty of flowers. For 35 million years it has captivated, invigorated, and immunized the living things that have evolved along with it. Not only are roses a global symbol of enduring love, they are also marvelous food and good medicine. What better time than now, when we're slowed down and trying to ward off contagions, to look to traditional medicines to fortify our immunity? For countless generations, Indigenous practices of organizing around traditional food and healing systems have supported community health.

Eating rose petals bestows flavonoids, antioxidants, and immunity-boosting vitamins and minerals. Antioxidants strengthen our hearts and blood vessels, and the astringent action in the body tightens inflamed tissue, soothing sore throats and coughs. Roses are rich in vitamins A, B, C, E, and K and minerals including calcium, iron, and phosphorous.

Wild rose is the perennial favorite to harvest, though any variety of rose can be used in cooking or medicine-making as long as it is not chemically sprayed. For Native Americans, roses are used in times of transition—birth and death—helping us transition through change with grace. They are beaded into regalia and adorn ancient artforms. Wild roses like the Dwarf (*Rosa gymocarpa*), Nootka (*Rosa nutkana*), Swamp (*Rosa pisocarpa*), or *Rosa rugosa* adorn different habitats ranging from open to wooded and dry to moist locations. Most places have a wild rose variety.

Harvest roses in the early summer when they are the most vibrant and fragrant. An early morning stroll just after the dew has dried is the best time to pick. Think good thoughts as you pinch the petals off the flower, leaving the inner part so that it can become pollinated and turn into a rose hip later in the season. Follow the vitality of the rose to find where the medicine is. After blooming, the plants shoot their energy back to the roots, then, when the first frost hits, push sugars to the fruits (rose hips), making them sweeter.





1. Fresh petals

Sprinkle them on salads. Put them into water along with lemon, strawberries, or raspberries for a healthy, uplifting beverage. Chop the petals up and stir them into softened butter for a fancy spread on biscuits, crackers, or muffins.

2. Infuse local honey

Place fresh petals in a basket and let them wilt for a day. Transfer wilted petals to a clean glass jar and pour lightly warmed honey on top of them. Making sure the flowers are completely covered, screw on a tight-fitting lid. Let the jar sit in a warm spot for one week. Every few days take the lid off and wipe any condensation from the underside with a clean paper towel. After at least one week or up to three, strain the honey and store your rose-infused sweetener in a glass jar in a cool dark place. Rose gives up its medicine easily, for the most part. Using a local honey also can assist in seasonal allergies. Drizzle on peanut butter toast or add a teaspoon to a warm cup of tea or some hot water with lemon.

3. Dry for tea

The easiest way to dry buds or petals or whole flowers is to simply lay them out in the sun on a dry day. Store dried roses in a sealed glass jar in a dark cupboard. Light will subdue their vibrant color over time. Dried rose petals can be steeped in hot water to make a tasty rose tea. For a more multidimensional flavor add some black tea, like Ceylon or Earl Grey, and a pinch of ground cardamom.

4. Flavor Vinegars

Add those dried flowers to a bottle of rice or white wine vinegar. The vinegar will draw out the minerals, fragrance, and floral flavor of the rose petals. It is a great way to boost the medicinal qualities of your salad dressings or brighten up a dish with complex flavors.

5. Rose hips in fall

Don't forget about those rose fruits you spared during your early summer harvest. Revisiting those patches in the fall, preferably after the first frost when the fruit becomes sweeter, will gift you with a more potent flavor of rose, reminiscent of its close cousins apple and cherry. Just three tiny rose hips have the same amount of Vitamin C as an orange. Pluck the fruits off the rose bush and drop them into a dehydrator or a basket for a few weeks, moving them around once a day. After they have dried, remove the seeds. Grind the rose hips into a powder and add a splash of apple juice for an easy jam. They can also be steeped as a tea or infused in vinegar.

This article appeared in YES! Magazine. For the full article, please visit: <https://www.yesmagazine.org/issue/coronavirus-community-power/2020/05/09/how-to-eat-a-rose/>

Camas

By Elise Bill-Gerrish

How To Harvest Camas in bəqəlsʉtuckd

1) čədəxʷ tɪ čəbɪd

Where is the camas?

2) ʔulab čəd tɪ čəqəysəb ʔə tə kaykayəb

I will look for the blue flower.

3) ʔulab čəd tɪ čəbɪd

I see the camas.

4) kʷədəd tɪ dɪtqəlɪ

Grab your digging stick.

5) ʔuləxəd tɪ čəbɪd

Gather the camas.

6) čəgrəd tɪ čəbɪd

Wash the camas.

7) ʔəskʷədɪldəxʷ dxʷʔəl tɪ čəbɪd

Grateful for the camas

8) dɪt ʔuys, huyəxʷ čət

That is all, we are done.



Photo: Gathering Camas

Harvesting

By Isabelle M. Kemman

These are pictures of my first graders harvesting Hawthorn on the Muckleshoot property





Cranberry

Good Medicine: A Powerful Punch

By Valerie Segrest



Toss a crimson cranberry in your mouth and an irrepressible response begins. That sweet zip followed by a puckered sour. All your tissues constrict, as if your body is trying to fold in on itself, absorbing the medicinal benefits of cranberry. Traditional and Western Medicine: Tart, crisp, and instantly cooling—these gems are packed with phytochemicals, antioxidants, antivirals, and antibacterial actions. As if that weren't enough power packed into this teeny fruiting body, they also assist in treating inflammation with a high Vitamin C and manganese content. These lively little fruits contain a compound called proanthocyanidins, which work to impede the ability of bacteria like *E. coli* to adhere to the lining of the bladder, making them an effective treatment for urinary tract infections. This combination culminates in the ability to clear heat from inflamed tissues, specifically in the liver, kidneys, and bladder.

12,000 Years of Cultivation: The American cranberry is indigenous to North America, and regional varieties adorn the continent in a belt of distinctive flowering and fruiting bogs that spans from the Pacific Northwest to the Northeast. Native peoples, from the Quinaults to the Wampanoags, have been cultivating and harvesting wild cranberries for more than 12,000 years. Close cousins to other valued Indigenous foods, such as blueberries and huckleberries, they are sought out each fall. Indigenous languages name the berry “bitter berry” or “sour berry.” In the springtime, cranberry bogs produce a blanket of delicate pink flowers that resemble the bill of a crane. When the settlers saw this they started to refer to it as the “crane-berry.” Wild cranberries can still be found for foraging in small pockets in coastal areas.

Modern Production: America now cultivates and produces more than 404,880 metric tons of cranberries each year, most of which become sugary beverages or dehydrated versions. Ocean Spray is a cooperative buying from more than 700 cranberry growers. During Thanksgiving week, 20% of the annual harvest is consumed—often in the form of jelly in a can. Yet, cranberries are tasty and most nutritious when eaten fresh. So now's the time to buy them fresh—you can always freeze them for later use. And when you buy them in their whole form, farmers make the most profit. Here are three recipes that use whole cranberries.

Cranberries Three Ways:

Sliced fresh cranberries are delicious on a bed of fresh greens with sliced apples, walnuts, and feta.

Make your own fresh juice by simmering 1 cup of berries in 6 cups of water for 20 minutes. After the berries have popped open and released their medicine, strain. Add a splash of maple syrup to sweeten it, and drink warm or cold. Juice will last for three days in the fridge.

Make a quick cranberry sauce by combining 1 cup of fresh cranberries with ½ cup of apple cider, zest of half a lemon, and a few tablespoons of maple syrup. Heat them in a saucepan on a low boil until the berries pop open. This sauce is excellent on top of turkey or as an accompaniment to brie and crackers. Yum!



This article appeared in YES! Magazine. For the full article, please visit: <https://www.yesmagazine.org/issue/what-the-rest-of-the-world-knows/2020/11/03/cranberry-medicine/>

Nettle Tea

By Elise Bill-Gerrish

Nettles Tea
sćədʒħ tiac

- ʒuqʷibid čəʈ sćədʒħ tiac ʒal tə sləxil
Today we are making nettles tea
- ʒuləčəd ti xʷħalap
Fill the pot with water
- ʒudʒəħəd ti xʷħalap ʒal tə səxʷhudali
Move the pot onto the stove
- ʃaqšəd ʒa tə qʷalc
Wait for this to boil
- kʷədəd ti sćədʒħ
Grab the nettles
- gəqad ti sćədʒħ xʷlabali
Open the nettles jar
- bəčəšəxʷ čəd sćədʒħ ʒa tə səxʷqʷuʒqʷaʒ
I put the nettles in the cup
- təqad ti sćədʒħ xʷlabali
Close the nettles jar
- ʒəsqʷalc ti qʷuʒ - ʒəsqʷib ti qʷuʒ
The water is boiling - the water is ready
- kʷəʈ ti qʷuʒ dxʷʒal ti səxʷqʷuʒqʷaʒ
Pour the water into the cup
- labčəbut, laʒəb dxʷshəd
Be careful, it is really hot
- ʃaqšəd ʒə kʷi padac ʒəxʷ kʷi cəlac 'minutes'
Wait for 15 min.
- ʒubiqʷid čəd ʒal tə sćədʒħ
Press down on the nettles
- ʒəsqʷibəxʷ ti tiac
The tea is ready now
- juʒil ti tiac kʷəti ʒəshaʒʈ sʃəljixʷ
Enjoy the tea because it is good medicine



ʔUQ^wIBID ČƏŁ SCƏD^zǺ TIAC ʔAL TƏ SLƏǺIL

TODAY WE ARE MAKING NETTLES TEA

Ingredients:

- Dried Nettles (scəd^zǺ)
- Water (q^wuʔ)
- Teapot (x^wǺalap)
- Cup (səx^wq^wuʔq^waʔ)
- Tea Strainer

Essential Oils

By Amy Maharaj



Essential Oil Recipes:

- *Made for 10ml roller
- *Always dilute with a carrier oil, I like organic fractionated coconut oil
- *Let sit in a cold, dark place for 24-48 hours
- *Always do a patch test
- *If pregnant, please ask me about which oils to avoid/limited use

Common Cold 1 drop Lemon 2 drops Eucalyptus 2 drops Rosemary	Headache 3 drops Lavender 1 drop Peppermint
Cough 3 drops Eucalyptus 2 drops of Thyme	Insomnia 3 drops Clary Sage 2 drops Lavender
Stress 2 drops Clary Sage 2 drops Lavender 1 drop Lemon	Sadness 3 drops Geranium 2 drops Bergamot 1 drop Lavender
Energy 2 drops Peppermint 2 drops Sweet Orange	Focus 2 drops Rosemary 2 drops Grapefruit

Walking/Forest/Nettles

By Morgan Sohappy



Hazelnuts

Not Just Your Nutella

By Valerie Segrest

The creamy, buttery, crunchy, sweet hazelnut inspires our earth born senses. Charred shells found in ancient middens from Scotland to the Pacific Northwest, dated at 9,000 years old, share a story of our collective ancestors cultivating and consuming hazelnuts since the Stone Age. They nourished the ancestors for thousands of years, providing protein and healthy fats in rough winters; tiny packages dense with minerals and vitamins.

Latin name—*Corylus avellana*, *Corylus maxima*

Common names—Hazelnut, Cobnut, Filbert, Spanish Nut, Pontic Nut, Lombardy Nut

Traditional medicine

Much of the world knows hazelnuts as the second ingredient to chocolate in the 800 million pounds of Nutella consumed each year. For Indigenous communities, they are more than snack food, they are medicine. Traditional preparations include pounding and soaking the hazelnuts to treat an upset stomach. Soothe a cough and other cold symptoms by mixing powdered hazelnuts in honey. Topically, apply hazelnut oil to lighten dark spots on the skin and use small amounts on the scalp to encourage hair growth. Hazelnut has astringent and antibacterial properties that are used to soothe eczema outbreaks.

Harvest in late summer

Native varieties and introduced European species are successfully cultivated in the Pacific Northwest to this day. In fact, Oregon hazelnut farmers are the world's third-largest producers. You can still find native varieties growing here and there. In spring, look for hazel trees' incandescent pink female flowers. Once pollinated, the tiny scarlet flower begins to transform into a hazelnut. Squirrels and birds excitedly signal to us when the harvest is ready, as they vigorously shake the hazel trees hungrily searching for clusters of these honeyed kernels. A mid- to late-summer treat, hazelnuts are best harvested from July to August, depending on elevation. Be sure to wear gloves because the outer sheath is armed with bristly hairs that easily irritate human fingers. Peel off the fuzzy husks to find the hazelnuts inside or store them in a burlap sack in a cool, dark place for several months until the sheath peels itself off.



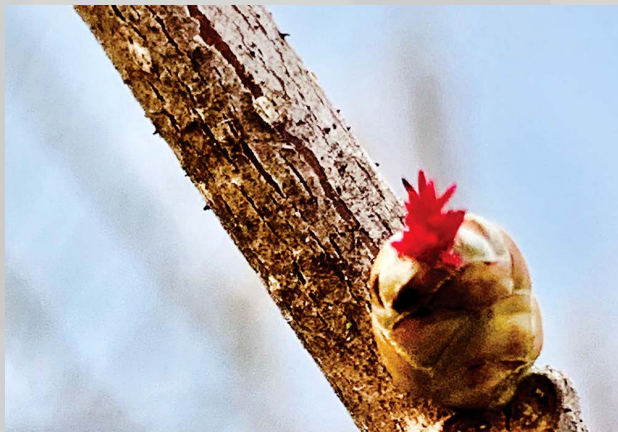
Peel and roast

Roasting enhances their sweet flavor, caramelizing and amplifying their aromatic compounds. Place the shelled nuts on a baking sheet. Roast at 300 degrees for up to 10 minutes, or toast them in a pan on low to medium heat until they show the slightest hint of brown. Quickly remove them from the heat, as they will continue to gently cook. Cool and store in a jar. Add to salads, oatmeal, or as a trail side snack.

Hazelnut milk

Combine one cup of raw hazelnuts with two cups of water in a blender and mix for two minutes. Let the mixture sit overnight, about eight hours, and then strain the nut sludge from the liquid. You've created hazelnut milk, an elixir rich in magnesium, manganese, and vitamin E. Add a splash of maple syrup or vanilla and use as an alternative to milk. Or think of it as a hazelnut tea.

Use the mush from this process in baked goods, pesto, smoothies, or even soups! Hazelnuts' buttery flavor amplifies smoked salmon chowders and turns turnip or squash soup into dense protein-rich porridge.



This article appeared in YES! Magazine. For the full article, please visit: <https://www.yesmagazine.org/issue/black-lives/2020/08/26/ways-to-use-hazelnuts/>

Dandelion Roots

By Elise Bill-Gerrish



Huckleberry

By Elise Bill-Gerrish

Huckleberry Gathering in haqshutuxid (Muckleshoot Language)

- We are in the mountains
sk^wak^watotad ?al ta cat
- The mountains are sacred to our people
?astat^wka^w ti sk^wak^watotad dx^w?al ti ?ac^wacthtalib^wcat
- We are going (on our way) to gather blue huckleberries
?u^wut^w cat dx^w?al ?ulotad ?a ti wada?^w
- Where are the huckleberries
cat^wax^w ti wada?^w
- We see the huckleberries
?ulob cat ti wada?^w
- We are picking huckleberries
?uk^wlid cat ti wada?^w
- The berries are ready during the end of summer (or August and September)
?asq^wib ti sq^walotad dx^w?al ti padhadob
- Huckleberries are beautiful
?astuwil ti wada?^w
- We give thanks to the huckleberries
?ask^wadlidax^w dx^w?al ti wada?^w
- Go home now and wash the huckleberries
fuk^wax^w yax^w ti cog^wod ?a ta wada?^w
- Enjoy the berries now
ju^wilax^w ti sq^walotad
- They are good medicine for our people
ka^w? ?asfalib^w dx^w?al ti ?ac^wacthtalib^wcat

Indigenuity of Community Science: The Reciprocity of Relationships

By Michelle R. Montgomery, PhD

Tribal Traditional Ecological Knowledge – TEK – holders acquire their knowledge intergenerationally through life-times of attentiveness and mindfulness to the places - living-system communities – they consider their home, for this reason citizen science, seen through Indigenous eyes, might be better named community science.

Daniel Wildcat PhD, Muskogee Creek Nation

Since childhood, insomnia has been my nemesis, I have lived years of sleepless nights. And, as a child, sleepless nights included adventures of sneaking outside on clear, crisp nights, climbing my favorite tree and listening quietly for the arrival of the white-tail deer (*Odocoileus virginianus*) and raccoons (*Procyon lotor*) that would invade our vegetable garden. On one particular morning, my dad mentioned, “If for one second you think that I do not know about you climbing trees at night...think again. You’re pretty good with a slingshot...at least you could guard the garden.” As I grew older, a lesson learned very quickly was the intuition of parents to predict the behavior patterns of their children. Over the years, my body became acclimated to surviving with only 2-3 hours of sleep or sleepless 2-day periods. On the positive side of insomnia, I became a voracious reader focused on a broad array of topics, especially those immersed in ethnoecology and environmental sciences. As a person trained in both Scientific Ecological Knowledge (SEK) and place-based, Traditional Ecological Knowledge (TEK), it became quite apparent that obtaining volumes of knowledge would also lead to a prolific need to find ways to include cultural inclusiveness and advocating for sustainable environmental stewardship to protect the natural environment for the next generation.

A part of sustainability advocacy is also experiencing environmental impacts. By experiencing, I am not implying that one must partake in an expedition to sail the Northwest passage (which has been described as the Mount Everest of sailing), or traverse the Three Sisters trio peaks near Canmore, Alberta in Canada. In a time of unsustainable urbanization growth, environmental experiences can be as simple as making purchasing choices that decrease your carbon footprint. Purchasing locally sourced products, or within your region, from cooperatively (co-op) owned food and retail stores is a sustainable community action. A co-op is a business, usually incorporated, that sells goods and services. In a cooperative, owner-members democratically own the direction of the business and each owner-member has one share that equals one vote.

Owner-members elect a board of directors to monitor the business, set goals and hire management. One of my favorite co-ops is the Skagit Valley Food Co-op (SVFC), which has served the Skagit County and surrounding areas since 1973. The goal is to bring natural, wholesome, organic and local foods to the community at fair prices. The co-op's produce department was the first in the county to be certified organic and everyday its produce is at least 98 percent organic. They feature more local produce than any other grocery store in the county and have supported local and regional farmers for decades. An empowerment principle of the SVFC is the commitment to the sustainable development of the community.

Similarly, as a broader community in the natural world, we should share one commonality, the idea of sustainable living. On a cold and misty day in 2010, I was invited to sail to Poets Cove in the Southern Gulf Islands in British Columbia, Canada. The small island oasis is set in the secluded Bedwell Harbor Bay on the South Pender Island. I had overwhelming, mixed emotions of grief and anger for how a historical protected village site of the Saanich First Nations was desecrated by the "Poets Cove Resort and Spa." Yet, the call of the sea – epicenter of life – has the power to call your spirit and heal your soul. While sailing, you need to monitor weather, tides, sea conditions and the movement of other vessels around you. A good sailor knows how to translate and utilize input from your senses, such as the feel of the wind and the motion of the sea, and how to anticipate potential problems. That first call to the sea created a new quest for minimalist living. In 2017, I purchased a 33-foot auxiliary Catalina 320 sailing yacht, *Salish Star*, a name gifted from Tim and Laurel Ballew. She was rigged as a masthead sloop, with a three-cylinder diesel engine. The hull is raked bow with an interior that consisted of deck access chain locker and V berth followed by a main cabin with settee, navigation station and galley port, enclosed head with shower and quarter cabin with a transverse double berth starboard. I became a novice sailor and lived aboard at Shilshole Bay Marina in Seattle, Washington with a goal of living a sustainable, community lifestyle on the ocean and fostering responsible stewardship of the Salish Sea.

As the sunset led into the night, the whispers of waves created my very own personal, holistic retreat. Often, I would hear the harbor seals (*Phoca vitulina richardii*) swimming as I laid nestled in the forward cabin. Although this is one of many pleasant memories of life at Shilshole Bay, I began to worry about water quality knowing of the 2017 West Point disaster that sent raw sewage into Puget Sound, particularly the Strait of Juan de Fuca. Since 1970, Port Angeles, Sequim, and Port Townsend were required to install secondary sewage treatment plants. Meanwhile, the Victoria metro area, located in British Columbia, Canada, continued to release 34 million gallons of raw sewage into the Strait each day.

Indigenuity of Community , Continued

The Georgia Strait, Puget Sound, and the Strait of Juan De Fuca are together known as the Salish Sea, in recognition of the Coast Salish peoples who have lived in this region for millennia. Together, these bodies of water form a huge estuary system, a place where hundreds of rivers flow into the sea. From tiny creeks, all the way to the Fraser River, these fresh waters help to feed and shape the unique characteristics of the region and make the Strait of Georgia a body of water rich with a great diversity of life. The Fraser River has the largest salmon runs in North America that includes all 5 species of Pacific salmon (Chum - *Oncorhynchus keta*, Sockeye - *Oncorhynchus nerka*, Pink - *Oncorhynchus gorbuscha*, Chinook - *Oncorhynchus tshawytscha* and Coho - *Oncorhynchus kisutch*). Georgia Strait is among the most biologically productive marine ecosystems in the world, providing critical habitat for a huge diversity of fish, marine mammals, invertebrates, shorebirds and marine plants that all need protection. From a lens of sustainability, the most productive habitats in this region are estuaries, the places where rivers meet the sea, and freshwater gradually mixes with salt.

When I think of the multiple meanings of sustainability as an Indigenous woman, there is a different perspective of TEK that redefines a SEK of citizen science. Citizen science engages local communities to get involved with important scientific research to advocate for their environmental concerns. Volunteers without formal scientific education or training, can among other activities, gather data for ongoing research. Citizen science projects can be a tool for expanding scientific knowledge and literacy, while expanding opportunities to access and collect scientific data. Since 2009, Daniel Wildcat has explained through the years that a TEK perspective for sustainable science is becoming increasingly recognized that tribal Peoples understand the places they call home better than SEK. Indigenous Peoples possess knowledge that the best-trained natural scientist cannot acquire with their objectivist epistemologies and precise methodologies (Kimmerer, R., 2013). Tribal TEK holders acquire their knowledge intergenerationally through life-times of attentiveness and mindfulness to the places - living-system communities – they consider their home, for this reason citizen science, seen through Indigenous eyes, might be better named community science. Years of mentoring have simultaneously provided the necessary lens to problematize citizen science, its exclusiveness of sustainability, as well as gaps that negate TEK. To focus on community science and Indigenous ways of knowing is a political act.

A profound task is for Western-trained scientist of SEK to recognize the legitimacy of IK and TEK as an institutionally communicative tool for delivery of culturally inclusive sustainability (Kimmerer, R., 2012). This also means equitable spaces for safe practice and exploration within an otherwise status quo environment. Integrating community science recognizes that different forms of IK and TEK do co-exist. Community science is informed by Indigenous peoples practice that in turn, informs IK. One cannot operate without the other. From an Indigenuitive perspective, it is our collective responsibility to the natural world,

our ancestors, and future generations, to take an active role in shared acts of sustainability that are grounded in our cultural roots, and grounding ourselves to act our authentic selves. Authenticity in knowledge re-establishes old communities. Because of this, it is imperative to call out false knowledge that does not represent TEK; if we ignore the dissemination of false knowledge we do ourselves, and our communities a disservice.

For generations, Indigenous people have practiced environmental preservation and sustainability by the seasonal utilization and natural resources. The authentic interconnectedness of Indigenous peoples is shown through an intertwined relationship with land and water. Impacts on the environment can influence cultural practices as the environment undergoes non-sustainable changes. IK and TEK are accumulated knowledge, based on intimate familiarity with the environment. Community science places in the forefront an awareness of life-ways for ecological health. We are well aware on a local, national and global scale, that there is an urgency to address ecological health.

At the Northwest Indian College, the Salish Sea Research Center (SSRC) is purposefully designed to prepare the next generation of environmental scientists and leaders by fostering respect for IK of the natural world, providing opportunities for students to gain a solid background in scientific methods, and promoting critical thinking skills. At the SSRC, students and faculty conduct environmental research that supports healthy ecosystems that sustain Indigenous communities. For example, projects that include manila clam (*Venerupis phippinarium*) growth, diets, and bioassays to study water quality. The values of SSRC respect and acknowledge Indigenous cultures, languages, and traditions while operating within an area Western education, Western science, IK and TEK. Community science partnerships are significant models in addressing the unique challenges of our communities.

The Tide of Change – Finding Common Ground

In my experience as working with Indigenous communities, there are similarities in questions that prompt the need to address ecological concerns such as: How do rain water and agricultural practices contribute to the pollution of water sheds and estuaries? It is well known that rain-washes chemicals out of the air into condensed liquid that should not be imbibed, but what exactly is the effect? How much impact does the transport of pollutants from across local, national, and global lines play in both rainwater and agriculture? The answer is, quite a bit. Being raised in the southeast and now residing in the Pacific Northwest, I have realized that there are no barriers that prevent poor agricultural practices and air quality pollution from resulting in ecological damage, like the record forest fires. Due to the topographical nature of the Pacific

Indigenuity of Community , Continued

Northwest and the vast number of mountains connected to Canada, along with prevailing wind patterns that combine to form funnels, more and more communities are becoming the tailpipe of poor air quality. And, because traditional foods are a major part of Indigenous peoples diets, it is important to consider the contamination of particulate matter for human health. Growing up, my favorite part of a harvested white-tail deer (*Odocoileus virginianus*) was the liver. Known environmental pollutants like cadmium and copper are found in the liver of harvested white-tail deer. Cadmium is a heavy metal found in the environment that can cause extreme neurological problems even in low concentrations and copper compounds are commonly used in agriculture fungicides to treat plant diseases like mildew. A pesticide is any substance used to kill, repel or control certain forms of plant or animal life that are considered pests. Fungicides are used to prevent the growth of molds and mildew. Because of the widespread use of agricultural chemicals (pesticides) in food production, ecosystems (air, land, traditional foods and water) are constantly exposed.

As the environmental health disparity gap increases, Indigenous communities find they are increasingly responsible for maintaining the food security and safety, air quality, and ecological change health impacts of not only their communities, but those of the broader community as well. Community science will bring together collaborative opportunities for bi-directional learning and discussions on strategies for building and strengthening partnerships. A part of strengthening partnerships includes creating opportunities for training and team building projects that share common goals.

We need methods of discourse that recognize plural knowledge that can engage scholars. Modern discourse sees dichotomies as invalid and Western ideas as opposing IK and TEK. Plurality is found in everything; as Indigenous people we recognize the importance of not pitting one knowledge system against another as it is dangerous. Community science approaches also require additional steps that acknowledge and respect the unique sovereign status of Indigenous peoples and the unique moral cultural context of their communities. As Deloria, Jr., Foehnr & Scinta asserts (1999), “All knowledge, if it is to be useful was directed toward the moral goal” (p. 43-44). The ethical dimensions of community science highlight how IK and TEK have an inherent awareness for the respect of all beings. Vine Deloria, Jr., et al (1999) explains,

There is content to every action, behavior or belief. The sum of our life experiences has a reality. There is a direction to the universe, empirically exemplified in the physical growth cycles of childhood, youth and old age, with the corresponding responsibility of every entity to enjoy life, fulfill itself, and increase in wisdom and the spiritual development of personality. Nothing has incidental meanings for or coincidences. In the moral universe all activities, events, and entities are related and consequently it does not matter what kind of existence an entity enjoys, for the responsibility is always there for it to participate in the continuing creation of reality. (p. 46-47)

Tribal communities engage in practical knowledge systems and utilize ideas of traditional knowledge. This awareness derives from acknowledging the things that make up a place and the way place affects that people are. It is important to find ways of interpreting and synthesizing knowledge so that it is meaningful to the recipient. Relating to others is important, yet is difficult to find in normal academic discourse. We are all related and this goes beyond the bounds of human interaction. Respect for all things creates proactive and ethical work.

The Lessons of Reciprocity

As a child, I idolized my older brother, Henry, and cherished our relationship. When invited to partake in made-up games or outdoor adventures, I always felt such an overwhelming sense of joy. During a late-June summer day, I carefully observed Henry weave between the dangling branches of a Weeping Willow (*Salix Babylonica*) gently collecting June Bugs (*Cotinis nitida*) in a glass jar with a spool of thread bulging out the back pocket on his shorts. The June Bug or June Beetle is common to North Carolina and other southeastern states. The name reflects the emergence in June and July from its larval form into an adult beetle averaging less than an inch in length. The larvae (white grubs) live in the soil and can be destructive to Virginia Bright Leaf tobacco (*Nicotiana rustica*) and Burley tobacco (*Nicotiana tabacum*). Metallic green with a dusky yellow along its side, the June Beetles could be seen on the altering, narrow, simple leaves. After he collected what appeared to be quite large June Bugs, he sat down on the grass and gestured for me join him. Within seconds my dad appeared as if he had some sort of magical powers and inquired, “What are you planning on doing with those June Bugs?” My brother explained how he wanted to make June Bug kites by fastening a thread from the spool to its leg and following it while flying. My dad replied, “Did you know the June Bug is a state bug and protected by the law? Do you plan on breaking the law?” In this moment, I shared a horrified glance with my brother. After my father noticed he had our full attention, attempting not to laugh, he proceeded with his lesson by asking, “Would you want someone to tie a string to your leg and watch you run around the yard? Is this being respectful?” My brother replied, “Why would someone do that? That’s mean...no!” And so my dad finished his lesson by saying, “Exactly! And put those June Bugs back where you found them.” As he walked away he yelled, “The state bug is a damn bumble bee and don’t ask me how I know. Don’t forget to visit Mr. Richardson, he’s collecting honey today.”

Mr. Cleveland Richardson was the local beekeeper. Surrounding our properties were massive amount of Japanese Honeysuckles (*Lonicera japonica*), White Clovers (*Trifolium repens*) and Sawtooth Blackberries (*Rubus argutus*). The intricate relationship with the European Honeybees (*Apis mellifera*) played an important role in the sweet floral taste of Mr. Richardson’s honey. Honeysuckle, at least the version I knew growing up in North Carolina, is a particular variety called Japanese Honeysuckle. It is one of 20 species in North America, but it is not native to our area. Many of my memories include eating honeysuckle flowers and enjoying the sweet tasting nectar. White Clover is not only a favorite of bees but also preferred by butterflies such as my personal favorites – Eastern Tiger Swallowtail Butterfly (*Papilio glaucus*) and Common Buckeye (*Junoia coenia*). And it out competes weeds by spreading rapidly while growing

Indigenuity of Community , Continued

harmoniously with grass. The Sawtooth Blackberry is a perennial native wild blackberry and can be quite invasive. It is known to compete with pine seedlings or saplings natural regeneration of pine tree stands such as loblolly (*Pinus taeda*) and shortleaf pine (*Pinus echinata*). My dad's reminder had multiple reasons, (1) take care of our elders, (2) being around bees teaches respect and (3) my hardest task – patience. Mr. Richardson taught me that we should always respect bees for providing an important medicine, raw honey. It is known to have antioxidant, antifungal and antibacterial properties. Although a spoon of raw honey has always been my much-loved energizing treat. There is a reason – the love and care it takes for bees to produce honey is passed on. After all, we are what we eat. Through the years, I continue to learn the powerful reality of respectful relationships.

As a forever student on a spiritual journey, I view everything around me as having multiple realities that are not static, but fluid. My multiple realities are a relational accountability, while knowing my actions should reflect a dutiful and ethical responsibility to the natural world. There is an urgent need to ask ourselves “as a relative to the natural world, how do you want to be remembered?”

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Recipe

By Rosa Maldonado



FEED
SEVEN
GENERATIONS

Baked Coho on a bed of Wild Rice & Maple Butternut Squash Recipe

Ingredients:

- 1 Pacific Northwest Coho Salmon (wild caught)
- 1 Bundle of fresh herbs (Rosemary, sage, and bay leaves)
- 1 large Onion
- 1 lemon sliced
- Salt, pepper, garlic to taste
- Seasonal squash (preferably butternut) cubed into bitesize pieces
- ¼ cup Minnesota Maple Syrup

Directions:

Preheat Oven to 450' degrees. Season salmon with salt and pepper. Place salmon skin side down on a non-stick baking sheet or in oven proof pan. You may add a bed of lemon and onions slices on top of salmon if desired. Bake until salmon is cooked through, about 12 to 15 minutes.

Rinse the wild rice: Place the wild rice in a fine-mesh strainer and

rinse in the sink under cold running water. Shake to drain.

Bring the rice and water to a boil: Place the rice in the saucepan and add 4 cups of water or stock, along with the salt (unless the stock is already salted). Bring to a boil over high heat.

Reduce to a simmer; When the water has reached a boil, lower the heat to maintain a slow but steady simmer and cover the pan.

Cook the wild rice: Cook at a simmer for 45 minutes. Check the rice. It should be chewy and some of the grains will have burst open. It may need an additional 10 to 15 minutes — keep checking the rice and stop cooking when the grains are tender.

Drain the wild rice: When the rice is done, pour it into a strainer to drain off any remaining liquid.

Fluff and serve: Fluff the rice with a fork and serve, or add it to any number of dishes for a delicious, nutty taste and chewy texture

1-2 butternut squash - peeled, seeded, and cut into 1-inch cubes

2 tablespoons olive oil + 2 cloves garlic, minced

2 tablespoons of sumac seasoning

salt and ground black pepper to taste

1/4 cup of maple syrup

Preheat oven to 400 degrees F

Toss butternut squash with olive oil and garlic in a large bowl.

Season with salt and black pepper. Arrange coated squash on a baking sheet. Season with sumac seasoning and maple syrup. Roast in the preheated oven until squash is tender and lightly browned, 25 to 30 minutes. *Let cool down for 4-5 minutes mix butternut squash with wild rice and place salmon over and enjoy.

You may also add dried cranberries or huckleberries to the rice mix as well.

Bone Broth

Recipe from “Feeding Seven Generations Recipe Book” and “Native Infusion: A Guide to Ancestral Beverages” by Valerie Segrest and Elise Krohn.

Broths are simple to make. You put bones, vegetables, herbs and spices in a pot, cover with water and simmer over a warm stove for a period of time. Marvelously, broth satisfies hunger with its comforting tastiness and supporting aromas. Even more magical is its ability to resurrect, restore, regenerate and beautify. Nearly every culture around the world has food traditions that include broths or stocks. Boiling bones is perhaps the greatest example of how our thrifty ancestors honored wild game and seafood by using every part of them. Broths were traditionally prepared as stone soups by dropping hot volcanic rocks in to a cedar basket or bentwood box lined with clay and tree pitch, fashioned well enough to hold water and bones. Eventually the water gets so hot it turns in to an instant rolling boil. Nowadays we have stovetops and crock pots to simplify the process.

Preparing your own bone broth and incorporating it in to your daily program is a great way to boost your health and immunity. These incredible liquids contain crucial minerals, like calcium and magnesium, which are anti-arthritic, anti-diabetic and great for nourishing and treating folks with conditions like cancer, anemia, muscular dystrophy and the flu. The components of bone broth go beyond water and micro-nutrients like minerals and vitamins. Collagen, cartilage and bone marrow are also key players. Collagen is the most abundant protein in our body, making up about 25-35% of the whole body protein content. It is one of the most prevailing building blocks of our skin, muscles, blood vessels, digestive tract and connective tissue. Simply put, it is the glue that holds us together. As we age, collagen production naturally diminishes, and this can be addressed by drinking enough hydrating fluids and include bone broth in your diet.

Bones house nutrient-rich marrow deep in the central cavity. Marrow is a highly nutritious and central to brain development. Our ancestors treated marrow as a dietary supplement for children, a multi-vitamin and oftentimes a substitute for breast milk. Made largely of healthy fats and immune building blocks, it takes much less energy to digest than plant foods. Cartilage is the glistening silvery white gristle swirling through your elk steak and tucked in to the corners of that T-bone steak. These whitish globs also reside between our bones and are what our body uses as a shock absorber and friction reducer as we attempt any weight bearing movement. It is what makes our anatomy strong, resilient and pliable. Without it, our bones would grind together and life would be painful. When preparing bone broth, cartilage is released in to the preparation and takes form as gelatin. Wiggly and indiscrete, gelatin is responsible for restoring and repairing the inner lining of the digestive tract. It binds to the walls of our intestines and assimilates nutrients like nobodies business. Make no bones about it, gelatin is behind the scenes powering up this healing elixirs potential.



Basic Bone Broth Recipe

Ingredients:

Bones- from poultry, fish, shellfish, wild game, beef

*This could include: raw bones (preferably the spine and femurs), whole carcass, shellfish shells and whole fish carcasses.

Cold Water- enough to cover the bones

Vinegar- a splash, or 2 tablespoons per quart of water

Vegetables- onions, garlic, carrots, celery are great additions

Herbs- bay leaf, peppercorns, and parsley add great flavor

Instructions:

Combine all ingredients in a large stockpot, ensuring everything is completely submerged under water and bring to a boil. Reduce to a simmer and cook for up to 12 hours. Strain the bones and remnants out of the stock using a colander or sieve lined with cheesecloth. Allow to cool to room temperature and then store in the freezer for up to three months, or the refrigerator for up to five days. Use your prepared broth as a base for soups or gravy, or as a cooking liquid to replace water. You can also warm it up and drink it like a tea.

Gathered Blackberries

By: Elise Bill-Gerrish



Lessons from the Plants that Surround Us

By Adrian James, Janay Joseph
Facilitated by Monica Paulson Priebe

I have had the opportunity to teach some incredibly inspiring people that have taught me much about the current limits to my education and experiences and how, as an educator, it is imperative that I keep learning. Janay Joseph and Adrian James, are both members of the Muckleshoot Tribe pursuing their degrees in Natural Resources at Green River College (GRC), where I teach. Their experiences highlight why we, as educators, need to create relationships across disciplines and backgrounds. Janay Joseph and Adrian James are pursuing a degree in Natural Resources through Green River College while working in Tomanamus Forest with Hancock. What follows are their perspectives.

Q: Do you remember a time when you were able to see a plant differently after you learned something about it? If so please tell me about that experience.

Joseph: After learning how packed Stinging Nettle is with nutrients, I saw it in a different light. It has many barbs to protect itself from predators and also protect the important medicine it has to offer. Having to work carefully with the plant to avoid getting stung reaches one patience and attention to detail.

James: Definitely. I've had that experience many times. But one that comes to mind, is from learning about trees—which is a perennial plant. While at GRC, I took a class on trees and shrubs. There, I learned that in the interchange of gases, through a trees lenticels and stomata. That they take in carbon dioxide and release oxygen as a by-product. While we as humans, do the exact opposite. We inhale oxygen and release carbon dioxide. So, there is this kind of symbiosis that is going on between our two biological organisms that I had never thought about before. So now when I see trees, I kind of think about this picture I once saw. Where it depicts the trees branch system and a humans lungs. The picture suggesting a correlation between the lungs bronchus and a trees branches.

Q: What are the differences in the ways that you have learned about the plant life that surrounds us between a tribal and a college setting?

Joseph: Plants are our first teachers. They were here before man and have spent thousands of years evolving to nurture, feed, clothe and teach us about the world around us or ourselves. In a college setting, one does not view plants as living, breathing life. It is strictly a scientific view and this leads to the depersonalization of the plant people.

James: I've had the privilege of having many teachers when it comes to the plants that surround us. Teachers like Valerie Segrest, Monica Priebe, Cinnamon Bear and Leslie LaFontaine. And the ways that I have learned from them, were pretty different but equally important. Through Monica and a college setting, I learned a more scientific approach to plants around me. I was taught things like the anatomy of plants and how they function. As well as how to identify them properly. While Val, Leslie and Cinnamon thought me our traditional ways of using plants. For example, using nettle stalks for cordage. Or the many ways to eat and prepare the plant. While also teaching the stories passed down from our ancestors over the years. Although, it's worth noting, that some of those stories also came from Monica.

Q: In what way are these ways of learning complementary?

Joseph: These ways of learning can be complimentary in regards to learning scientific names and gaining the full spectrum of everything the plant has to offer. White Sage, for example, has an extensive list of uses and importance to Native Americans. However, since there are so many varieties, learning Latin names is necessary to ensure the proper medicine is gathered and used.

James: I think that they complement each other by letting you have a broader range of knowledge. It kind of fills in the gaps if you will. Missing pieces of the puzzle that will help us out in the forest in the long run.

Q: Do these ways contradict each other ever? If so, in what ways?

James: I think it ultimately depends on what your future goals are. But I don't think so, no.

Joseph: These two ways of learning don't contradict one another, they're simply different. Getting to know the plant as a person and then continuing to learn the academic science of the plant, is learning the plant formally and informally. Similar to getting acquainted with a person at school or work, then relaxing with them at home.

Q: What is it like to learn under both ways?

James: A pain (laughing). There is just so much information going in at once. It's going to take a lifetime to learn it all.

Joseph: Learning under both ways has been enlightening. Learning plant people then going to school and seeing everyone else get familiar with the individual I know, I feel I know the plant more intimately.

Q: What can Green River faculty do to better connect these ways of learning?

Joseph: Respect for the plant people has to be taught at a basic level. Acknowledging we are not the first to walk this land, there is a mutual respect gained. When you walk into the forest, you respect everything that is there. The same as entering a vehicle. When you get in your car, you respect the rules of the road. Same as entering the forest. You acknowledge you are there and thank the plant people for being present and providing their teachings.

James: Like I mentioned before. It all kind of depends on what the individual's goals are. But I think that Green River College is already kind of doing that in a way; well, as far as learning about plants go. In class, there was always mention of how our people utilized these plants and the stories that go along with them.

Q: What could MIT do to better support combined learning and experiences?

James: I think that they are doing a good job so far. Especially in trying to integrate more natural resources type classes in the high school. I think that maybe if they tried that at a college level. That would be helpful.

Q: What collaborations do you see as potential ways to move a combined learning experience forward?

Joseph: Collaborations could include Valerie Segrest, Cinnamon Bear, Will Bill, Leslie Bill, and Gail White Eagle. Will Bill should have lots of material that focuses on the history of our fish wars and all the struggles native people have simply endured just to exist on a very basic human level.

Lessons from the Plants, Continued

Q: What is the most inspiring thing that you have learned about the botanical world?

James: I think the most inspiring thing that I could think of, is the Sustainable Forest Initiative (SFI). The fact that we are doing stuff the right way and not just destroying our forests. The idea that we plant a trees for the ones we cut down. And that we also look out for our streams water quality and try not to create unstable slopes that could become landslides. Wildlife habitat and species at risk. All things I had felt guilty about before learning about good forest practices and SFI. I'm sure I'm missing something out but I kind of find that inspiring.

Q: What is the most impactful thing you have learned about education and experience? Or What is the most impactful learning experience you have had?

James: As far as experience goes. I'm glad I had experienced the hard labor that goes along with doing contracting work in the forest. Working in the mountains with silviculture and road crews, gave me an understanding of what I'll be asking of them in the future. I'll understand why certain things may take longer to get finished. And why things may not always go as planned. The job is often times harder than it looks. And with education, I have found the internships to be impactful. It gives you a better understanding of if this is really what you want for a career. It also helped me learn better while in school—things to really look out for.

Q: If you could teach someone interested in plants one thing, what would it be?

James: That's easy. How to plant a tree.

Joseph: Plants are our first teachers. All the knowledge the plant has gained or learned, can be acquired by yourself as well, beginning with respect.

Afterword:

There are so many ways to learn about the world around us. It is through a combination of all these ways that we can really educate our future leaders. As an instructor of Natural Resources at Green River College, I teach because I love to see the spark in my students when they get excited about the natural world around them, and to watch that empowerment and confidence that is created in those moments is an honor to witness. However, as an educator, I do feel that in the classroom we can get overwhelmed with all the ways there are to teach, and instead we can choose to focus on those that are easiest for us, which is frequently

teaching the same method we learned by. While no teacher can possibly teach all the ways there are to teach, paying attention to where there are gaps for our students and working to create relationships with others that have the knowledge to fill those gaps through their experiences, is crucial to advancing not only knowledge, but expanding trust and understanding while building strong relationships and friendships. Green River College, The Muckleshoot Indian Tribe and Hancock Forest Management have started to create key relationships surrounding natural resources education. We have piloted an educational video swap to share with our respective students. A video on digging Camas with Lushootseed words was made by Hancock Forest Management's Education Forester and a teacher from the MIT Language Department for the Muckleshoot Early Learning Academy and community use. Green River Natural Resources created a plant dissection video of scientific plant parts for use of GRC and MIT students. The plant dissection videos can be accessed here: <https://youtu.be/c-Itte4pbNc> The Camas culture video can be accessed here: https://youtu.be/JxxwG_01bVY.

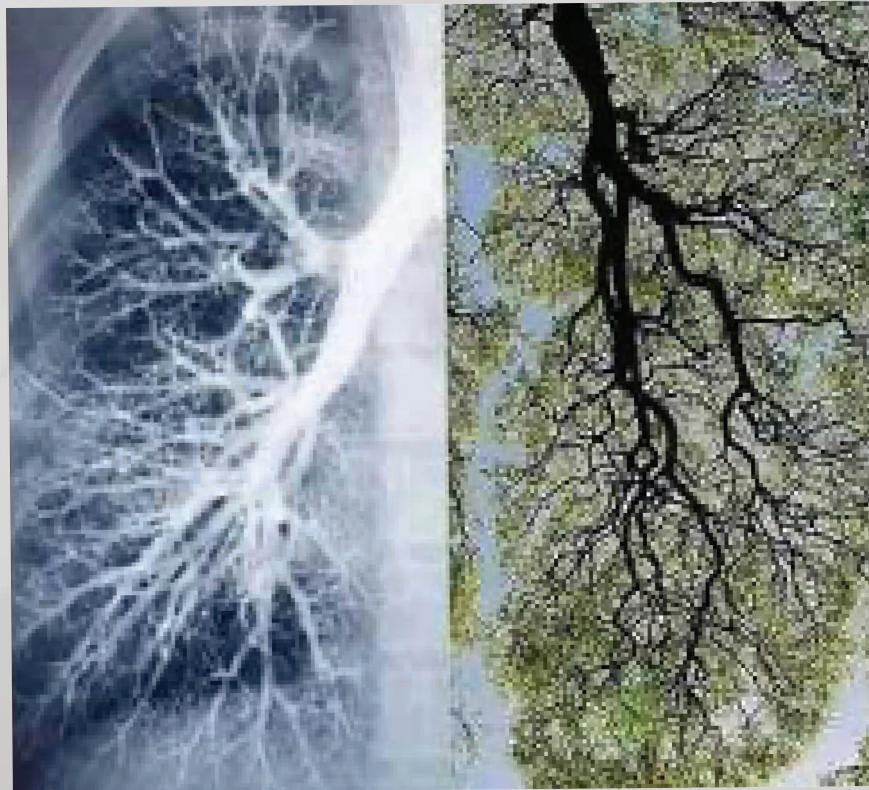


Image Source: Blake, D. (September 25, 2019). Quora. Is it a coincidence that the shape of the trees' branches is similar to the shape of our lungs' bronchi and bronchioles? Both produce respectively O₂ & CO₂ that is reciprocally needed. URL <https://www.quora.com/> Retrieved on: 8-1-2020

Making Cedar Bundles

By Dr. Robin Minthorn

It was beautiful to watch my nieces Brylee Williams and Roxie Minthorn make their first cedar bundle with cedar from Oklahoma. The cedar bundles are what we give to others as a gift of medicine. The cedar was picked from Rita Brewer (their grandmother) from Medicine Creek in the Wichita Mountains in Lawton, OK.





Sunshine in the Woods

By Elise Bill-Gerrish



