

Welcome to the Tend, Gather and Grow

WILD EDIBLE BERRIES TOOLKIT



This toolkit is a resource for families and communities to get outside and learn together. It covers native berries including how to identify them, ethical harvest guidelines, recipes, stories, and activities. The toolkit is a part of *Tend, Gather and Grow* (*Tend* for short)—a place-based curriculum dedicated to educating people about plants, local landscapes, and the rich cultural traditions that surround them. The curriculum focuses on native and naturalized plants of the Pacific Northwest region and includes Northwest Native knowledge, stories, and plant traditions.

Content in this toolkit has been adapted from the *Tend* Wild Food Traditions module, which focuses on seasonal attunement and ethical harvesting of native and wild plants including spring greens, summer berries, healthy snacks, and traditional beverages. A more extensive version is available for educators, which includes lesson plans and Next Generation Science Standards alignment.

We ask that you read the Tend Teacher Guide if you are using this toolkit. The guide explores the ethical harvest considerations and cultural foundations of this work, as well as teaching practices that enhance students' interaction with the content. You can access it online, along with other lessons and resources, on GRuB's website: <https://www.goodgrub.org/wild-foods/wild-foods-medicine-resources>

We also have a recorded Wild Edible Berries workshop that accompanies this toolkit. Visit <https://vimeo.com/431538703> and enter the password **wildberry**.

We hope you enjoy berry season!

For more information or to give us feedback on the toolkit please contact GRuB's Wild Food and Medicine program: Elise Krohn at elise@goodgrub.org or Mariana Harvey at mariana@goodgrub.org



WILD EDIBLE BERRIES

Many delicious wild edible berries and fruits thrive in our forests, fields, and city landscapes. What better way to embrace the season than to pick sweet, sun-warmed berries right off the bush or vine? Some people say happiness is having berry-stained fingers and lips.



Many wild edible berries thrive in our region including:

Blackberry, Black Cap Raspberry, Cranberry, Currant, Elderberry, Gooseberry, Hawthorn, Huckleberry, Indian Plum, Salal, Salmonberry, Saskatoon (also called June Berry and Serviceberry), Soapberry, Strawberry, Thimbleberry, Wild Cherry

The berry to this day is considered by some to be worth its weight in gold. The nutritional value alone places this food gift in a very unique category. The medicinal properties can address some really serious health issues among Native communities in the 21st century.

–Warren KingGeorge, Muckleshoot

Northwest Native People historically put great effort into cultivating, harvesting, and preserving berries, and carry on this tradition today. Some berries, including salmonberry and strawberry, mark seasonal changes and celebrations. Others, like salal, are dried and preserved to eat throughout winter. Berry season is also a time to gather with friends and family, and to celebrate the gifts of the land. Today we can go to the grocery store in any season to purchase berries, but there are many reasons to grow and forage your own berries.

BERRY MEDICINE

Berries are loaded with nutrients that keep us healthy and strong, including fiber, minerals, and vitamins. The seeds of some berries, like salal, contain a significant amount of protein and omega fatty acids that provide sustained energy. Wild berries are generally higher in nutrients than commercially grown berries.

Berries are among the most potent antioxidant foods. Antioxidants are known to slow aging, reduce inflammation, and increase immune health. Vitamin C, Vitamin E, and carotenes are examples of antioxidants that have been shown to lower the risk for type 2 diabetes. Antioxidants help protect us on a cellular level from exposure to pollution, cigarette smoke, and unhealthy food, including refined food and fried food. They are anti-aging compounds that help prevent chronic diseases, such as heart disease, cancer, and arthritis. Perhaps this is why many Coast Salish Elders say that eating berries helps us live a long and healthy life.

Flavonoids are plant pigments that give berries their color. Flavonoids contribute to our health in many ways, including protecting and strengthening blood vessel walls, and healing tissue. Eating berries or drinking berry leaf tea helps protect us from cardiovascular disease, varicose veins, Alzheimer's disease, cataracts, glaucoma, and the side effects of diabetes, including diabetic retinopathy, kidney damage, and vascular degeneration.

Local Flavor: Many store-bought berries are transported from far-away places and are picked before they are ripe. This makes them inferior to local berries in both flavor and nutritional content. When you eat wild berries, you taste the flavors of your local lands.

Seasonal Attunement: Wild berries teach us to pay attention to the seasons. Many berries have a short season, so if you miss their precious gifts, you have to wait a whole year for another chance to harvest. Berries can also be seasonal indicators. Salmonberry is the first berry to ripen in springtime, while evergreen huckleberries ripen in early winter.



Eat Organic: Many commercially grown berries are treated with herbicides and pesticides. For example, non-organic strawberries are number one on the “dirty dozen” list for being very high in pesticides, which are linked with many health risks including cancer. If you grow or wild-harvest berries from a clean area, pesticides, and other harmful substances are avoided altogether.

The Store Outside Your Door: Organic produce, especially berries, can be very expensive, and it costs precious resources including fuel to transport berries from where they are grown. Many wild berries are readily available, even in neighborhood parks and local woodlands.

Harvest Safety and Ethics:

- Avoid Poisonous Berries: While most wild berries are safe to eat, there are a few poisonous ones you should know about. Many toxic berries taste bitter. Consult a plant expert before you pick for the first time. See the references section for plant identification books.
- Harvest from Safe Areas: Avoid harvesting from roadsides, industrial areas, or other places that might have been sprayed with herbicides or pesticides. Plants can absorb toxins, including heavy metals from the soil, and pass them on to you.
- Ask Permission: Acknowledge whose land you are on. Do you have permission to harvest there?
- Slow Down and Look Around: How many plants are there? Are they healthy? How many can you harvest while still leaving a strong community? Many foragers take a maximum of 10-20% of the plants in a place. Sometimes caring for plant communities means not harvesting anything. Other animal species rely on berries for food, so leave enough for them to eat. Also, berries contain seeds that will grow into new plants, so when you leave some, you help ensure future harvests.
- What Can You Give Back? Some people leave a gift, a song, or a prayer as thanks for the gift they have received. Others may pick up garbage or remove invasive plant species.
- Leave No Trace: Clean up and fill in holes so you don’t make a visible impact.

Grow Your Own Native Berries: Berries are easy to grow in your own yard or community garden. Native plants are uniquely adapted for this environment and often need less water and care. They make beautiful additions to gardens and public landscapes and can be found at many plant nurseries.

BLACKBERRY – *Rubus spp.*

Blackberries are one of our most delicious and abundant wild fruits. There are close to four hundred varieties around the world, and several grow in our region. They have a solid core, different from the hollow thimble shape of raspberry, thimbleberry and salmonberry.



The native trailing wild blackberry (*Rubus ursinus*) is the most prized and flavorful of all blackberries. It is a low-growing plant with long-running stems that are grayish-green to pink colored and covered in thorns. Leaves are in threes and have serrated edges and pointed tips. They create a ground cover in woods or in clearings. Flowers are white with five long petals. Only female plants bear the purple to black colored fruit, which is about one inch long and ripe in June to August. Wild blackberries are smaller than non-native varieties, but they are also more packed with flavor.

The rampant Himalayan blackberry (*Rubus armeniacus*) is a non-native weed that is originally from Armenia and Iran. It was spread by birds eating the fruit and dropping the seeds, and reached the Pacific Northwest for the first time in 1945. It grows with such robust vigor that it appears to consume houses, climb trees, and cover fields. It does have its tasty benefits—the fruit is sweet and abundant. Leaves are usually grouped in five leaflets, occasionally in three. The flowers are similar to wild blackberry but with fatter petals. The fruit is usually ripe in late July through August. Thornless blackberry cultivars are grown commercially. Loganberries, boysenberries and tayberries are crosses between blackberry and raspberry.

CRANBERRY – *Oxycoccus spp*

Cranberries are the jewels of coastal and mountain bogs. These tiny, low-growing, woody plants are often found growing in moss. They have evergreen leaves and graceful pink flowers that resemble cranes, hence the name “cranberry.” Round, ruby-colored berries are ripe in late summer through winter. They are sweetest when gathered after the first frost.

Cranberries can be eaten fresh, but their tart flavor is greatly improved with cooking and sweetening. Northwest Native People traditionally stored cranberries in damp moss throughout the winter so they stayed fresh until spring. They were also picked green and stored in boxes or baskets until they turned soft and red.



Cranberry is a favorite relish for accompanying turkey and other meats. It is also excellent in salad dressing, desserts, breads, jams, and jellies. The berries are high in pectin, so when you cook them, they become thick.

Cranberry is valued for its ability to prevent and treat bladder and urinary tract infections. Bitter compounds in cranberry also stimulate the secretion of digestive juices. Most cranberry juice on the market is heavily sweetened. Because sugar weakens immune function, unsweetened or lightly sweetened cranberry juice is recommended.

HUCKLEBERRY – *Vaccinium* spp.

What could be better than wandering through the woods and finding a bush covered in ripe huckleberries? Botanists recognize fourteen species of huckleberries in the Pacific Northwest, which grow in habitats ranging from the coast to the high mountains. Huckleberries come in many sizes. A type of huckleberry called dwarf whortleberry is a mere six inches tall and is covered in tiny red berries that would satisfy a mouse, while mountain blueberries and huckleberries are large enough to satisfy a bear. All huckleberry fruits have a circular “crown” on the opposite side from the stem. Berry colors range from orangey-red to purple to deep blue-black.

Red Huckleberry – *Vaccinium parvifolium*. Red huckleberry grows on nurse logs in shady forested areas. It can reach twelve feet tall. Stems are green colored, and deciduous leaves are limey green with smooth edges. Only young leaves remain on the bush throughout winter. Greenish-white bell shaped flowers bloom in April through July. Pink to orange-red berries are round and up to ½ inch in diameter. They are ripe from June into August and have a tart flavor.



Evergreen Huckleberry – *Vaccinium ovatum*. Evergreen huckleberry grows in gravelly or sandy soil in evergreen forests, open woodlands, and clear cuts. It stays green all year and can reach eight feet tall. Leaves are leathery with toothed edges and strong central veins. Flowers are white to pink and bell shaped. Berries are dark blue to black, about ¼ inch in diameter, and are ripe in August through November when most other berries have passed. They are sweetest after the first frost.

Evergreen huckleberry benefits from some pruning, and the small berries are time-consuming to harvest, so many people prefer to cut loaded branches and pick the berries off at home. The leaves can be dried and made into tea. If you cut branches make sure to take less than 20% of a plant, and act as if you are pruning it. Cut stems at an angle with sharp clean clippers. Proper pruning will help the plant to be more healthy and productive next year!



While most types of huckleberries cannot be cultivated, the evergreen huckleberry is an exception. These handsome bushes prefer partial sun but will also grow in full sun. Many nurseries carry evergreen huckleberry and they are common landscaping plants in public spaces.

Big Huckleberry – *Vaccinium membranaceum*. Also called mountain huckleberry, this deciduous shrub often grows two to four feet tall. It has oval shaped, finely toothed leaves that taper to a pointed tip. The urn-shaped blossoms are round, wider than they are long, and pinkish-white. They bloom just after the snow melts and are pollinated by long-nosed bumblebees. The fruits are shiny, about ¼ inch across, and dark purple. They are ripe in late summer through fall.





Mountain huckleberries, like all native foods in this region, are an important cultural food for Native People. Mountain huckleberry is often over-harvested by commercial harvesters, and it is increasingly difficult for Native families to find healthy berry patches. For non-Indigenous folks, consider eating berries in your local neighborhood or growing evergreen huckleberries in your own backyard.

Huckleberries are among the healthiest of berries. They do not raise blood sugar and are an important food for pre-diabetics and diabetics because they are high in antioxidants—compounds that help protect the body from the effects of high blood sugar, including diabetic retinopathies, kidney damage, and poor tissue healing. Research suggests that blueberries and huckleberries also lower cholesterol, slow age-related dementia, and reduce tumor formation. They are excellent for heart health, and can ease varicose veins and hemorrhoids. Huckleberries and blueberries contain arbutin, a plant compound that helps to fight bacteria often associated with urinary tract and bladder infections. The berry juice or the leaf tea can be used as a preventative and a treatment for both.

If you cannot grow or gather your own huckleberries or blueberries, you can buy them frozen in most stores throughout the year. If possible, buy wild harvested or organic berries. You can add them to hot cereal, sprinkle them on cold cereal, or mix them into dressings, sauces, and desserts. Cooking them actually increases their antioxidant content. The recommended daily amount for health benefits is ½ cup a day. Eat them straight off the bush or preserve them by freezing, drying, canning, or making fruit leather.

SALAL – *Gaultheria shallon*

Salal is a common understory plant that grows in lush thickets in coastal areas and lowland forests. Evergreen leaves are dark green on top, thick, and waxy. Spring flowers look like little white bells (sticky and slightly hairy), and berries are a blue-black when ripe. They have a small star on the bottom.



Salal berries ripen between July and October, depending on elevation and weather conditions. They vary from delicious to bland and boring. Taste the berries before you gather them. If they do not suit you, try traveling to a different bush nearby or wait until they are riper. Salal berries can be eaten fresh, cooked, or preserved for later use. They are exceptionally high in vitamin C, antioxidants, fiber, protein, and even omega fatty acids.

Northwest Coastal Native People mash salal berries and shape them into cakes that are dried. These cakes are traditionally stored in bentwood boxes to be enjoyed throughout the year. Salal cakes were often dipped in oil or cooked in hot water. Salal berries have also been mixed with dried meat, fish, and other berries to make pemmican—a native version of the “Power Bar” for physically demanding times, including traveling or hunting. People continue to prepare these foods today. Humans are not the only ones to enjoy salal berries. Many berry pickers are accustomed to sharing the harvest with other creatures. You may be on one side of the patch, while bears, birds or small mammals are on the other.

Salal leaves are dried and made into an astringent tea to reduce inflammation and ease sore throats. The young leaves can be made into a poultice or infused oil to heal wounds. The leaves hold up so well that they are a valued addition to floral arrangements.

SALMONBERRY – *Rubus spectabilis*

Salmonberry forms dense thickets in wet forested areas, especially along streams and rivers. Plants grow as high as nine feet tall with brown stems that are covered in thorns and leaves resembling the raspberry plant.



Deep pink flowers have five petals and many stamens. Leaves are sharply toothed, pointed at the tip, and grow in threes. Salmonberries are the earliest berries of spring. In late April through June, succulent orange to ruby-colored berries appear.

The tender spring shoots of salmonberry are also called bear candy, because bears relish this spring treat. Salish Elders teach that sprouts are an important spring food because they energize our body after wintertime. They are loaded with minerals and vitamin C, nutrients we need to enter a new season with strength and vigor. For a few weeks, salmonberry sprouts are tender and juicy and can be pinched off easily, either from where they emerge on previous years' stems or from the ground. The outer skin is easy to peel, leaving a crunchy vegetable that is tart and sweet. Most people enjoy eating them fresh but they are also tasty when lightly steamed or sautéed. Sprouts become more bitter toward the tip of the shoot. As they mature, they turn hard and fibrous. If you can't easily pinch sprouts off the bush with your fingers, they are too mature to eat.

Salmonberry flowers are edible and have a sweet taste due to their nectar and pollen content. They can be eaten straight or used to garnish salads and desserts. The leaves are rich in minerals and can be dried and made into a tea that is similar to raspberry leaf.



Salmonberries are the first berries to ripen in spring, and people often look forward to their sweet and juicy flavor. They remind us to embrace the season when it is here—otherwise, we will have to wait until next year. Berries can vary in color from yellow to orange to red to a deep purple on the same bush. The taste varies according to where they grow—perform taste-tests to find bushes that are most delicious. Skokomish elder, Bruce Miller, shared that his family owned a patch of salmonberry and maintained them like a garden.

Salmonberry is an environmental indicator for salmon runs. If the salmonberries are abundant in the spring, it is an indicator that many salmon will be returning to their ancestral streams. Salmonberry is intimately tied to the health of rivers and tributaries. Many Native communities in the Pacific Northwest associate salmonberry with Swainson's thrush, which is also called "salmonberry bird." Salmonberry sprouts are often ripe when the bird returns from its winter grounds.

STRAWBERRY – *Fragaria* spp.

Wild strawberries are creeping perennials that grow in mats in open areas in woodlands, gravelly fields, and on grassy beaches. Flowers are white with five petals and a yellow center with many stamens. They resemble small rose and thimbleberry flowers. Leaves are fan shaped with toothed edges, especially at the tip, and are divided into three leaflets. Leaves can be smooth and glossy or slightly fuzzy, and are fuzzier on the underside. The fruit is deliciously fragrant, oval, orange to red colored, and about ½ inch across. Seeds are on the surface of the berry. Long pink runners crawl across the ground, root, and start new plants. There are several kinds of wild strawberries in our area, including woodland strawberry (*Fragaria vesca*), Virginia or blue-leafed strawberry (*Fragaria virginiana*), and coastal or beach strawberry (*Fragaria chiloensis*).



Wild strawberries may be only the size of the tip of your pinky finger, but they pack more flavor than the giant strawberries found in stores. Look for patches in sunny locations with rich soil or a recent burn. Those who pick are enticed by their juiciness, bright red color, and irresistible scent, and they often end up in the mouth instead of the harvesting bucket. In an abundant patch, a dedicated picker can harvest a gallon an hour. Strawberries should be used soon after they are gathered, as they have a short shelf life. They remind us to enjoy the gifts of the present moment. Strawberries can be made into syrup or jam, infused in vinegar, or frozen for later use. The flavor of strawberry in winter is a sweet reminder of the deliciousness of summer.



Strawberry leaves can be dried and made into a mineral-rich tea.

Harvest any time between mid-spring when leaves are fully developed and late summer when the leaves are still vibrant. They should be completely dried before using them as tea. They have a pleasant mild flavor and will act as an astringent to gently tighten inflamed tissue, including swollen gums, sore throats, sore eyes, burns, and digestive irritability.

The whole strawberry plant is cooling, strengthening, and healing. The leaves contain vitamin C, which helps to heal and strengthen tissue, methyl salicylate, which feels cooling and acts as an anti-inflammatory, and quercetin, which stabilizes inflammation. Recent research shows that strawberry contains ellagic acid, which has antioxidant, anti-mutagen, and anti-carcinogenic properties. Many people value strawberry as a women's tonic to strengthen the blood (it contains iron and other minerals), prevent miscarriage, and ease morning sickness.

THIMBLEBERRY – *Rubus parviflorus*

Thimbleberry is a many-stemmed bush that grows to six feet tall in wet woodlands. Flowers are large with five white petals and a yellow center. They mature into bright red berries that are shaped like shallow caps. Leaves are soft, fuzzy, and resemble a large maple leaf. They have serrated edges and five sharply pointed lobes. Thornless stems are green when



young and brown and woody when they mature.

Thimbleberry is a delicious woodland treat. The berries are tart, sweet, and have a pleasant crunch due to tiny seeds. It is difficult to pick enough to make a pie or jam because only a couple of berries ripen on a bush at a time. The berries can be used to make fruit leather, dipping sauce, salad dressing, and refreshing drinks.

The spring shoots of thimbleberry and salmonberry are peeled and eaten as a vegetable called "sprouts" or "bear candy." They are tart and sweet with a nice crunch like celery, and can be eaten fresh or lightly cooked. Look for fat new growth that you can easily pinch off the base of the plant or from larger stems in March through April. If sprouts are too tough to pinch off easily, they have become woody and are past their prime.

A large thimbleberry leaf can also be fashioned into a berry-picking basket. Gather the top three points of the leaf and pierce them with the stem, then fold the stem over to hold the shape of the basket. Thimbleberry's large soft leaves give it another common name: "toilet paper plant." Many a hiker has been grateful for its leaves when in need.



Dried thimbleberry leaves are made into an astringent and mineral-rich tea. They are valued for women's health in a similar way to raspberry leaf. Gather them in spring through early summer, dry them in baskets or paper bags, and then crumble them up into tea. Use 1 tablespoon per cup and steep 15 minutes. Drink 1-2 cups a day. They blend well with other herbs like rosehips, orange peel, and other berry leaves.

OTHER WILD BERRIES



Blackcap Raspberry – *Rubus leucodermis*

Blackcap looks similar to raspberries, with arching silvery green canes growing up to six feet tall and adorned with tiny curved thorns. The fruit turns purple to blackish when ripe. Try making a drink out of blackcap by placing a cup of the fruit in a blender with two cups of water and a teaspoon of sweetener. Use muslin cloth to strain out the seeds and then enjoy this taste of summer.

Elderberry – *Sambucus* spp.

Elder is a small tree that grows up to 20 feet high. Tiny star-shaped flowers are whitish-yellow and grow in dense clusters. Each leaf has five to nine leaflets with serrated edges. Red elder (*S. racemosa*) blooms in March and April, with cone-shaped flower clusters that turn into red berries in June. Blue elder (*S. canadensis* and *C. cerulea*) has flat-topped flowering heads that bloom in June and turn into berries in July through August. Black elder (*S. nigra*) is native to Europe and is commonly grown in gardens.



Elderberries have a tiny seed with a toxic alkaloid called sambucine that can cause upset stomach when eaten fresh. Cooking or drying helps remove this alkaloid. Blue elderberries are used more often and make delicious jam, jelly, and syrup. Fully dried berries are made into tea. They contain Vitamins A, B and C, as well as the minerals calcium, iron, and potassium. Blue elderberry is anti-viral and is used for preventing and treating colds and flu.

CAUTION: Red and blue elder stems, leaves, unripe fruit, and seeds contain toxic compounds. When the fresh berries are ingested in quantity, they may cause vomiting and diarrhea. Berries are eaten *after* they are cooked and the seeds have been removed by squeezing the pulp through cloth or a food mill.

Serviceberry – *Amelanchier* spp.

Also known as juneberry and saskatoon, serviceberry looks like a giant blueberry shrub. Bushes vary from three to 21 feet tall, with smooth red-to-grey bark and oval leaves that are toothed on the tip. Fruits are ripe in May through July, depending on elevation and weather conditions. Berries are dark blue and sweet, although their flavor varies. Serviceberries can be dried whole or mashed into cakes then dried. They are easy to grow in your garden and, if in good growing conditions, will turn into a small tree. Serviceberry thrives in many different habitats, from moist stream banks to dry slopes and well-drained prairie areas.



Soapberry – *Shepherdia canadensis*

Soapberry is also called buffalo berry, foam berry, and soopolallie because it contains compounds called saponins that lather like soap. When the red round berries are whipped, they make a foamy dessert that resembles light pink whipping cream called "Indian ice cream." The berries are extremely bitter. These days, most people mix them with sugar. Many people say Indian ice cream is an acquired taste. If you do not like it the first time, try it several more times and you may find that you begin to enjoy it.

Skokomish elder Bruce Miller said the traditional way of eating Indian ice cream was as a palate cleanser between courses at feasts. Considered a party food, special wooden bowls and spoons were used to eat this delicacy during large social gatherings. Soapberries are such an important fruit to Coastal People that many families who do not have them in their area travel long distances to get them. They can be grown in gardens but you need a male and a female plant to produce berries.



BERRY ACTIVITIES

Below are some ideas for berry activities you can do with youth groups and families. We invite you to adapt them to your learning environment! Consider these guidelines:

- Do a check in when you start an activity. Give each person an opportunity to share their name, how they're feeling, and the answer a get-to-know-you question. This simple approach strengthens relationships in the group. Example questions: If your mood was a weather system today, what would it be and why? What is something you appreciate about spring/summer/fall/winter?
- Encourage youth curiosity, problem solving skills, and the "art of noticing" by asking questions like "*What do you notice about salmonberry?*" instead of just telling people about the features of salmonberry.
- Make activities as experiential as possible. For example, if you are cooking, have each participant be a part of the process.
- Close the activity with a check-out reflection, such as "what's one thing you learned today?", or "what is something you appreciated about our time together?"

Build Plant Identification Skills

The *Tend* curriculum encourages students to develop the "art of noticing," meaning engaging all five senses and awakening to seasonal rhythms. This can promote the development of critical thinking skills in observing, comparing, contrasting, classifying, and identifying plants. Instead of a forest looking like a wall of green plants, it can become a community of distinct individuals – each with stories, gifts, and complex relationships.

People have an incredible ability to recognize shapes, textures, and colors. Today, the average youth under ten years old in the United States can identify up to 1000 advertising symbols, but less than ten native plants or animals. As a culture today, we are constantly bombarded with advertising and rarely spend time in nature. In contrast, one six-year-old girl in Ecuador was able to identify over 1000 plants in the jungle from small leaf samples! Becoming acquainted with local plants and places can be empowering and healing, and helps us to take better care of our plant neighbors. Here are a few tips for teaching berry identification:

Leaf Identification

- Is the leaf large or small (thimbleberry verses huckleberry)? Does it have leaflets that make up an entire leaf (strawberry, salmonberry)? Does it have edges that are toothed (serrated) or smooth? What is the pattern of the leaf veins?
- Does the berry plant have evergreen leaves that stay on the bush all winter, or does it lose its leaves in winter (deciduous)?

Flower Identification

- What is the shape of the flower – a star, a bell?
- How many petals does it have? What does the center of the flower look like?
- What color are the petals, the center?
- Who is pollinating the flowers?

Berry Identification

- What shape is the berry? Is it round, or does it have many circles grouped together like a blackberry?
- Where are the seeds—inside or outside? What is their shape? Are there one, or many?
- What is the color of the berry?
- Do you see signs of animals eating the berries?

Habitat

- Where does the berry tend to grow? Along streams, in shady woodlands, on nurse logs? This is called habitat, and noticing it can help us to find berries in other places.

Berry Plant Walk

Find a place where a few types of native berries are growing. This might be a local park, a forested area, or a back alley in a neighborhood. Here are a few things to do along the walk:

- The Art of Noticing: When you start your walk, have everyone put on their deer ears to hear as many sounds as possible, their eagle eyes to see details around you, their salmon nose to smell, and their fox feet to be quiet so you don't scare wildlife. You can act this out by making signs or mimicking the animals. As you walk, keep referring to your animal observation skills to help notice sights, sounds, smells, signs of animals, etc.
- Harvesting Safety and Ethics: Before you gather any berries, ask: *What is important to consider before we harvest berries?* Fill in information that was not shared, including having permission to harvest, making sure you have the right plant and that the area is free of pesticides, chemicals, and other contaminants (like dog pee), and leaving enough behind for other animals and so that the berries can create seeds and reproduce. If you see poisonous berries, make sure to point them out and go over how to identify them.
- Documentation: Make notes or do sketches in a field journal. Or you can take pictures and make a photo essay.
- Berry Cards: Youth can read the berry cards with the group or adults can read them to younger students. If you have several participants on the walk, have each person remember a berry including how they identified it and one fun fact. Do a closing circle at the end of the walk where everyone shares their berry.

Berry Scavenger Hunt

There are all sorts of scavenger hunts to be done in the woods or outside. This one helps participants experience their environment through all five senses (or one sense in particular). Split the group into small teams and give them a list of plant qualities (this can be done with an egg carton where each hole is labeled with a quality). Qualities could be: rough and smooth-edged leaves, orange/red/purple berries, pink flowers, thorny stems, seeds, etc. Scavengers find and gather small examples of each quality.



Berry Matching Game and Bingo

Give youth a set of Wild Berry ID Cards and corresponding berry plant samples from live plants—for example, a small stem of salmonberry, salal, etc. Ask them to match the samples with the cards. They will need to pay close attention to leaf shape, color, texture, etc. Once they have properly matched the cards with the samples, each person can share a card or multiple cards with the group including how they identified it and fun facts.

Play Berry Bingo: This activity is best for children ages 10 and above, and can be used after playing the berry matching game or going on a berry plant walk. It relies on information from the Berry ID cards, as well as words defined below. Before you play, ask participants what the words mean and fill in missing information that is not shared. You will need to print the berry bingo scorecards and Q/A scorecards. Read the Q/A cards first and adapt the questions if necessary.

- Annual – Plants that live only one year. Ask, *What are some annual plants?* Examples include garden color plants like petunias and marigolds, and vegetables like pumpkin, tomatoes, and corn.
- Perennial – Plants that live several years (most herbs, trees, and shrubs including nettles, huckleberry, and yarrow).
- Deciduous – Plants lose their leaves in the cold months (maple trees, salmonberry, red huckleberry).
- Evergreen – These plants keep their leaves or “stay green” all year long (evergreen trees, salal, evergreen huckleberry).
- Antioxidants (adapt to the age-range you are teaching). Cells are the tiniest structures in our bodies—the building blocks of life. Molecules called free radicals constantly attack them. These can tear cell membranes and damage cell components, leading to poor health or “aging” of cells. Some oxidative damage is a normal part of being alive. Yet, pollution, including cigarette smoke and unhealthy food such as refined food and fried food, exposes us to excessive amounts. Excessive exposure to oxidation is a contributing factor to developing many modern diseases, including type 2 diabetes, cancer, and heart disease. Antioxidants in berries stabilize free radicals, limiting the damage they can do to our bodies. They are said to slow down aging, reduce inflammation and increase immune health. Berries are among the most potent antioxidant foods!
- Fiber – Fiber helps to prevent constipation and normalizes gut health. It also lowers cholesterol and reduces the risk of heart disease and some cancers.
- Minerals – We need minerals from our foods and beverages to build strong bones, hair, and nails. The health of our blood and cells also depends on having the right balance of minerals. Plants are able to draw up minerals from the soil and concentrate them in their tissue. When we eat plants, including berries, or drink tea made from plants, we can absorb their minerals. Examples of mineral rich herbs include: blackberry, huckleberry, raspberry, salmonberry, strawberry and thimbleberry leaf, horsetail, nettle, and rosehip.
- Vitamin C – This important compound helps our body absorb the mineral iron, heal cuts, and keep teeth and gums healthy. Our bodies do not make vitamin C, so we need to eat foods that contain it.

Give each person a bingo card and a pen, a small handful of dried berries like cranberries, or small leaves to mark their answers. Explain that there are no free spaces. If someone gets all four in a row horizontally, vertically

or diagonally, they can call BINGO! Shuffle your cards and then begin. Once someone calls bingo, double check that they have the right boxes crossed off. If not, keep going until someone gets a correct bingo. Once finished, reread the questions and have people call out the correct answers.

Tell a Story, Create a Story

Read a berry story or see CedarBoxStories on Vimeo (<https://vimeo.com/cedarboxstories>) to watch a Coast Salish storyteller tell a story. Reflect on lessons from the story and refer to the characters in the story later. Stories will be more meaningful if people hear them several times and then can tell the story themselves. Youth can illustrate the story or act it out.

You can encourage storytelling through having youth write their own berry story. This might be a real story about their experience with berries, or a story they make up with characters that might include humans, non-humans, and real or mythical places.

Cook a Berry Treat

Make berry jam, baked treats, fruit leathers, etc. Remember you can harvest berries and freeze them for use later or dry berries in a dehydrator. See the recipe section below for inspiration.

Make Berry Beverages

Experiment with smoothies, "magic potions", and berry-flavored lemonade, or iced tea. See the recipe section for ideas on how to make berry-flavored waters, berry tea, and berry shrubs. You can also make many refreshing types of berry popsicles.

Berry Art Activities

Use the *My Native Berry Book* for drawing berries or doing leaf rubbings. To create a leaf rubbing, pick enough of each type of leaf so students can easily take turns making the rubbings. Having half as many leaves as the number of students works well. Pick them the day before or the morning of class so they do not wilt. You can flatten them in a book or keep them in a plastic bag in the refrigerator to preserve them.



Plant a Berry Garden

Many native berries included in this handout grow well in home, community, or school gardens. Check local nurseries for native plants. Research preferred habitats including light and soil conditions. Make it a group project and watch your berries grow together! You can create a berry garden journal and document when berry plants bloom, when fruits ripen, and which animal species pollinate flowers and eat berries.

WILD BERRY RECIPES

Strawberry Sauce, for the Love of Summer

This delectable sauce captures the sweetness and warmth of summer. It can be enjoyed in countless ways including adding it to drinks like lemonade, mixing it into salad dressing, pouring it over pancakes, and of course, and making the classic summer dessert - strawberry shortcake. Freeze or can the sauce, and you have the perfect remedy for easing the winter blues.



- 3 cups wild strawberries
- 1 tablespoon lemon juice
- ½ cup honey, brown rice syrup or sugar
- *Optional – 2 teaspoons rosewater, ¼ teaspoon vanilla

Place strawberries and lemon juice in a small pot and gently heat, mashing the berries with a spoon until they are soft. Add honey and blend thoroughly. Serve immediately or pour into a glass jar and store in the refrigerator for 1-2 weeks.

Strawberry Douglas Fir Gummy Treats

These delicious treats are high in protein and Vitamin C – a perfect high-energy snack. Douglas fir spring tips are traditionally eaten to ward off hunger and thirst when you are doing physical activity. If it is too late for the tips add rose petals, basil, or mint.

- 1 cup strawberries
- ⅓ cups lemon juice
- ½ cup Douglas fir or spruce tips
- ¼ cup natural beef gelatin



Purée strawberries, juice and needles in a blender. Heat gently on stovetop until just below boiling. Slowly and steadily pour in gelatin, constantly stirring with a whisk so it does not clump. When the gelatin is completely mixed, turn off heat, allow to cool for a few minutes, and then pour into molds or an 8 by 8 pan.

Cranberry Rosehip Sauce

This tasty fall recipe is excellent with meats like turkey, on toast, or drizzled over brie cheese with crackers. It helps boost immunity during the cold and flu season. From Spokane tribal member, Elizabeth Campbell.

- 1 -12oz. bag of cranberries
- 1 cup apple cider (raspberry if available)
- ½ cup orange juice or 1 teaspoon of orange zest
- ½ cup of dried deseeded rosehips, ground in a coffee grinder
- 4-8 tablespoons honey, sugar or other sweetener



In a medium-sized saucepan heat cranberries and ½ cup of cider and boil until the cranberries pop open. Stir in remaining ½ cup cider, orange juice, rosehip powder, and sweetener. Remove from heat and let the sauce thicken as it cools. Sweeten to taste. Add more cider to thin consistency if necessary.

Thimbleberry Dressing or Dipping Sauce

Any of the wild berries in this handout can be used for this versatile recipe. Try different kinds of vinegar, or adding flavorful herbs like mint or rosemary.

- ½ cup thimbleberries, mashed
- ½ cup olive oil
- ¼ cup white wine or rice vinegar
- juice of ½ lemon
- salt to taste



Put all ingredients in a jar with a lid and shake vigorously. Use as salad dressing or dipping sauce.

Salal Fruit Leather

Gather berries in late summer to early fall when they are sweet and tasty. For easy harvest, pinch off the whole stem full of ripe berries, and then twist or pinch each berry off the stem instead of pulling it. Clean and rinse if necessary. Three quarts of berries makes about one cookie sheet of fruit leather. Place berries in a blender with ½ cup honey to sweeten and the juice of one fresh lemon to bring out the flavor.

Fit wax paper over a cookie sheet with sides. Pour blended berries onto the sheet and use a spatula to smooth them out to an even consistency of about ¼ inch thick. The berries can be dried traditionally in the sun or in the oven.

Sun Drying: If it is hot and dry, place the pan in the full sun, preferably in a windy spot. If there are flies or bugs, you can put cheesecloth over the berries. It will probably take 2-4 days to dry completely, so bring the berries in at night to prevent them from gathering dew. After the berries are mostly dried, lay another piece of wax paper over the berries and carefully turn them over. Peel the old wax paper off and let the other side dry out. When it seems the consistency of fruit leather, cut the berry sheet into strips and store in plastic bags. They will last longer if kept in the refrigerator. You can also make round berry cakes and dry them on skunk cabbage leaves, which works like wax paper. This is the traditional method.

Oven Method: Place the berries in the oven on the lowest temperature (usually about 170 degrees) and leave the oven cracked (you can use a wooden spoon in the door) so that water can evaporate off the berries. When the berries are mostly dry (6-8 hours) place another piece of wax paper over the berries and flip them over. Carefully peel off the wax paper and continue drying. If you have to leave, simply turn your oven off and place the berries in a warm spot in the house with draped cloth over them. Continue drying as you can.

Variations: You can make fruit leather out of a variety of berries. The key is to use berries that are low in water content. Good choices are thimbleberry, blueberry, and huckleberry.

Wild Berry Crisp

Filling:

6-8 cups of berries. Possibilities include strawberry, huckleberry, or blackberry
½ cup of honey, agave nectar, or xylitol as sweetener
2 tablespoons cornstarch or ¼ cup all-purpose flour
1 teaspoon of lemon zest or two teaspoons of lemon juice

Topping:

½ cup all purpose flour or barley flour
1 - ½ cup rolled oats
½ cup chopped walnuts
½ cup chopped hazelnuts
2 tablespoons sunflower, walnut, grapeseed, or other healthy cooking oil
½ cup honey, agave nectar or rice syrup
⅛ teaspoon sea salt
½ teaspoon cinnamon

Preheat oven to 375 degrees. Mix the filling ingredients and spread evenly in a 9 x 12 inch baking pan. Roast flour, oats and chopped nuts by stirring them in a dry skillet over medium heat until they are heated through and are just beginning to brown. Remove from heat and place in a bowl. Heat oil and honey, then pour over the dry mix. Add salt and cinnamon. Mix well and drop evenly over the berries. Bake for 30-40 minutes or until the berries bubble and the topping is crisp.

Wild Berry Tea

Many types of berry leaves including strawberry, blackberry, huckleberry, thimbleberry, salmonberry, and salal make delicious teas. They are easy to dry and can be bundled and hung in a warm place with good air circulation, or dried in basket. Keep out of direct sunlight. Once dried, crumble the leaves and place them in glass jars or bags. Store in a cool, dark place. They will last about a year.

This antioxidant-rich tea is a delicious beverage for strengthening your heart and blood vessels. Huckleberry leaf also helps balance blood sugar. Rosehips, hibiscus, and orange peel are high in Vitamin C, which supports immune function. Get creative with blending your own berry tea combinations. You can have family or community members vote on their favorite blend.

2 parts of each of the following dried herbs: strawberry leaf, huckleberry leaf, hawthorn leaf and flower, hawthorn berry, rose hips

1 part of each of the following dried herbs: hibiscus, orange peel

Use 1 tablespoon of tea per cup of hot water, steep for 20 minutes. Drink 1-3 cups daily.

Berry Popsicles

Make a berry smoothie and pour it into popsicle molds or make a berry tea and add fresh berries to the popsicle molds. Search online for many great recipes and tutorials!

BERRY INFUSED WATERS

Store-bought flavored waters usually contain sugar, artificial sweeteners, and artificial flavors. Try making your own refreshing drinks with your favorite fruits, herbs, spices, edible flowers, and vegetables! Preparation is simple:

- Gather your ingredients using a large glass bottle or jar.
- Chop or slice fruits and vegetables.
- Place your ingredients inside the jar and cover with water.
- Let the water sit for a few hours so the flavors can infuse. The longer it sits, the more flavorful the water will be and more nutrients will be extracted. (*tip: prepare an infused water before bed, place it in the fridge, and your delicious water will be ready to enjoy the next day.*)
- Drink the water the day you prepare it if it is room temperature. You can keep flavored waters in the refrigerator for up to three days.
- You can use fizzy water for added excitement.
- Eat the fruit or veggies after your drink your water. They will still be packed with flavor and nutrients.



Possible Ingredients:

Berries: They can be fresh or frozen. Slice larger berries.

Sliced fruit: cherry, lemon, lime, orange, grapefruit, melon, cucumber, plum, kiwi.

Vegetables: fennel, celery, carrot.

Fruit concentrate: lemon, lime or tart cherry.

Sprigs of aromatic herbs: basil, lemon balm, mint, rosemary, sage, thyme, basil, cilantro.

Fragrant edible flowers: rose, lavender, chamomile, violet, hibiscus.

Fresh spices: long thin slices of ginger, turmeric, jalapeno, cayenne.

Tips of evergreen tree branches: Douglas fir, grand fir, spruce, hemlock.



Tasty combinations:

- Thimbleberry, cucumber, mint: great for blood sugar balance, to combat bloating and to help cool you down on a hot day!
- Strawberry Douglas fir: rich in vitamin C, electrolytes and antioxidants- this combination boosts immunity and energy.
- Blueberry, lemon, ginger: aids in digestion and soothes heartburn.
- Orange, lemon balm, lavender: calming and uplifting.
- Huckleberry and lavender: delicious and balancing.
- Frozen raspberries with a splash of rose water and a teaspoon of tart cherry concentrate - strengthens blood vessels, boosts immunity, and helps alleviate muscle aches and pains.

BERRY SHRUBS — DRINKING VINEGARS

Shrubs are concentrated syrups made from vinegar, sugar, fruit, and herbs. They are tart, sweet, and thirst quenching. Shrubs are very strong and are usually added in small amounts to water, soda, or other drinks. Apple cider vinegar is often used in shrubs because it is nutritious and inexpensive. Other types of vinegars can be used as well. Vinegar balances blood pH, has a cooling effect on the body, and stimulates digestion. Vinegar usually contains 5% acetic acid, which is a natural preservative. Once vinegar is diluted with fruit juice, it must be refrigerated. Shrubs will last for several months to a year.

There are several ways to make berry shrubs, including cooking the fruit or processing it cold. We prefer the cold method because it brings out the flavors of the fruit.

2 cups berries

1 cup sugar

1 cup vinegar (can be infused with herbs)

1. Place washed berries and sugar in a bowl. Mash the fruit with a fork or slotted spoon. The sugar will help pull the juice from the fruit.
2. Cover the bowl with plastic wrap or a lid and place in the refrigerator for several hours to a day. If you are infusing the vinegar with herbs, place the vinegar in a jar with about ¼ cup of plant material. Possibilities include fragrant flowers like rose or lavender, rosemary, mint, spruce tips, or citrus peel.
3. Place a mesh strainer over a bowl. Pour the fruit mixture through the strainer and mash the fruit to get as much juice out as possible. Pour the vinegar mixture over the fruit and mash again to remove remaining juice and sugar.
4. Bottle the shrub in a glass jar, label, and keep in the refrigerator for up to three months.

People have made vinegar for over 8,000 years. Vinegar was mixed with fruit, fragrant flowers, herbs, and nuts in Turkey and Persia and called “sherbet.” This is considered the original soft drink. Shrubs were very popular in America in the late 1700s through the mid-1800s and during prohibition. Newspapers across the country ran recipes or advertized stores selling them. They were also called fruited vinegars. Shrubs fell out of favor when sugary soft drinks became popular. They are making a comeback and can be found in many stores and restaurants. You can find many shrub recipes online.



Another option is to place the berries, sweetener, vinegar, and herbs in a jar, cover it with a lid, and let it sit in the refrigerator for up to a week. In this method you can use honey or another sweetener. Feel free to reduce the amount of sweetener. After a week, press out the shrub and bottle.

As a shrub ages, a chemical process occurs. Yeast on the fruit and in the air turns the sugar into alcohol, and bacteria in unpasteurized vinegar turns the alcohol into more vinegar. Eventually the process stabilizes, and the whole shrub turns into vinegar. The end result is a different flavor profile than just the initial fruit, vinegar, and sugar blended mixture—a unique balance of flavors that has been enjoyed for centuries.

COAST SALISH BERRY STORIES

HUCKLEBERRY MEDICINE

As told by Roger Fernandes, Lower Elwha S'Klallam storyteller:



A long time ago a man had a daughter who became very sick. She was unable to eat and was in great pain. The family tried all the remedies they knew, but nothing worked. She became sicker every day. She was becoming weaker.

The family called for Indian doctors to come and treat her. They tried all their medicine, but nothing worked. She became sicker. The man was afraid she would die if a cure was not found.

One night, before he went to sleep, the man prayed to the spirits to please help his daughter.

A plant came to him in a dream that night. The plant taught him a song. The plant told the man to go up into the mountains the next morning, singing the song. When he knew it was time, he should stop singing and the medicine he needed would be there.

The man awoke and went into the mountains, singing that song. He went a long way, but finally knew he should stop singing. He looked down and there was the Huckleberry bush. The man picked the berries and took them back to the village. The girl was too weak to eat so he pressed the juice from them and had her drink the juice. She got a little better.

The next day he mashed the berries and fed them to her. Again, she felt better. Finally after several days she was able to eat the whole berry. She was well now.

The people asked what he had done and how she got better. He explained about the dream and the berries. The people did not believe him. They said it could not be from a simple berry.

That night the man had another dream and a voice spoke to him. It said that the juice of the huckleberry is the blood of the earth and the bush is the veins. The man then knew that huckleberry is a powerful medicine. He shared the dream with the people and they believed what the dream said.

And that is all.

LITTLE CHIPMUNK GIRL

As told by Roger Fernandes, Lower Elwha S'Klallam storyteller:

A long time ago, Little Chipmunk Girl lived with her grandmother. One day she decided to help her grandma by doing the thing she liked to do the most anyway, and that was to pick berries. Little chipmunk girl got ready to go. She tied a little belt to her waist and on that belt was a little berry basket. The Klallam word for a berry basket is mahoit.

Little Chipmunk Girl went running out into the woods following the trails, looking for the best huckleberry bushes. Finally, deep in the woods, she found a beautiful, big huckleberry bush. And at the top, she saw the biggest, sweetest, juiciest huckleberries. She climbed all the way up to the top of that bush and started picking berries. If you have been picking berries, you know how it goes: *"One for the basket, one for me, one for the basket, two for me, one for the basket, three for me."* She was eating more than she was picking. She looked in her mahoit and there were only a few little berries rolling around in there.

Little Chipmunk Girl said, "I better pick faster because it is getting dark." She picked faster - *"One for the basket, one for me, one for the basket, two for me, one for the basket, three for me,"* and she looked in her little basket but there were only a few berries.

She said, "It's getting dark and I better get home or else..." She heard something. Something was coming through the woods. Something was coming down the trail. Little Chipmunk Girl leaned over the leaves and peeked down the trail, and sure enough, someone was coming. Old Owl Woman was coming down the trail. She was looking from side to side into the bushes and the grass. She was wearing a basket on her waist too, but it wasn't for berries. It was for children, little children that were out in the woods after dark, and that was her dinner. She was looking carefully for any little lost ones.

Little Chipmunk Girl was frightened and she hid behind the leaves, as still as she could, hoping Old Owl Woman would pass by her. You know that chipmunks can't be very still. Old Owl Woman walked down the trail and she stopped right in front of that huckleberry bush. She reached into her basket, and by its tail, she lifted up a poor little mouse child. Old Owl Woman was going to eat her dinner. She leaned her head back and opened her mouth wide...

But she saw, way up in that huckleberry bush, the leaves were shaking. So she put back that little mouse child, and she said, "Whoooooo is up there?"

Little Chipmunk Girl said, "Nobody," in her tiny chipmunk voice.

Old Owl Woman said, "I know someone is up there, whoooooo is up there?"

Little Chipmunk Girl said, "Nobody."

Old Owl Woman said, "I know someone is up there, show me your face, don't make me come up there."

Little Chipmunk Girl said, "It's just me, Little Chipmunk Girl, and I know who you are. You are Old Owl Woman and you hurt children. Go away and leave me alone."



Old Owl Woman said, "Little girl, you don't have to be afraid of me. Those stories your parents tell you about me are not true. I really like little children, and do you know what? I was just walking by your house just a few minutes ago and I heard your mother calling you. Your mother wants you to come home right now. You better climb down that bush and go home little girl."

Chipmunk Girl said, "My mother died a year ago, so I don't see how she could be calling me."

Old Owl Woman said, "Oh... I mean your father was calling you. Climb down that bush and go to your father."

Chipmunk girl said, "My father died when I was a baby, so I don't see how he could be calling me."

Old Owl Woman was getting upset. "Little Girl, your uncle is calling you. Go home to your uncle!"

Little Chipmunk Girl said, "I don't have any uncle, so I don't see how he could be calling me."

Now Old Owl Woman was very angry. She said, "Little Girl, your grandma is calling you. Climb down that bush right now and go to your grandma!"

Well, Little Chipmunk Girl did live with her grandma, and maybe her grandma was calling her, and maybe she better go home right now, but she did not trust Old Owl Woman. She said, "I don't trust you. Cover up your eyes so you can't see me."

Old Owl Woman said, "Oh a very smart girl. Okay, I will cover up my eyes." She put her feathers up to her eyes, but her eyes were still visible between the feathers. She said, "Now you can climb down and go home little girl."

Little Chipmunk Girl said, "You are lying! I can still see your eyes, cover them up better!"

Old Owl Woman said, "Such a smart little girl, I can hardly wait." She covered up her eyes but she could still see between the feathers.

Little Chipmunk Girl decided that she would not trust Old Owl Woman. She knew that if she climbed down the bush and tried to run, Old Owl Woman, with her big, sharp claws, could reach out and grab her. So she decided that she would jump as high as she could over Old Owl Woman. And so that is what she did. She took a big, running start, and jumped as far as she could.

But Old Owl Woman saw this, and she dropped her feathers, and starting to beat her wings very powerfully. She started to fly towards Little Chipmunk Girl. She got closer, and closer, and when she was very close, she put out her sharp owl claws. But Little Chipmunk Girl had jumped high enough and far enough that all Old Owl Woman could do was run her claws down the back of Little Chipmunk Girl. Little Chipmunk Girl landed on the ground and she ran all the way home where her grandma protected her.

The proof of the story is that if you ever see a chipmunk, you see five white stripes on her back. And that is from when Old Owl Woman almost caught her in the huckleberry patch. And that is all.

RAVEN AND SALMONBERRY

As told by Tammy Cooper Woodrich, Nooksack storyteller

<https://vimeo.com/202328275> at 21.53 minutes

One day Raven decides to go visit his sister. It takes half a day to get there. He walks through the forest and finally gets to his sisters house, knocks on the door, and says, "Hello, is anyone here?"

His sister opens the door and says, "Brother, I am so happy to see you! What are you doing here?" All the nieces and nephews are so excited to see their uncle, and ask, "Uncle, how are you?"

He says, "I am good."

Raven's sister says, "Oh my goodness, you must be really tired and really hungry. Have a seat." So he sits down and his sister gets some fish out of the rafters. It is the end of wintertime and the last fish up there is really dry and really hard. She goes over and grabs her basket out of the cupboard. She grabs her drum out of the drum bag. She puts her shawl over the top of the basket and then she sings, "*Red and yellow salmonberries, salmonberries that are blackish. Red and yellow salmonberries, salmonberries that are blackish.*" She waves her drum over the top of her basket, pulls off the shawl, and there inside of the basket are salmonberries, just loaded and all different colors.

Those kids are so happy and yell "Wow, mommy, that was awesome!" They eat as many berries as they can and there are still some left over. The kids are so happy because they have not had salmonberries for a long time.

They get done visiting and Raven says, "I better get home now. It is a long day and I have to walk all that way."

His sister says, "Thank you so much for coming to visit Brother. We missed you so much! Oh you better take these salmonberries for my nieces and nephews, they would like that." So Raven grabs the basket and he takes off walking. He can smell those berries, they smell so good that they make his mouth water. Pretty soon he has a berry, and another berry, and he eats those berries all the way home. He gets close to his house and looks down into the basket, and there are no more berries.

Raven gets home. He opens and shuts the door and the kids come running saying, "Daddy, Daddy, how is our auntie? How are our cousins?"

"Really good, we had a nice visit. Oh yeah, look at this basket your auntie made us!"

"Oh, that is a beautiful basket," they say. So they put it on the shelf to use it later.

Time goes by and pretty soon they get a knock on the door. "Hello, is anybody there?" They open the door, and there is Auntie!

The kids say, "Auntie, Auntie, we are so happy to see you, come on in!" Raven sits his sister down and looks up in the rafters, and there is still a little fish up there, so he gives her some fish and some water, but he remembers what she did for him when he was there and that fish was so dry.

Raven goes over to get her basket and sets it down in front his sister. She is looking at him funny. He goes over and gets his wife's shawl and puts it over the top of the basket. He gets his drum. His sister is looking at him with her arms folded and she is shaking her head. He gets out his drum and he starts singing in his croaky Raven voice, "Red and yellow... salmonberries, blackish." He waves the drum over the top of the basket, pulls back the shawl and there in the basket is.... nothing. His kids look at him like, *What is wrong with Daddy, geez.* Sister is over there with her arms crossed and shaking her head. He throws that shawl over the top of the basket again, sings and pulls the shawl off, and there is nothing in the basket. Sister is shaking her head and sighing, and all the kids are wondering what is going on with Dad.

Sister looks at her nieces and nephews, so confused. She grabs her basket and she sets it down. She takes her shawl off and puts it over the basket. She takes her drum out of her drum bag and sings, "*Red and yellow salmonberries, salmonberries that are blackish. Red and yellow salmonberries, salmonberries that are blackish.*" She waves her drum over the top of the basket, takes the shawl off, and there inside the basket salmonberries are piled high. The nieces and nephews are so excited, they have not had salmonberries for so long. Raven stands with his head down and his sister is still shaking her head. And that is the end of the story.

Follow up question: *What does this story teach us?* One lesson is that we all have different gifts, and when we try to mimic other peoples' gifts, it is not always fruitful!



POISONOUS BERRIES!!

POISON OAK

Small to medium sized bush with shiny, oak-shaped leaves of three. Berries are ripe in late summer to fall.



BANEERRY

Grows in shady forests, red berries grow in clusters.



BITTERSWEET NIGHTSHADE

Vine with purple and yellow flowers.

Berries look like little tomatoes and grow in clusters.

OTHER POISONOUS BERRIES INCLUDE:

Devil's club

Holly

Twinberry

Berry Books

Wild Berries of Washington and Oregon. Able Lloyd and Fiona Chambers

Food Plants of the Coastal First Peoples. Nancy Turner

Berry Stories for Children

Berry Magic. Teri Sloat and Betty Huffmon, illustrated by Teri Sloat

Blueberries for Sal. Robert McCloskey

Brambly Hedge Series. Jill Barklem

Dream Wolf. Paul Goble.

The First Strawberries: A Cherokee Story. Joseph Bruchac, pictures by Anna Voitech.

Let's Go! A Harvest Story. Hannah Lindoff. Illustrated by Michaela Goade.

Wild Berries. Julie Flett



Websites

<http://wildfoodsandmedicines.com/>

<http://arcadianabe.blogspot.com>

<https://www.washington.edu/wholeu/2017/06/28/a-quick-and-juicy-guide-to-berries-of-the-northwest/>

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Photo and Art Credits

All photos by Elise Krohn except cranberry by Abe Lloyd, page 3

Huckleberry and strawberry drawing by Joe Seymour

SALAL

Gaultheria shallon



Key Characteristics

Salal is a medium-sized evergreen bush with dark green waxy leaves. It forms dense thickets in forests and beach edges.

Flowers are white to pink and bell-shaped.

Berries are dark blue and look velvety with a five-pointed star on the bottom. They are ripe between July and September.

Fun Facts

Salal berries are tasty and filling.

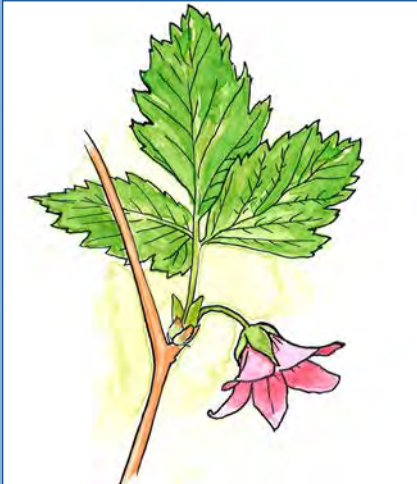
Northwest Native People mash salal berries, shape them into cakes and dry them in the sun so they can be eaten all year.

Salal is mixed with dried meat, fish, nuts and other berries to make pemmican. This high energy food is a native "Power Bar" that sustains people during intense physical activity.



SALMONBERRY

Rubus spectabilis



Key Characteristics

Salmonberry is a raspberry-like shrub reaching to nine feet tall. It grows in dense thickets in wet forested areas.

Salmonberry mature stems are brown and covered in thorns.

The bright pink flowers have five petals.

Leaves are sharply toothed, pointed at the tip and grow in threes. If you hold down the top leaf, the bottom two look like a butterfly.

Fun Facts

Salmonberries are the first berries to mature in spring. They can be red, orange, yellow or blackish. Because salmonberries are so juicy, they are usually eaten fresh.

The tender spring shoots of salmonberry (and thimbleberry) are a delicious vegetable called "sprouts" or "bear candy." Bears eat them whole, and humans peel and eat the crisp inner shoots.



THIMBLEBERRY

Rubus parviflorus



Fun Facts

Thimbleberries are sweet and juicy with tiny seeds. Eat them fresh or use them to make fruit leather, dipping sauce, salad dressing and refreshing drinks.

The tender spring shoots of thimbleberry (and salmonberry) are peeled and eaten as a vegetable called "sprouts" or "bear candy."

Thimbleberry is sometimes called "toilet paper plant" because the leaves are large and soft.

Key Characteristics

Thimbleberry is a deciduous bush growing to five feet tall. You will often see it growing in patches in wet woodlands.

Thornless stems are green to brown.

Leaves are soft, fuzzy and shaped like a large maple leaf. The edges are serrated and they have five points like your hand.

Flowers are white with five petals.

Berries are blood-red colored, full of tiny seeds, and are shaped like shallow caps, hence the name "thimbleberry."



CRANBERRY

Vaccinium oxycoccus



Fun Facts

Cranberries have a unique tart flavor. Northwest Native People traditionally cook and sweeten these berries like cranberry sauce.

A compound in cranberry helps to prevent bladder infections by blocking bacteria from sticking to the bladder wall.

Cranberry is also known as starvation food because it stays ripe throughout winter and can be harvested in emergencies.

Key Characteristics

Cranberry is a low-growing woody plant with small evergreen leaves. It grows in mossy bogs along the coast and in the mountains.

Cranberry fruit is green and turns red in autumn after the first frost. It stays red throughout winter.

The name comes from "crane berry," because its graceful flowers resemble the heads and necks of cranes.



TRAILING WILD BLACKBERRY

Rubus ursinus



Key Characteristics

Wild blackberry is a low-growing plant with long-running stems that are grayish green to pink colored and covered in thorns. It forms a groundcover in woodlands, fields and near streamsides.

Leaves are grouped in threes and have serrated edges and pointed tips.

Only female plants bear the purple to black colored fruit, which is about a half inch long and is ripe in June to August.

Fun Facts

Blackberry leaves can be dried and made into a nice tasting tea for colds and sore throats.

Blackberry vines form a dense ground-cover, and can catch unsuspecting walkers like a trip-wire.

Wild blackberries are smaller than non-native varieties, but the berries are more packed with flavor.



WILD STRAWBERRY

Fragaria species



Key Characteristics

Wild strawberries are creeping perennials that grow in mats in woodlands, open fields and on grassy beaches.

Flowers are white with five petals.

Leaves are toothed and grow in groups of three.

The fruit is orange to red colored and about half an inch across.

Fun Facts

Wild strawberries may be small, but they are far more flavorful than most of the strawberries we can get in stores.

Strawberry plants make a nice ground cover and are easy to grow in your yard. A single plant will send out many "runners" that root into new plants.

You can dry strawberry leaves and make them into a tasty tea that is rich in minerals and helps to soothe inflamed gums, sore throats and upset stomach.



RED HUCKLEBERRY

Vaccinium parvifolium



Key Characteristics

Red Huckleberry is a deciduous bush that grows to 12 feet tall. You can find it growing from stumps and nurse logs in shady forests.

Stems are green and leaves are limey green with smooth edges.

Greenish-white bell-shaped flowers bloom in April through July.

Pink to orange-red fruit is round and about 1/4 to 1/2 inch wide. Berries are ripe in June to August.

All huckleberry fruits have a circular "crown" on the opposite side from the stem.

Fun Facts

Red huckleberries are usually eaten fresh and make a delicious tart snack.

The leaves of all kinds of huckleberries are high in antioxidants and blood sugar balancing compounds. They can be dried and made into a tea.

Seeds are dispersed by birds, deer and banana slugs.



EVERGREEN HUCKLEBERRY

Vaccinium ovatum



Key Characteristics

Evergreen huckleberry is a bushy evergreen shrub growing to eight feet tall. It thrives in gravelly or sandy soil in evergreen forests, open woodlands and clear cuts.

The small leaves are leathery with toothed edges and a strong central vein.

Flowers are white to pink and bell-shaped.

Berries are dark blue to black and are ripe in August through November.



Fun Facts

Evergreen Huckleberry can be gathered in fall to winter when all the other berries have died back. They are sweetest after the first frost.

You can dry the leaves in spring through summer and make them into tea.

Because huckleberry leaves and berries are high in minerals, they are good medicine for people with diabetes.





Evergreen	Evergreen Huckleberry		Perennial
Salal	Deciduous	Vitamin C	Fiber
Antioxidants		Minerals	Cranberry
Red Huckleberry	Annual	Thimbleberry	Salmonberry

Tend Gather & Grow. Artwork by Roger Fernandes (Lower Elwha S'Klallam); photos by Elise Krohn.

BERRY BINGO



1



Cranberry	Red Huckleberry	Annual	Salal
Fiber	Antioxidants		Deciduous
Minerals	Thimbleberry	Salmonberry	
Vitamin C	Evergreen Huckleberry	Perennial	Evergreen

Tend Gather & Grow. Artwork by Roger Fernandes (Lower Elwha S'Klallam); photos by Elise Krohn.

BERRY BINGO



2



Perennial	Cranberry	Salal	Minerals
	Vitamin C	Fiber	Evergreen Huckleberry
Evergreen	Annual	Thimbleberry	
Salmonberry	Red Huckleberry	Antioxidants	Deciduous

Tend Gather & Grow. Artwork by Roger Fernandes (Lower Elwha S'Klallam); photos by Elise Krohn.

BERRY BINGO



3



Minerals	Deciduous	Evergreen Huckleberry	Red Huckleberry
Thimbleberry	Salmonberry	Cranberry	Vitamin C
Fiber	Perennial	Salal	
Evergreen	Annual		Antioxidants

Tend Gather & Grow. Artwork by Roger Fernandes (Lower Elwha S'Klallam); photos by Elise Krohn.

BERRY BINGO



4



	Salmonberry	Vitamin C	Salal
Antioxidants	Red Huckleberry	Thimbleberry	Fiber
Perennial		Minerals	Evergreen
Evergreen Huckleberry	Cranberry	Annual	Deciduous

Tend Gather & Grow. Artwork by Roger Fernandes (Lower Elwha S'Klallam); photos by Elise Krohn.

BERRY BINGO



5

Evergreen	Evergreen Huckleberry	Fiber	Perennial
Red Huckleberry		Minerals	Annual
Vitamin C	Antioxidants	Cranberry	Salmonberry
Deciduous	Thimbleberry	Salal	

Tend Gather & Grow. Artwork by Roger Fernandes (Lower Elwha S'Klallam); photos by Elise Krohn.

BERRY BINGO



6

This red berry grows to five feet tall and has stems without thorns. The leaves are soft and shaped like maple leaves. This is sometimes called "toilet paper plant."



Thimbleberry

This evergreen shrub has small, waxy leaves. The berries are round, small and blue-black colored. This berry can be gathered throughout the winter months and gets sweeter after the first frost.



Evergreen Huckleberry

As you wander through the woods in early summer you can snack on this red, round berry that is growing out of a nurse log. You notice that the stems are green and the berry looks like it has a crown.



Red Huckleberry

You want to make traditional dried berry cakes, so you choose this berry as your base. You have to wait until late summer to gather these blue-black berries.



Salal

These nutrients are found in berry leaves and fruits. When we drink them as tea or eat them, they strengthen our hair, bones and nails.



Minerals

This orange to red colored berry is usually the first berry of the spring. It grows on raspberry-like bushes with woody stems that are covered in thorns. The tender shoots are eaten in spring as a vegetable and are called sprouts.



Salmonberry

If you are walking through the woods, these low-growing vines may catch you like a trip wire. If you are lucky, you will find their small, tasty berries to pick. Hopefully you won't get scratched by thorns in the process.



Wild Trailing Blackberry

These delicious, small, red fruits grow on plants that usually form a mat on the ground. Their leaves are soft and come in 3's with serrated edges. Plants multiply by sending out new "runners."



Wild Strawberry

These tart, red, round berries are not ripe until autumn. They are grown in bogs along the coast and are mashed, sweetened and used to make holiday relish.



Cranberry

This vitamin is found in large amounts in many berries and is often used to support the immune system. You might take it when you are fighting a cold.



Vitamin C

These plant compounds are found in many native berries, including huckleberries. They protect your cells against the damaging effects of free radicals and are touted as “anti-aging compounds.”



Antioxidants

This compound, which is found in berries and other whole foods, normalizes gut health and is even said to reduce cholesterol and heart disease.



Fiber

This botanical term refers to plants that keep their leaves all year long.



Evergreen

This botanical term refers to plants that lose their leaves over the winter months.



Deciduous

This botanical term refers to plants that live for more than one year.



Perennial

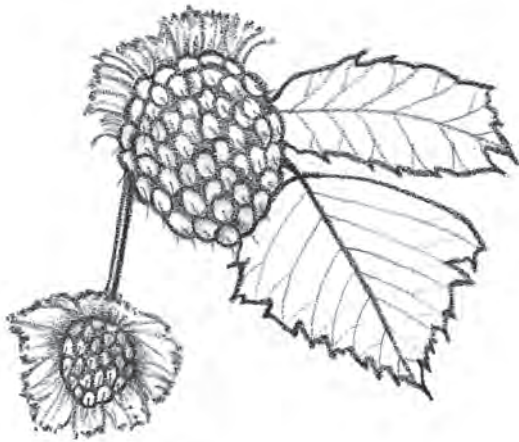
This botanical term refers to plants that only live one year.



Annual

COLORING PAGES: SALMONBERRY

My name: _____



COLORING PAGES: THIMBLEBERRY

My name: _____



MY NATIVE BERRY BOOK

My name: _____



Tend Gather & Grow

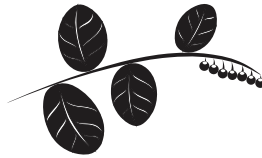
a curriculum for wild plants of the PNW

HELLO BERRY PICKER!

What is your favorite berry? Have you ever tasted berries that are native to our area?

Many delicious berries are growing wild and free in woodlands, fields and parks around you, including:

Blackberry, Black Cap Raspberry, Cranberry, Currant, Gooseberry, Huckleberry, Indian Plum, Salal, Salmonberry, Saskatoon (June berry, Service berry), Soapberry, Strawberry and Thimbleberry.



Important tips:

- **Learn to recognize berry plants:** If you pay attention to details, you can easily learn how to identify berries. What is the leaf shape? Are the edges toothed or smooth? Are there a certain number of leaflets, or just one leaf? What is the color and shape of the flower? The berry? Where is the plant growing?
- **Avoid poisonous berries:** Most wild berries are safe to eat, but there are a few poisonous ones. Toxic berries taste terrible. Consult an adult who knows about plants before you pick!
- **Harvest from safe areas:** Avoid harvesting from roadsides, industrial areas or places that might have been sprayed with pesticides or herbicides. Plants can absorb toxins and pass them on to you.
- **Leave enough behind:** Other animals rely on berries for food, so leave enough for them to eat. Also, berries contain seeds that grow into new plants, so when you leave some, you help plant more berries!

Scientific sketching is:

A accurate

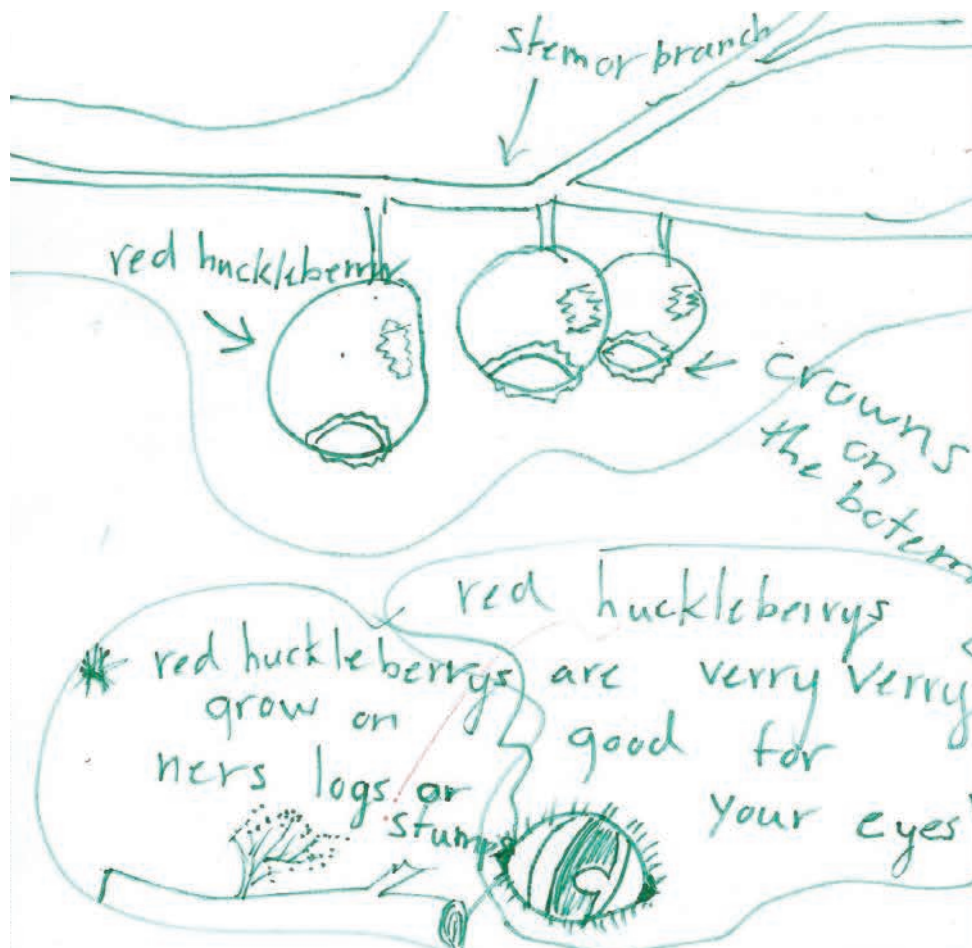
B BIG - use the whole page!

C colorful - or gives **context**

D detailed

E explained

- use writing + drawing together
- What do you notice about color, texture, shape, size?
- "I notice..." "I wonder..."
- "This reminds me of..."



my drawings of _____

MY NAME IS Wild Blackberry

Rubus ursinus

Other names? Indigenous names? _____

I like to hug the ground, and if you are walking in woodlands and fields, my long thin vines might trip you if you're not careful!

My pointy, serrated leaves grow in groups of three, and all my stems have little spines.

My berries are smaller than the big non-native blackberries, but their flavor is strong and sweet.

They are ripe in June, July and August, when they turn from red to black.

Try drying my leaves to make a nice-tasting tea for colds and sore throats.

my drawings of _____

MY NAME IS Cranberry

Vaccinium oxycoccus

Other names? Indigenous names? _____

Look for my tiny, evergreen leaves and woody stems very low to the ground. I like to grow in mossy bogs on the coast and in the mountains.

My graceful, long-stemmed flowers might remind you of the head and neck of a crane, and that's where my name comes from! "Crane berry."

My fruit is green at first, then turns red in autumn, and stays red through the winter.

Northwest Native People cook and sweeten my berries, just like the cranberry sauce made from my larger cranberry cousins who are native to the East Coast.

my drawings of _____

MY NAME IS Evergreen Huckleberry

Vaccinium species

Other names? Indigenous names? _____

Look for me in evergreen forests, open woodlands and clear cuts.

My small leaves are leathery with toothed edges.

Try drying my leaves and making them into a tea to strengthen your eyes and heart.

My flowers are white to pink and bell-shaped.

My berries are dark blue to black and are ripe in late summer through early winter when all the other berries are gone.

my drawings of _____

MY NAME IS Red Huckleberry

Vaccinium parvifolium

Other names? Indigenous names? _____

You can find me in shady forests growing from stumps and nurse logs.

My stems and smooth-edged leaves are green, and I have greenish-white bell-shaped flowers.

Try drying my leaves and making them into tea to bring your body's energy levels into balance.

Taste my small, round, red fruits in June, July and August when they are ripe. They are sweet-tart, so they might make your mouth pucker up!

my drawings of _____

MY NAME IS Salal

Gaultheria shallon

Other names? Indigenous names? _____

I form dense thickets in forests and beach edges.

My leaves are thick and waxy, and I keep them all year long.

See how my pinkish-white flowers are shaped like bells.

Look at the bottom of my berry – there is a 5-pointed star!

Try Me!

Sample my berries in mid-summer to early fall. My dark blue berries are tasty and filling

Salish People mash my berries, shape them into cakes and dry them in the sun so they can be eaten all year. They can be mixed with dried meat, fish, nuts and other berries to make a native version of a Power Bar.

my drawings of _____

MY NAME IS Salmonberry

Rubus spectabilis

Other names? Indigenous names? _____

You can find me in dense thickets in wet forested areas and along streams and rivers.

My bright pink flowers are the first to bloom in springtime.
Hummingbirds love to drink my nectar.

My leaves grow in threes. Try holding down the top leaf – the bottom two look like a butterfly!

I am the first berry to ripen in spring. See how my berries can be yellow, orange, red or purplish. Which color do you think tastes best?

Look out for the thorns on my stems!

my drawings of _____

MY NAME IS Wild Strawberry

Fragaria species

Other names? Indigenous names? _____

I grow in mats in woodlands, open fields and on grassy beaches.

My white flowers have five petals

My leaves are toothed and grow in groups of three. You can dry them to make a delicious and mineral-rich tea.

My red to orange colored fruit might be small, but they are far more flavorful than most strawberries you can buy in stores.

my drawings of _____

MY NAME IS Thimbleberry

Rubus parviflorus

Other names? Indigenous names? _____

Look for me growing in patches in sunny forest edges.

My leaves are soft, fuzzy and shaped like a large maple leaf. Some people call me "Nature's Charmin" or "toilet paper plant" because my leaves are large and soft.

My flowers are white with five petals.

See how my bright red berries are shaped like shallow caps or thimbles.

My berries are sweet and juicy. You can eat them fresh or use them to make fruit leather, dipping sauce, salad dressing and refreshing drinks.

my drawings of _____

MORE BERRY RESOURCES

Story and Picture Books:

Berry Magic, by Teri Sloat and Betty Huffmon, illustrated by Teri Sloat.

Blueberries for Sal, by Robert McCloskey.

Brambly Hedge Series, by Jill Barklem.

The First Strawberries: A Cherokee Story, by Joseph Bruchac, pictures by Anna Voitech.

Dream Wolf, by Paul Goble.

Jamerry, by Bruce Degen.

Field Guide to Berries:

Wild Berries of Washington and Oregon, by T. Abe Lloyd and Fiona Hamersley Chambers.



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Front cover artwork: Joe Seymour Jr. (Squaxin Island/Acoma Pueblo)*

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www.goodgrub.org/tend-gather-grow