

Oregon Oxalis
Oxalis oregana

Welcome to the Sylvia Creek Forestry Trail



The Sylvia Creek Forestry Trail is a 2.25-mile interpretive loop. It meanders down the valley, crosses Sylvia Creek and then climbs back to Lake Sylvia. Signs along the trail explore the plants, animals, history and logging practices of the Montesano City Forest and the Lake Sylvia area. The first half mile is along an old logging railroad grade and is ADA compliant, the remaining 1.75 miles is moderately strenuous. Allow two hours to complete the loop trail. Enjoy this wild and beautiful place.

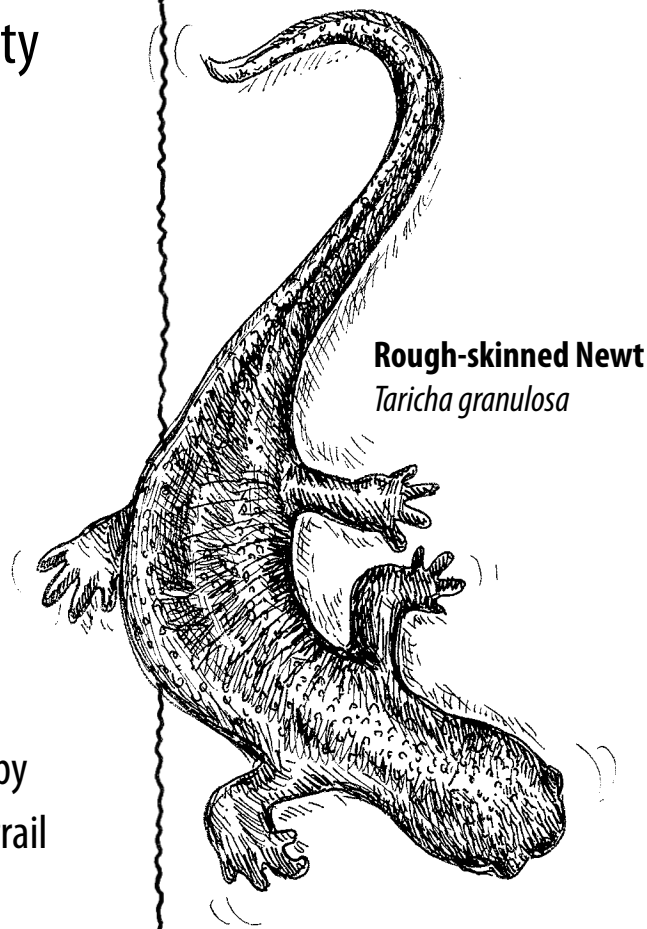
This trail was constructed in 1991 through a cooperative effort by members of the timber industry, public agencies and private citizens. It was built to commemorate the 50th anniversary of the American Tree Farm System, whose first certified tree farm was near Montesano. The City of Montesano, Lake Sylvia State Park and volunteers maintain the trail.

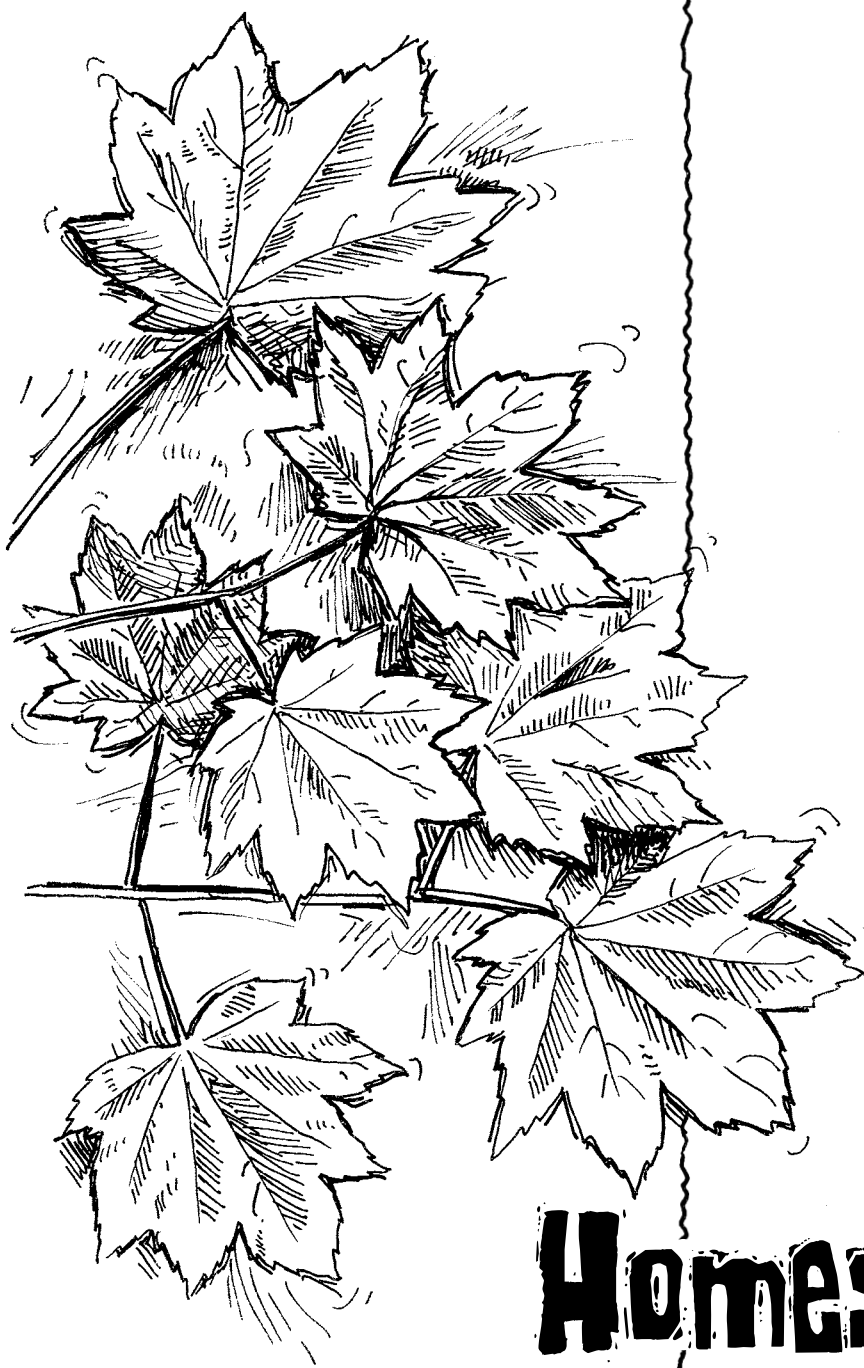
In 2012 the reconstruction of the trail was funded by the State Recreation and Conservation Office, the City of Montesano, Washington State Parks, and the Friends of Schafer and Lake Sylvia. The funding was augmented by many hundreds of volunteer hours from community members and trail users. Upgrades were made to renew trail surfaces, improve drainage, install a bridge over a wetland area and provide directional and interpretive signs.

Map Key

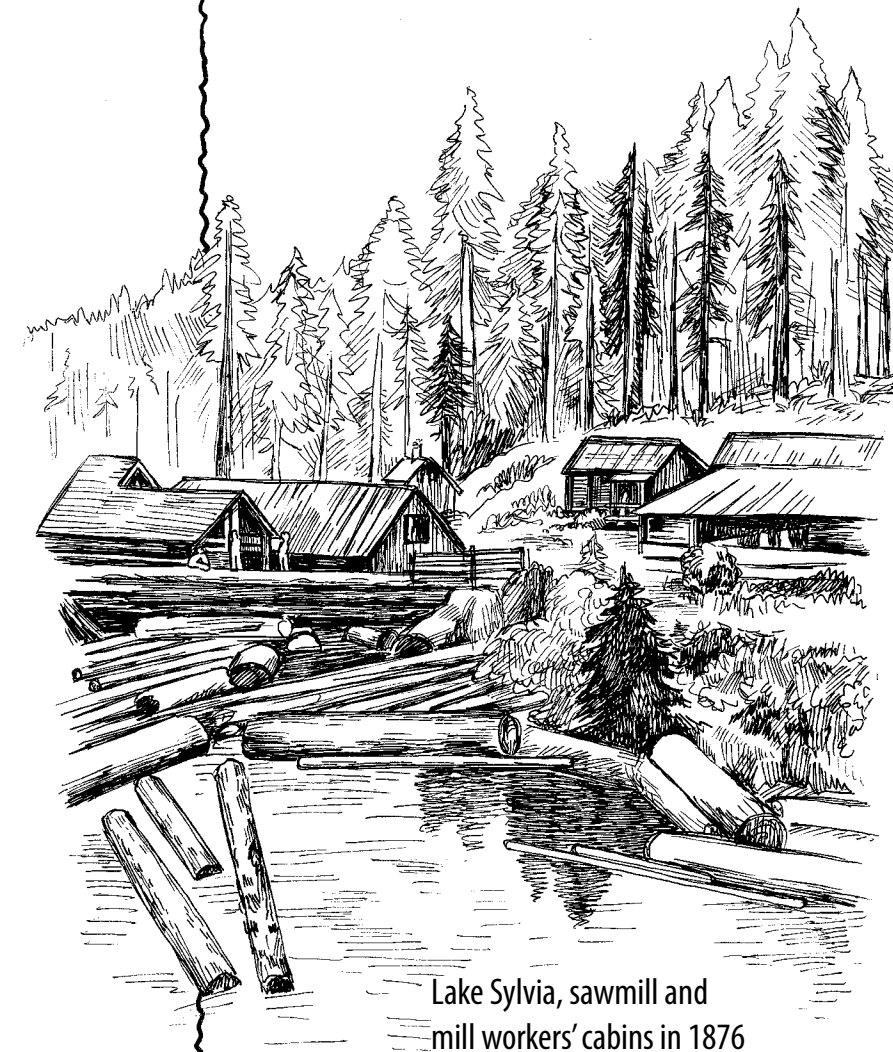
- Sylvia Creek Forestry Trail
- Secondary Trail
- Water
- Bridge
- Road
- Gated Road
- Boundary between State Park & City Forest
- Dam
- Parking
- Restroom
- State Park Office
- Scale 500 feet

Rough-skinned Newt
Taricha granulosa



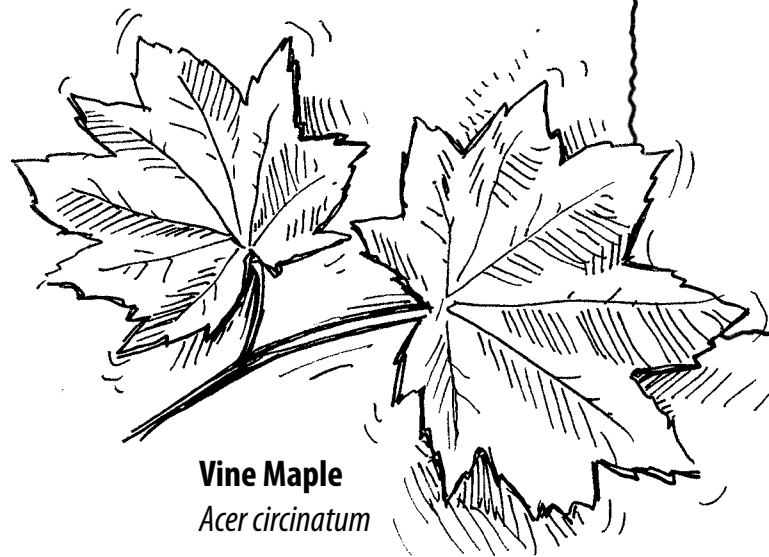


In the mid 1860s Michael F. Luark discovered the nearby lake and named it Sylva, later corrupted to Sylvia. He built a small water-powered sawmill there in 1868, a home for his wife, Rebecca, and their 13 children, cabins for the mill workers and a barn for horses and oxen. The lake was smaller then, extending only to about where the car bridge is today. Its outlet was the falls below where the dam is now. Luark constructed a dam of logs above the falls to facilitate the water-powered sawmill. The abundant large timber in the area fed the mill. The lumber was hauled by oxen or horses on a long winding road into Montesano. Later a flume was built to float the lumber to the Chehalis River (shown on the right side of the mill representation below). The mill closed in 1898.



Lake Sylvia, sawmill and mill workers' cabins in 1876

Homesteads in the Forest



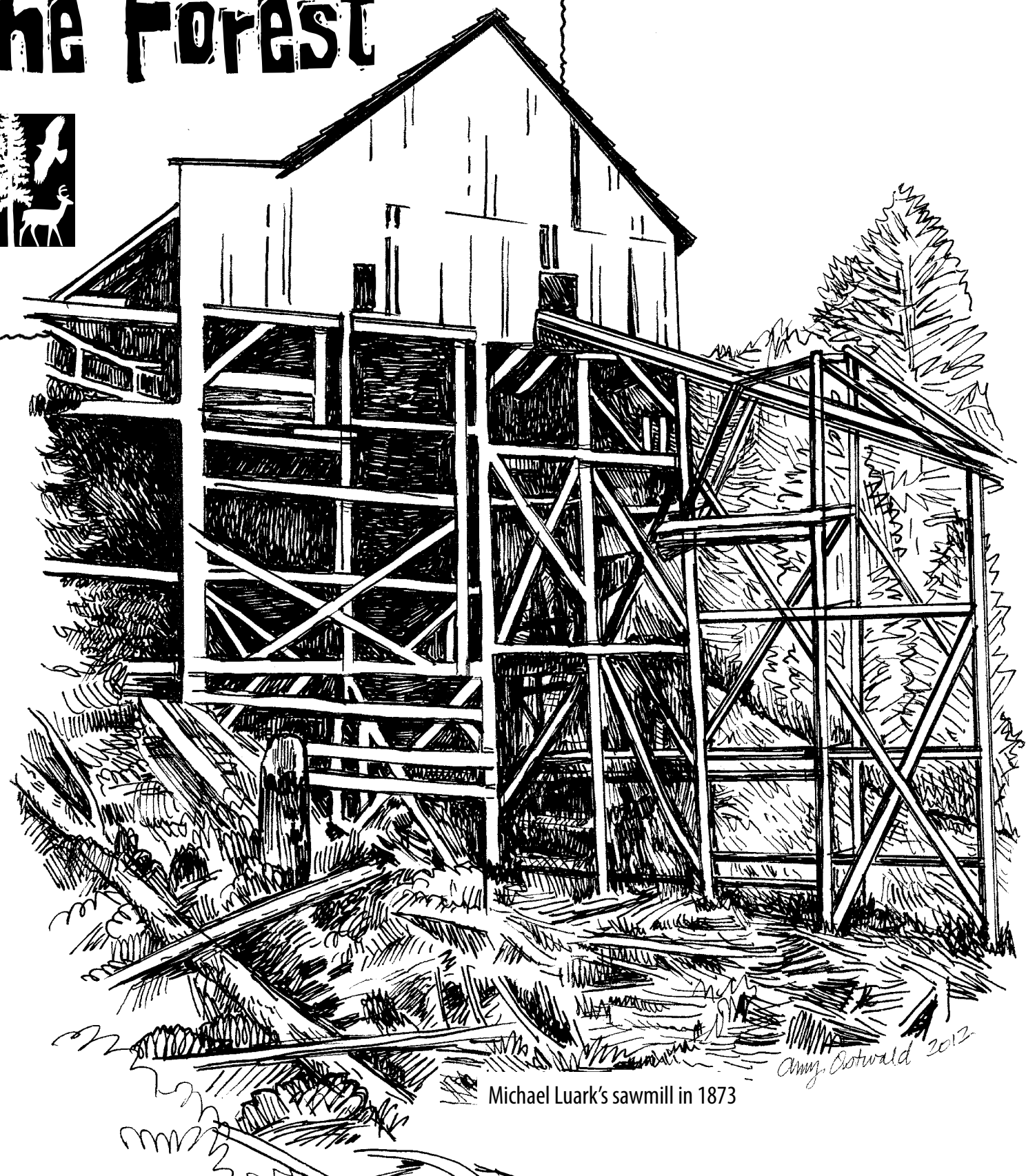
Vine Maple
Acer circinatum



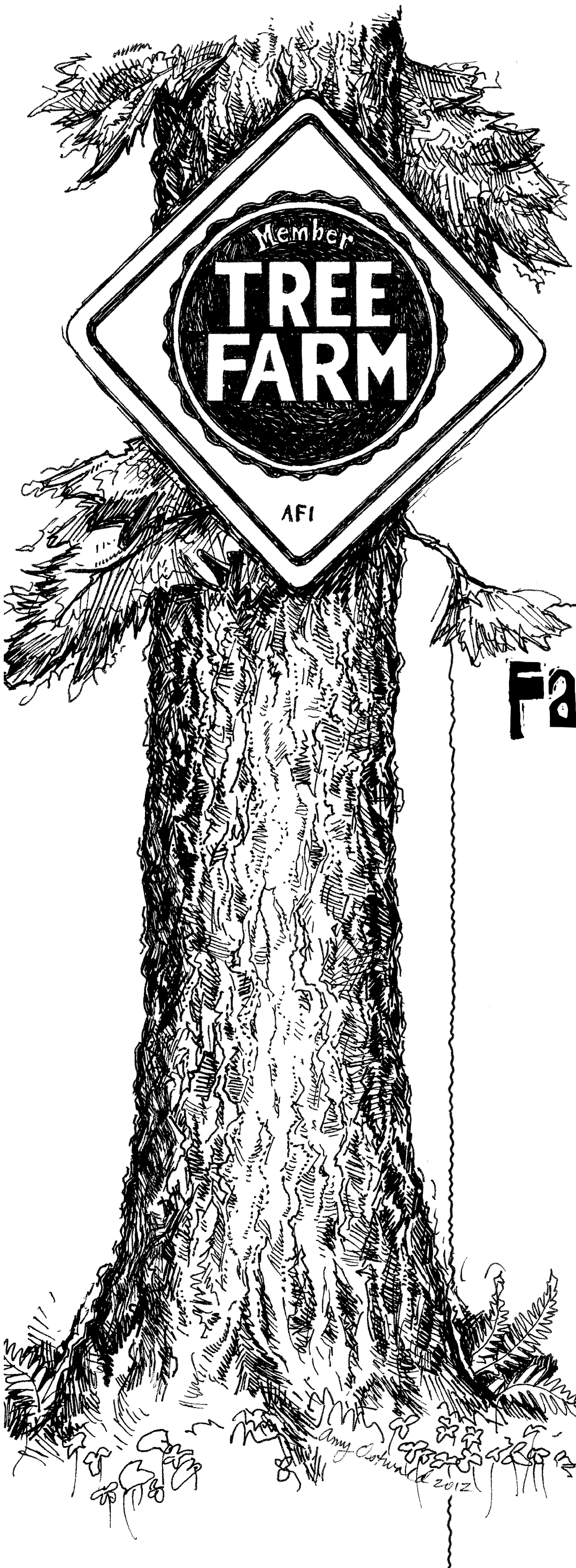
In 1882 James and Minnie Wilder homesteaded at Lake Sylvia. Minnie was the youngest of Michael and Rebecca Luark's children. James was a mill worker at her father's mill. In 1905 Silas Wilder, son of James and Minnie, bought his father's homestead. He married Elsie Valentine and they built a house where the campground is now located.

A generator plant was built at the Lake Sylvia dam by Puget Sound Power and Light Company in 1912. Elsie operated the plant for decades beginning in 1914. Silas and Elsie, with their many children, then lived in a residence over the penstock and turbine, below the dam.

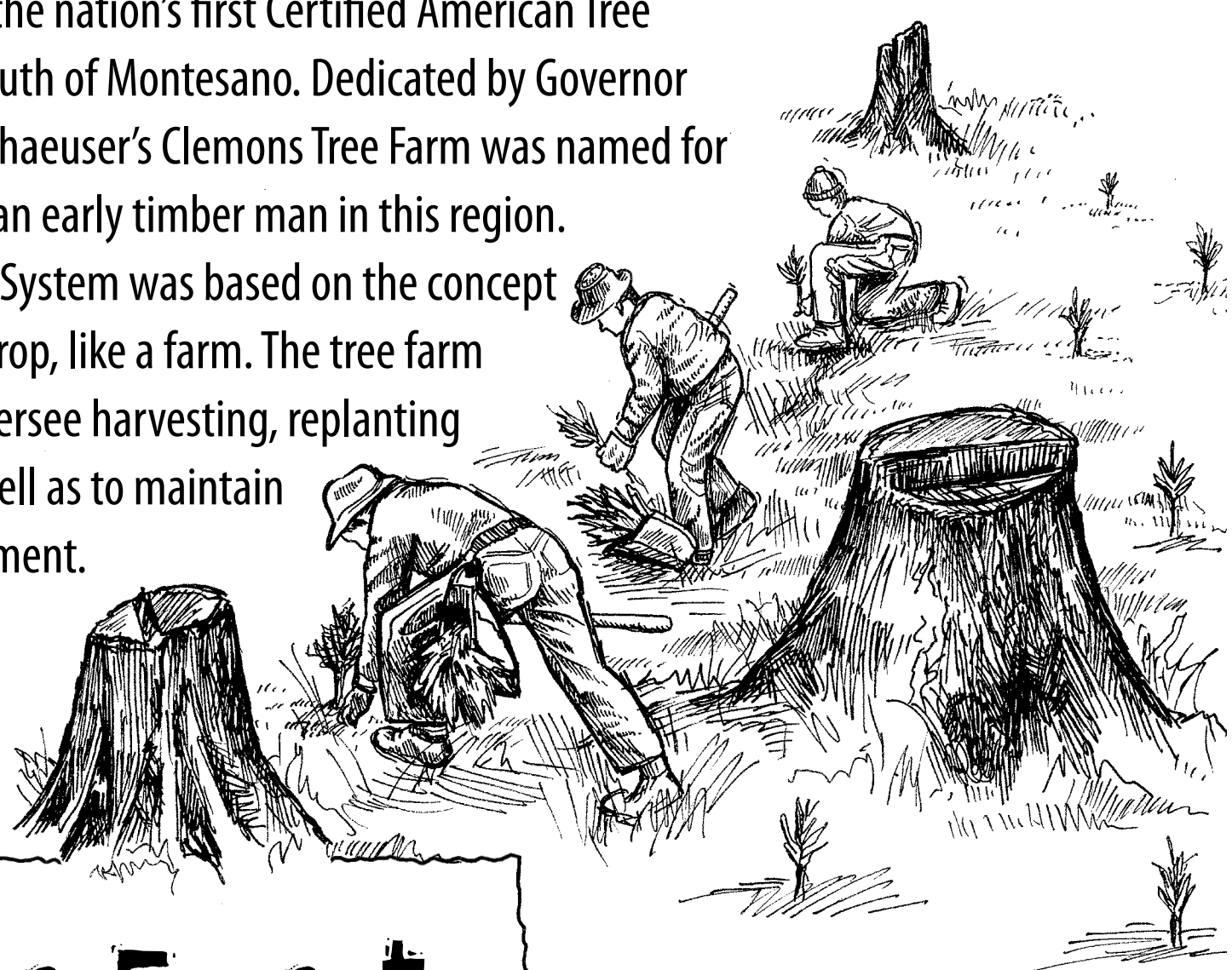
In 1936 Lake Sylvia became a state park. The land for the state park was donated by the City of Montesano and the Wilder family.



Michael Luark's sawmill in 1873



In the summer of 1941 the nation's first Certified American Tree Farm was established south of Montesano. Dedicated by Governor Arthur B. Langlie, Weyerhaeuser's Clemons Tree Farm was named for Charles H. Clemons, Sr., an early timber man in this region. The American Tree Farm System was based on the concept of growing timber as a crop, like a farm. The tree farm manager's job was to oversee harvesting, replanting and fire protection, as well as to maintain a healthy forest environment.



Farming the Forest



"Nature will do her part again if man will do his."
George S. Long, First General Manager of Weyerhaeuser
Timber Company (1853-1930)

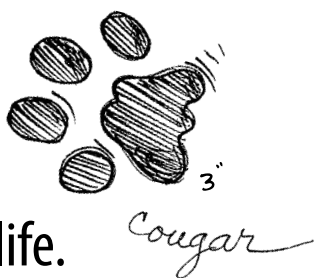
Why do trees grow so well in this region?
Thanks to mild temperatures and plenty of rain, this area has a long growing season. The tree species in this region are fast growing and are encouraged by productive soils. In fact, the Olympic Peninsula has forested areas that exceed the productivity found anywhere else on earth. Large trees store lots of water, important during the dry months of summer. And perhaps most importantly, conifers stay green year-round, replacing only about one-third of their needles each year. Conversely, deciduous trees are dormant in winter and must regrow all their leaves every spring.



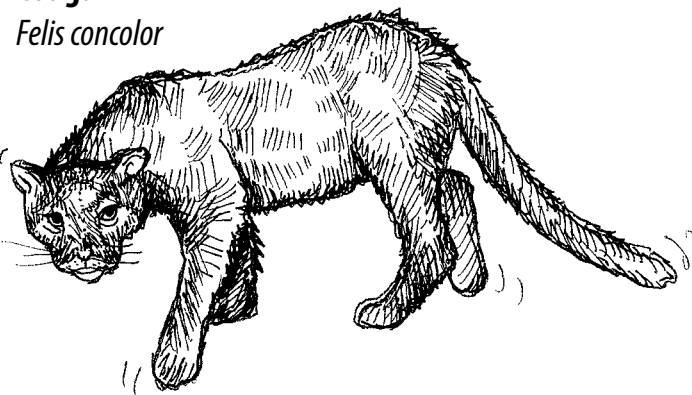
Salal
Gaultheria shallon

Amy Clavell 2012

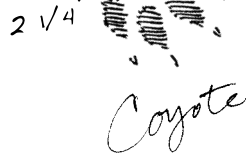
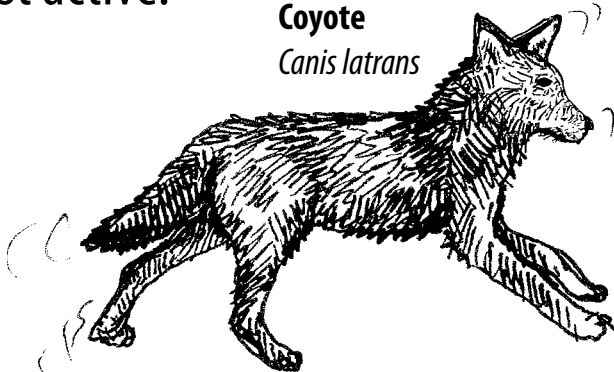
The forest in the Sylvania Creek watershed provides habitat for many species of wildlife. Wild animals are generally shy and prefer to avoid contact with people. The best times to view wildlife are at dawn and dusk because that is when animals are most active.



Cougar
Felis concolor

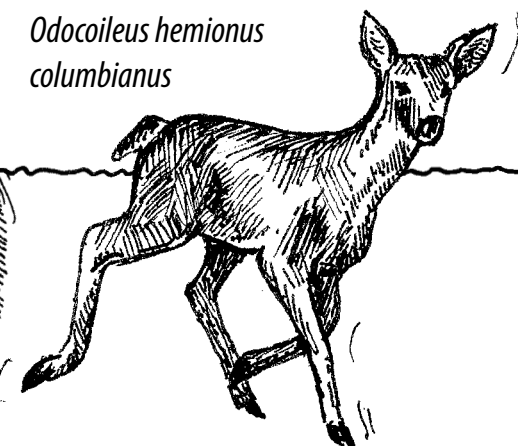


Coyote
Canis latrans



Roosevelt elk
1 1/4"

Black-tailed Deer
Odocoileus hemionus columbianus



Raccoon
Procyon lotor

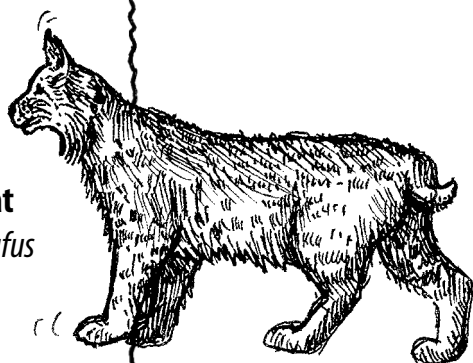


Crossing Paths With Wildlife

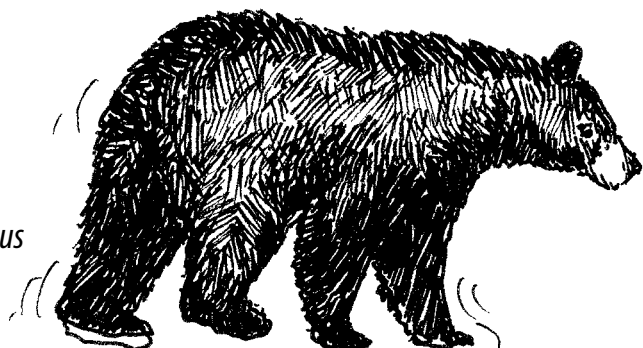


The Montesano City Forest is managed for multiple uses including income, recreation and habitat for fish and wildlife. It provides home to many species of wildlife that are adaptable to open areas and young forests (even 80 years is young for a Douglas fir tree that can live several hundred years).

Bobcat
Felis rufus

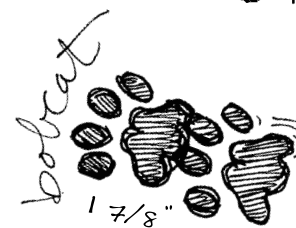


Black Bear
Ursus americanus

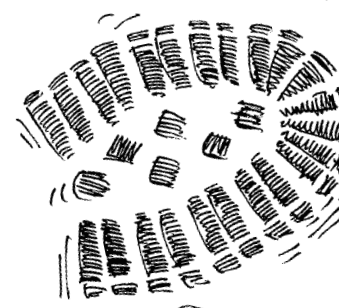


Tracks can give a window into the life of an animal. We can see which way it is going, perhaps how long ago it passed by and whether it was walking or running. The tracks on this sign are from animals known to live in the Montesano City Forest. Observe areas of mud or soft dirt and try to identify which creatures you are crossing paths with.

Roosevelt Elk
Cervus canadensis roosevelti



blacktail deer

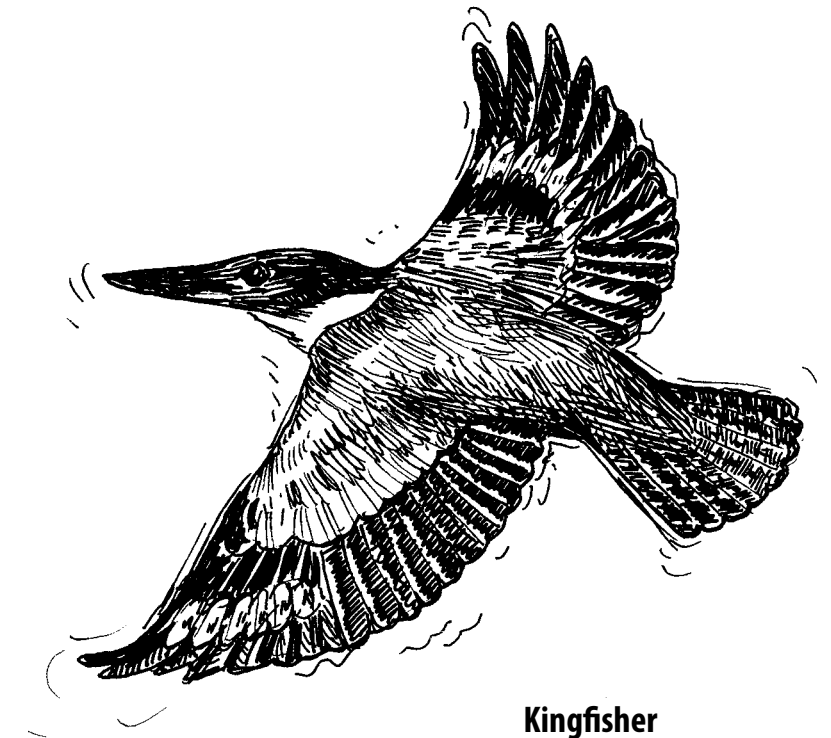


Dog



Salmonberry
Rubus spectabilis

Wetlands are wet, muddy, often inconvenient and sometimes impassable but are extremely important to a healthy ecosystem. Wetlands are among the most prolific, diverse and endangered ecosystems in the world. Within wetland areas live a variety of unique plants and animals that are dependent on the wetland habitat for their existence. Wetland plants strain unwanted toxins and silt from the water, thus improving water quality in surrounding streams and ground water. Wetlands aid in flood control by slowing down the flow of water during heavy precipitation and also provide habitat perfect for fish nurseries, which fortify the food chain.



Kingfisher
Megasceryle alcyon

Short-scale Sedge
Carex deweyana



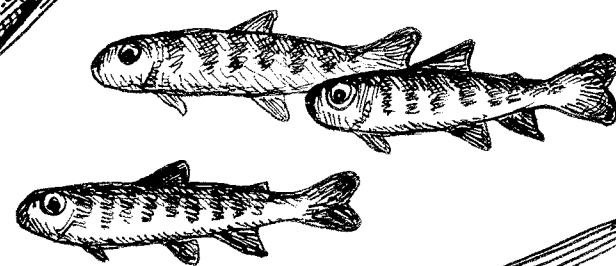
Wetland Wonders



For decades wetlands have been protected by law and are a very important part of our healthy forest ecosystem. Foresters leave buffer zones (an area where trees next to water are not harvested) around wetlands, creeks and all bodies of water to protect the important role wetlands play in the health of the environment. These buffer zones provide shade to keep water temperatures cool for the benefit of fish, stop siltation and provide organic materials to the water for the health of the ecosystem. They also allow trees to naturally fall into the water to provide habitat for fish and other riparian species.



Skunk Cabbage
Lysichiton americanum



Coho Salmon fry
Oncorhynchus kisutch

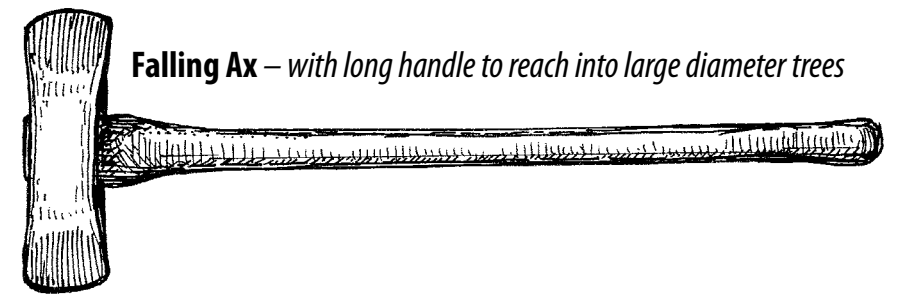


Red-legged Frog
Rana aurora

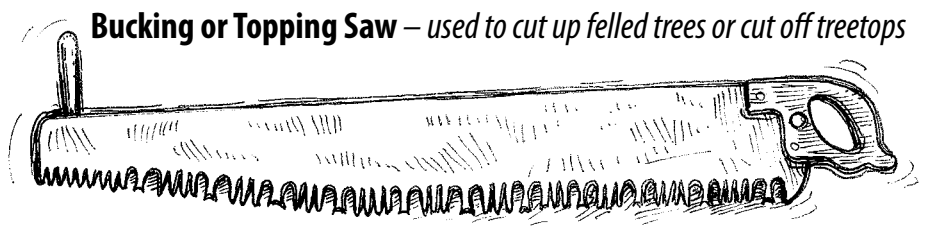
© Amy Sutwald 2012



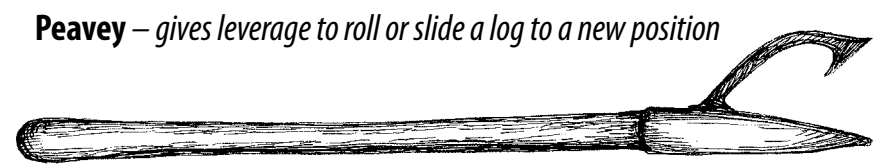
The forest land you see before you has been harvested twice, most recently in 1989. These large stumps are remnants of the original forest, likely cut in the early 1900s. At that time it was common to cut large trees above the swelling at the base of the trunk. The notches on the stumps were chopped out by axe to make a slot for a springboard. The springboards provided platforms for the loggers to stand on while felling the tree with a crosscut saw. Imagine the teamwork, skill and strength needed to saw a giant tree while perched on a thin board several feet above the ground.



Falling Ax – with long handle to reach into large diameter trees

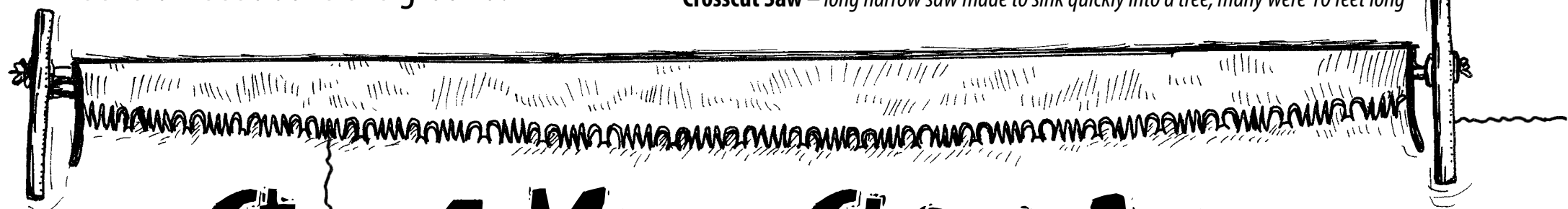


Bucking or Topping Saw – used to cut up felled trees or cut off treetops



Peavey – gives leverage to roll or slide a log to a new position

Crosscut Saw – long narrow saw made to sink quickly into a tree, many were 10 feet long



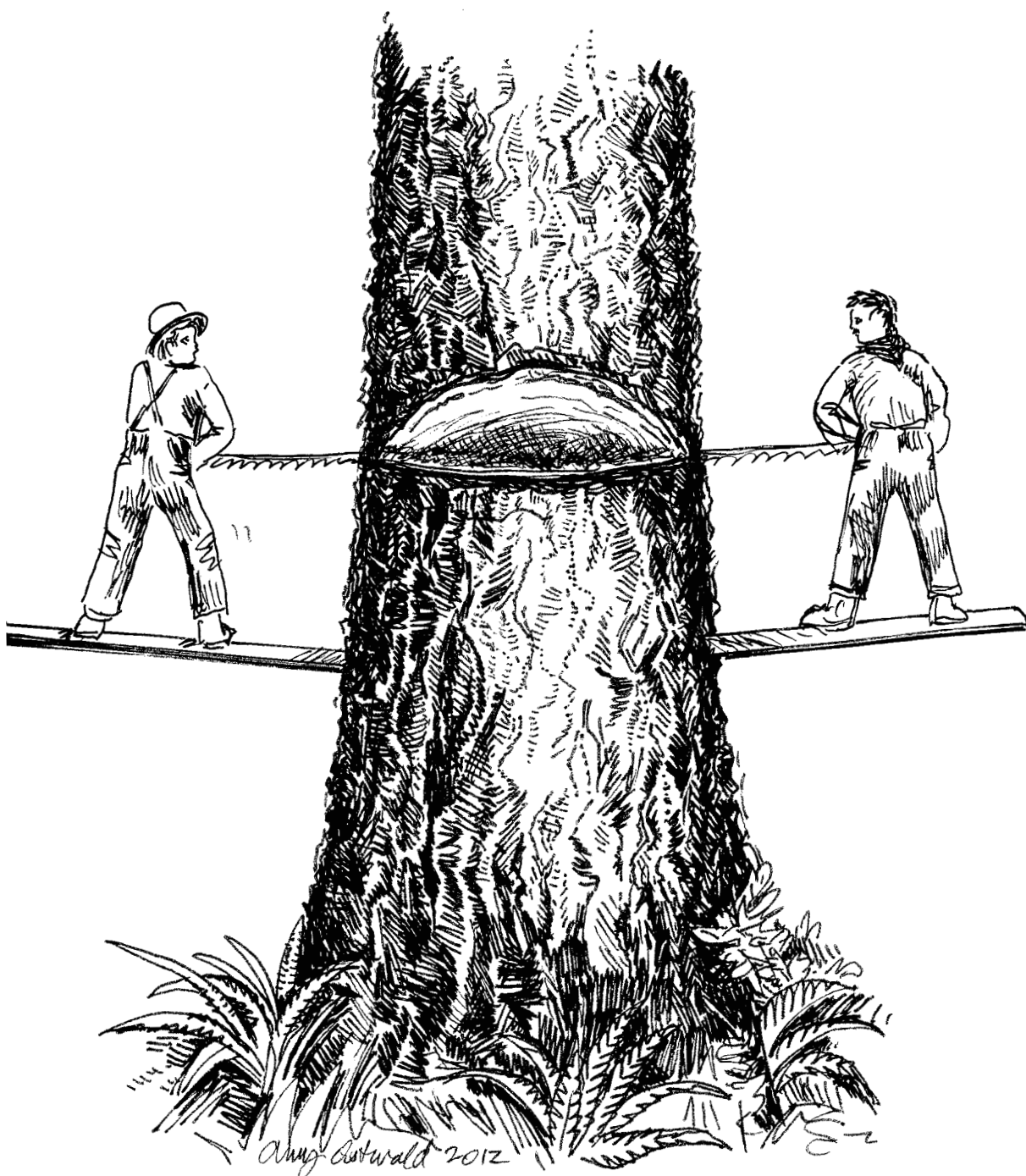
Tall Trees, Strong Men, Sharp Axes



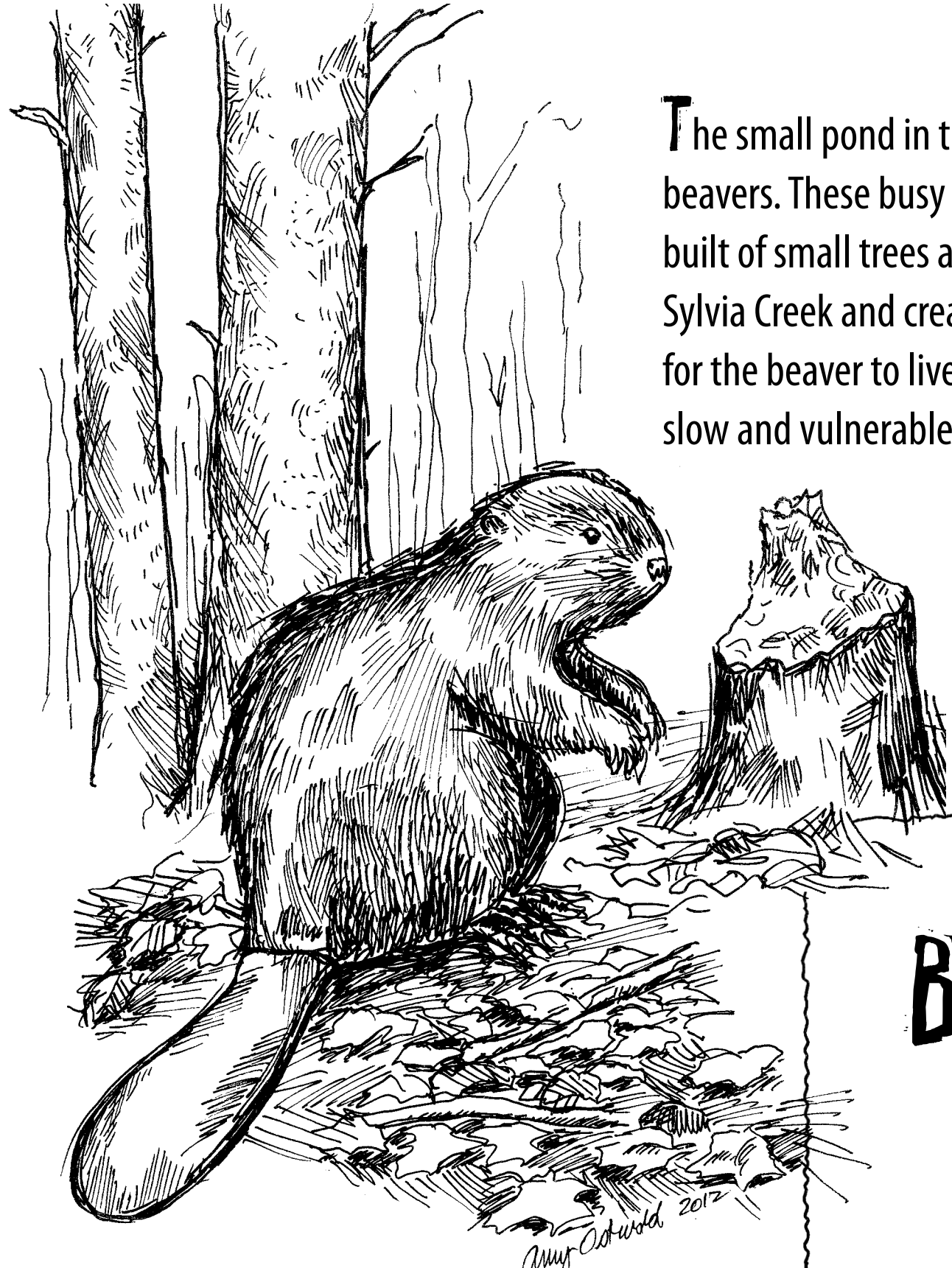
Slick, slimy slugs might be icky to some, but they are actually very important creatures of the forest. Slugs are nature's recyclers. They break down decaying plants, disperse seeds and consume insects. There are more than 20 species of slugs in our region, the most common is the banana slug. It is native to the northwest, can grow to 8 inches or more, and is the second largest slug in the world. Look for a slimy slug trail to find one of these slick fellows, or turn over a chunk of wood or rotting vegetation to find it in its hiding place. Watch his graceful movements and then leave him alone to do his job. Every creature occupies an important place in the complex ecological web. However, non-native species such as the European black slug (black or brownish-red color) can be very damaging to our gardens and crops.



Banana Slug
Ariolimax columbianus

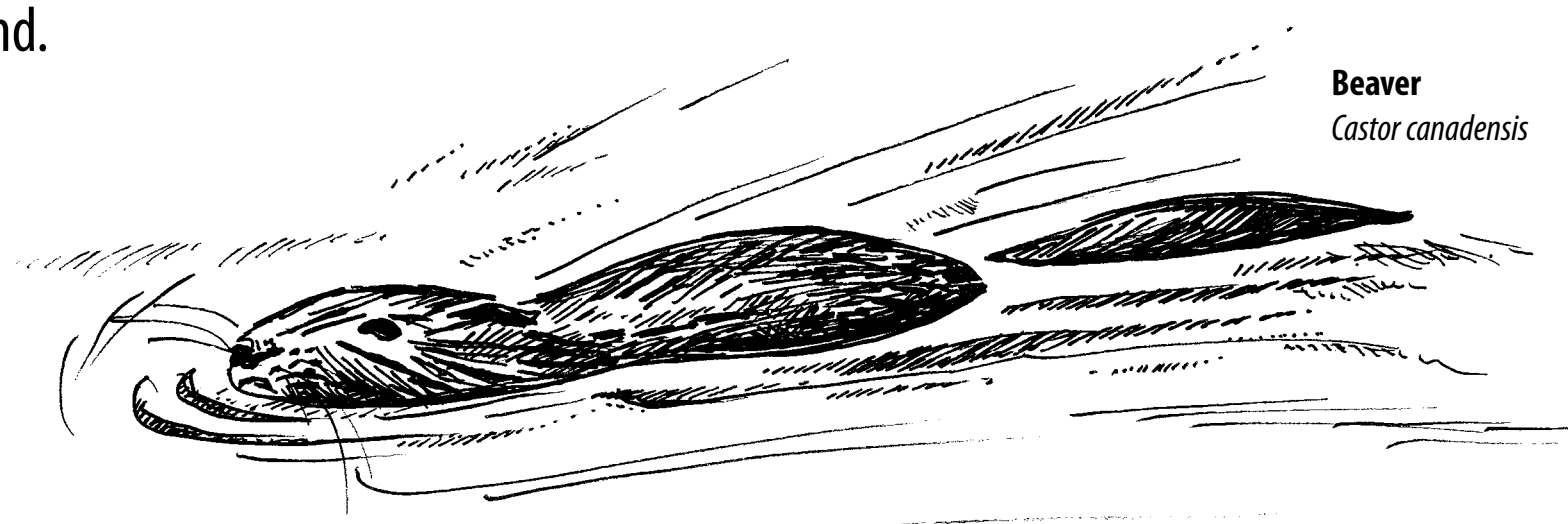


Amy Gustafson 2012



The small pond in the creek bed below was created by beavers. These busy and industrious workers created a dam built of small trees and sticks. The dam has slowed the flow of Sylvania Creek and created a pond. The pond creates a safe place for the beaver to live. While excellent swimmers, beavers are slow and vulnerable on land.

An inventory of beaver dams on the city forest located 126 dams with an estimated population of 180 beavers.



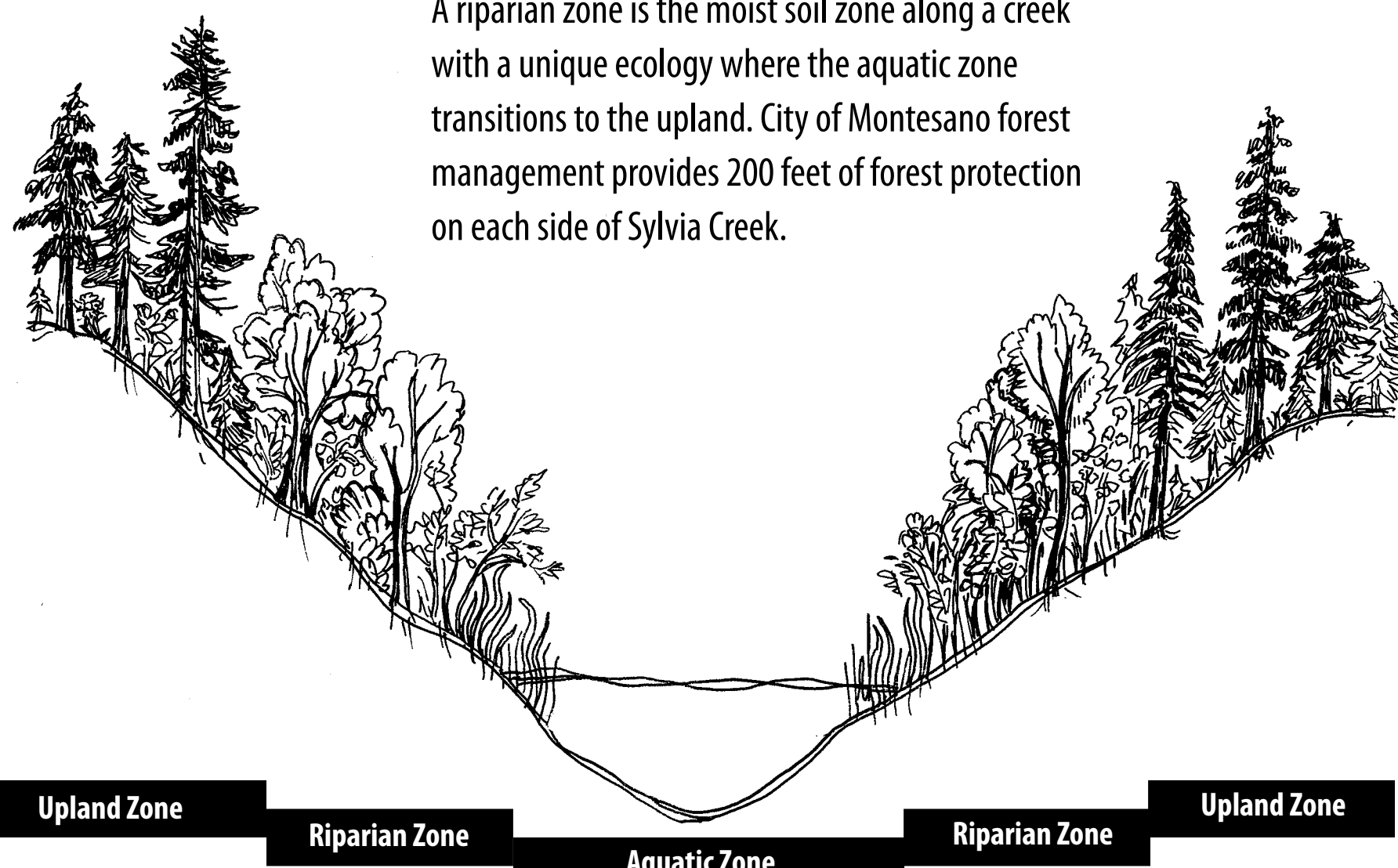
Beaver
Castor canadensis

Busy as a Beaver

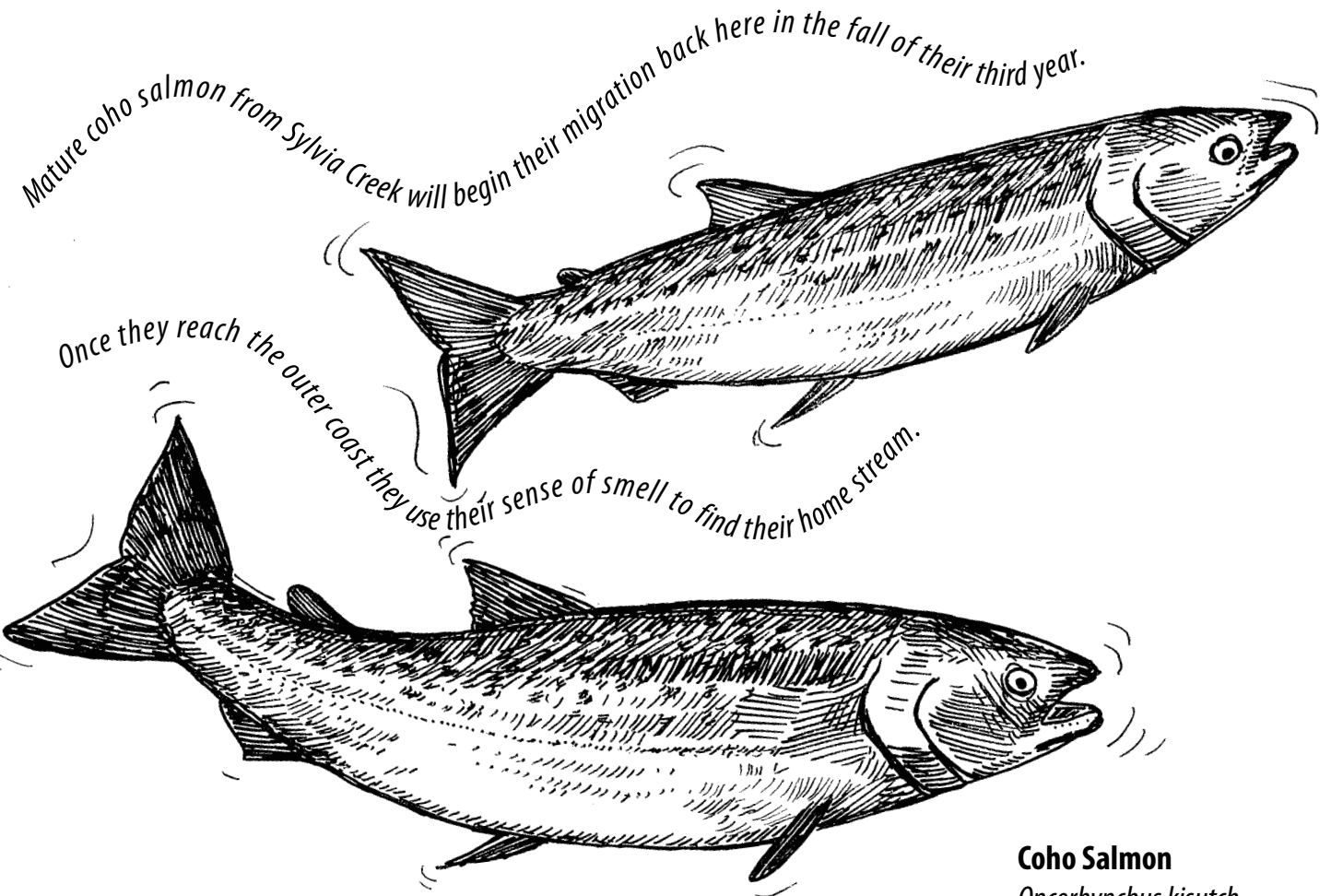


Forest management practices protect the habitat of beaver and other water dwelling animals with the riparian zone left around creeks and rivers. A riparian zone is the moist soil zone along a creek with a unique ecology where the aquatic zone transitions to the upland. City of Montesano forest management provides 200 feet of forest protection on each side of Sylvania Creek.

Beavers usually weigh 45 to 60 pounds. Their teeth never stop growing, and thus can withstand constant use. They are aquatic mammals with large webbed-feet ideal for swimming, and a large flat tail that serves as a rudder. This unique tail also stores fat for the winter. Beavers eat bark, twigs, leaves and other plant life. Their favorite foods include the cambium (inner bark layer) of alder, cottonwood and willow. Much of their time is spent gnawing on trees and sticks and dragging them to their dam, lodge or food storage area. This hard work creates valuable habitat for fish, amphibians, birds and other mammals. Beavers and humans are unique in their abilities to greatly alter habitats to suit their needs.



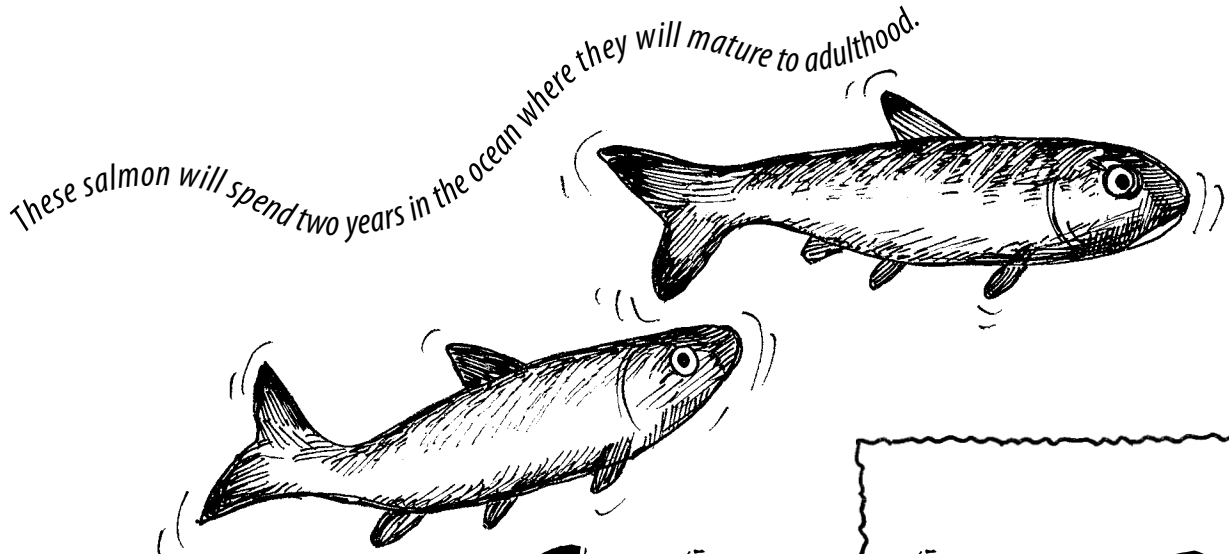
Sylvia Creek is home to coho salmon that live part of their life in the Pacific Ocean. These salmon are born in this creek and spend their first year of life here. They live their adult lives in the Pacific Ocean and then return here to spawn and die. In October and November you can watch the salmon returning to spawn here. Look closely for their large, shadowy figures underwater. The males are bright red and can measure more than two feet long.



Mature coho salmon from Sylvia Creek will begin their migration back here in the fall of their third year.

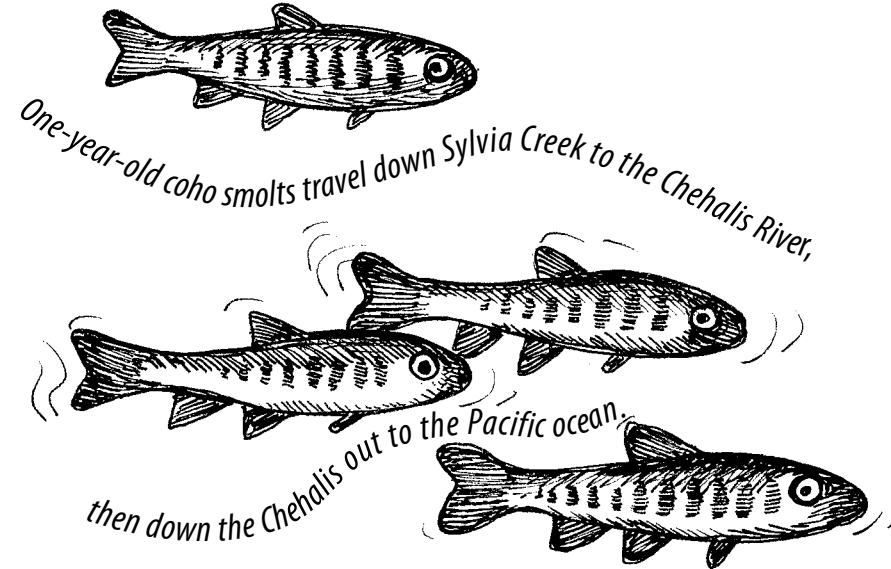
Once they reach the outer coast they use their sense of smell to find their home stream.

Coho Salmon
Oncorhynchus kisutch



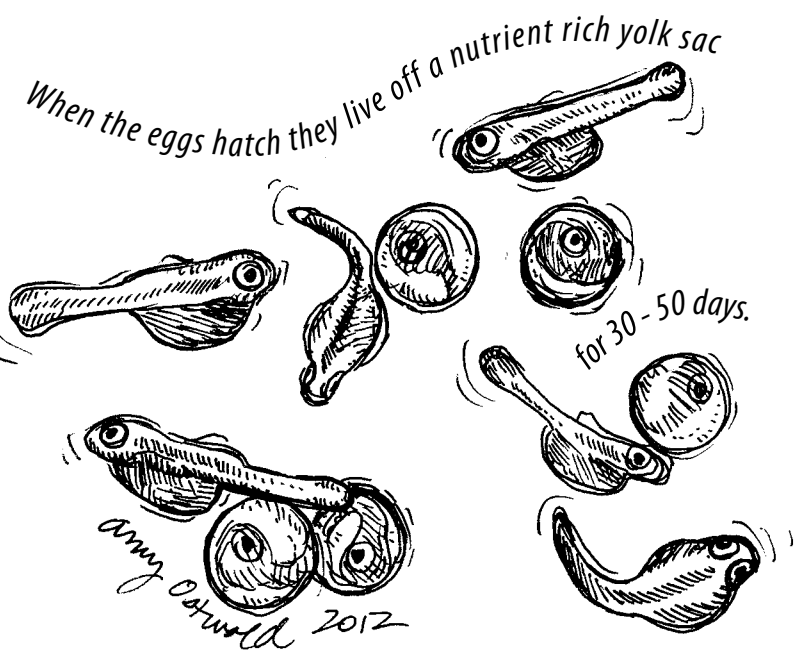
These salmon will spend two years in the ocean where they will mature to adulthood.

Swimming Against the Current



One-year-old coho smolts travel down Sylvia Creek to the Chehalis River,

then down the Chehalis out to the Pacific ocean.



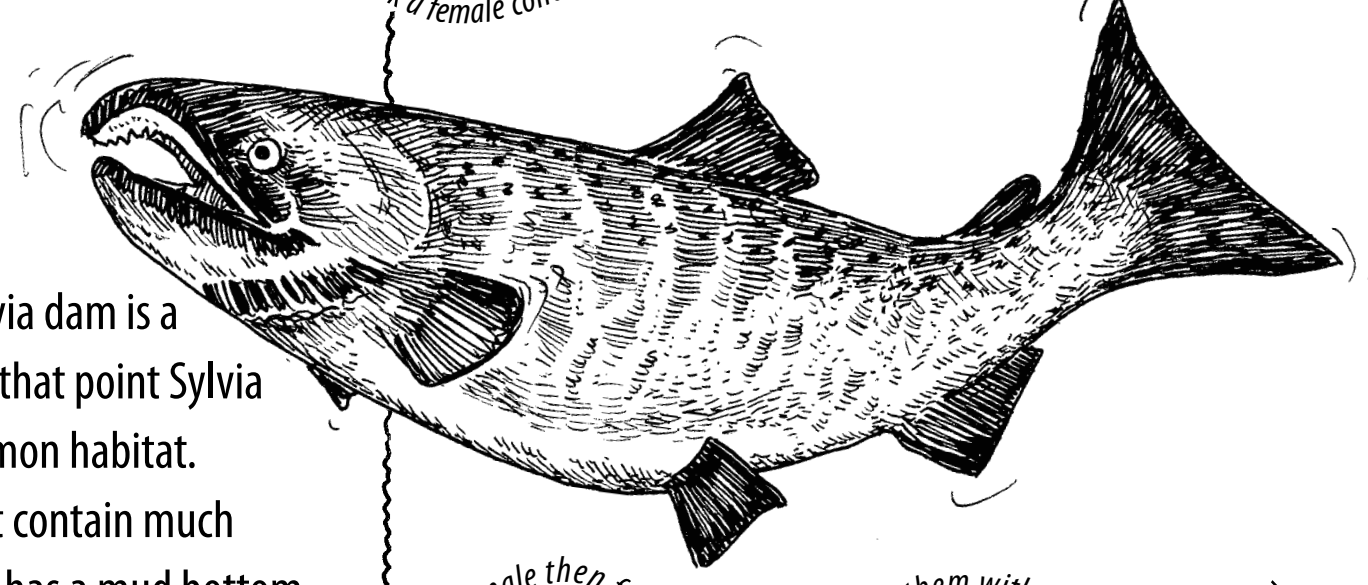
When the eggs hatch they live off a nutrient rich yolk sac

for 30 - 50 days.

Amy Oswald 2012

The tall waterfall below Lake Sylvia dam is a natural barrier to salmon. Below that point Sylvia Creek has nearly five miles of salmon habitat. The soils in this watershed do not contain much gravel and so the creek generally has a mud bottom. Thus, there was a lack of spawning gravel for salmon in Sylvia Creek. The City of Montesano's forestry department worked to change that in the 1990s. A salmon habitat enhancement project added gravel and large rock to create several salmon spawning areas upstream of this bridge. The salmon population has increased in lower Sylvia Creek as a result of these improvements. Trout habitat projects were also completed in the upper reaches of the creek, improving trout populations as well.

When home in Sylvia Creek a female coho deposits thousands of eggs in a stream bed nest called a redd.



The male then fertilizes the eggs and covers them with a light coating of gravel.

After spawning, the adult salmon die.

Their carcasses become very important nutrients recycled into the stream of their birth.



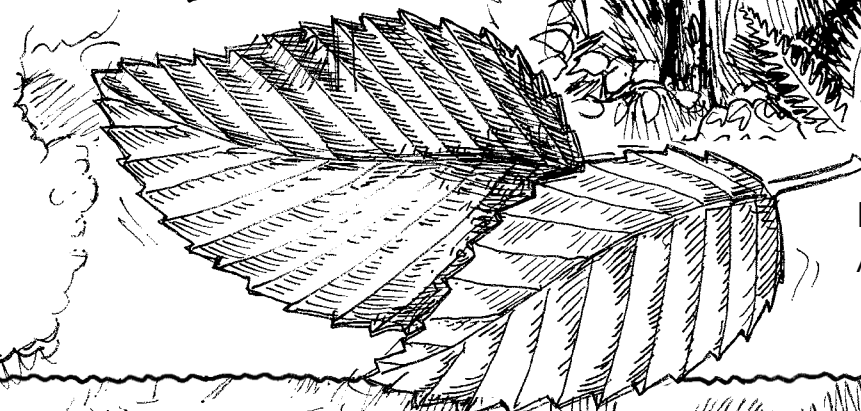
Life begins anew as a fertilized egg in the streambed.

An old circular saw blade is all that is evident of a sawmill that once occupied this area. Nature is reclaiming all that remains. Moss covers large concrete remnants. Downed trees and thick, thorny vegetation conceal clues to the past. Imagine the whine of the whirring blade, the smell of fresh cut lumber and the voices of the workers that toiled here. Historic information indicates that the Sylvia Shingle Company was incorporated in 1904 and the mill operated on this site until 1922. The mill was adjacent to the Chehalis County Logging and Timber Company railroad tracks and likely included living quarters for the workers.

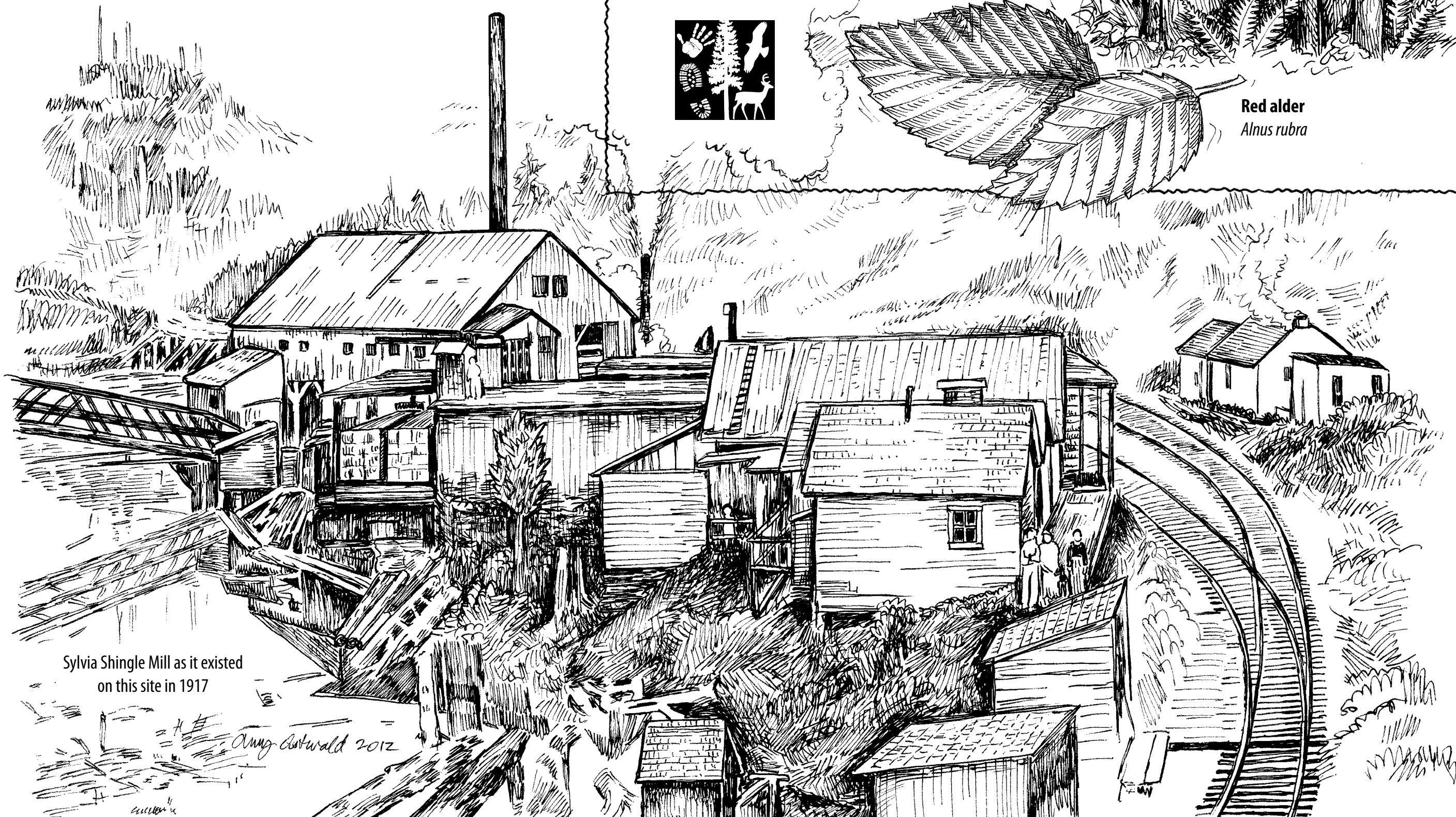
Red alder trees have reclaimed this old mill site which was likely cleared of all trees in the late 1800s. Alders are nature's pioneers. They grow on disturbed sites that may not be suitable for other trees. Red alders grow successfully in poor ground because they extract the nitrogen they need from the air through their leaves. Over time, dropped and decomposed alder leaves and roots add nitrogen to the soil to create better conditions for conifer trees to move in.



Working in the Woods

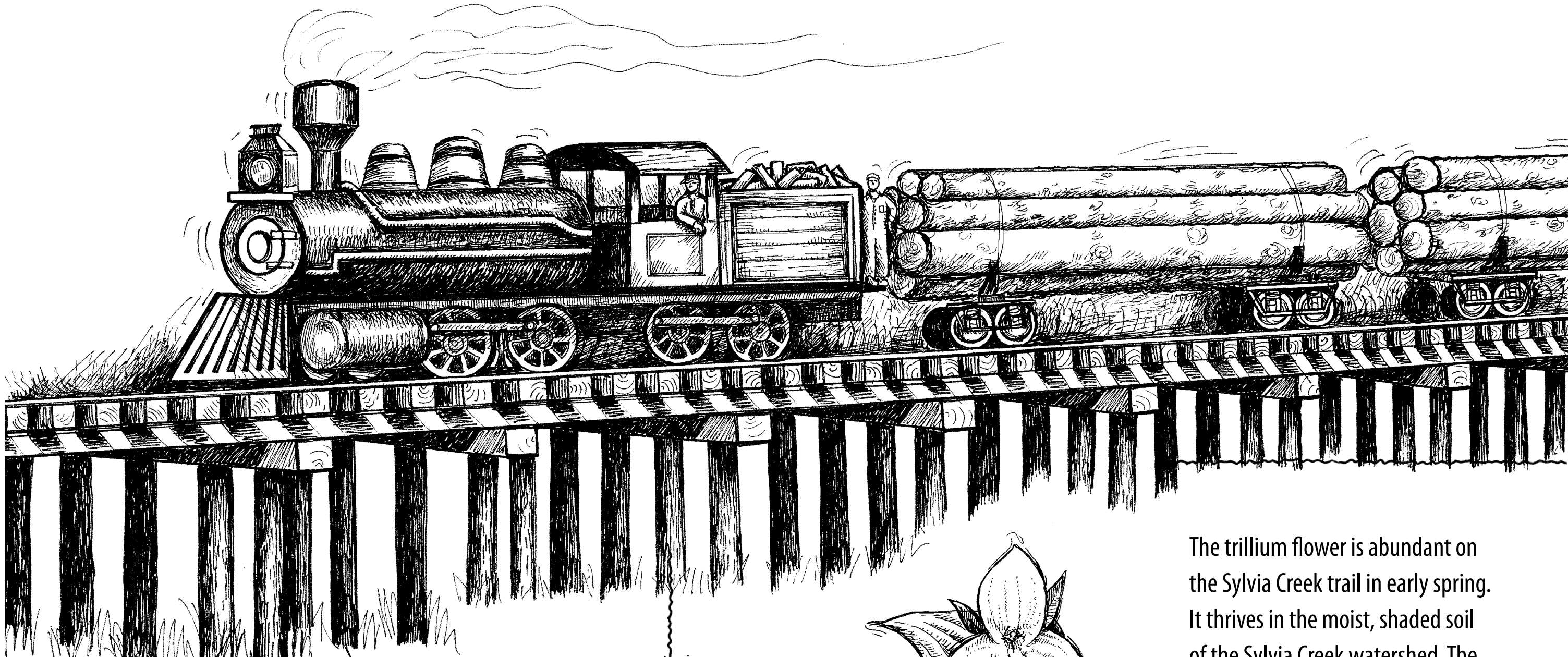


Red alder
Alnus rubra



Sylvia Shingle Mill as it existed
on this site in 1917

Amy Astwald 2012



Railroad Crossing

It may be difficult to imagine a train loaded with logs rumbling past where you now stand! In this valley and the surrounding lands, railroads were built to transport logs to mills. In the low area in front of you, railroad trestle supports are visible. The Chehalis County Logging and Timber Company railroad was surveyed in 1902 and by 1910 the length was inventoried at 7 miles. The tracks ran from the Northern Pacific tracks just west of Montesano up the Sylvia Creek valley. Parts of this loop trail are on the old railroad bed. The route continued along the shore of Lake Sylvia beyond the upper reaches of Sylvia Creek. This county at one time had more than 1,000 miles of logging railroads!



Trillium
Trillium ovatum



The trillium flower is abundant on the Sylvia Creek trail in early spring. It thrives in the moist, shaded soil of the Sylvia Creek watershed. The large white flower has three petals on a single stem 6 to 20 inches tall, and three large pointed leaves. The petals change from white to pink to lavender as they age. Local enthusiasts count the trilliums on this trail annually in spring with totals exceeding 1,500 observed from this 2.25-mile trail.

The challenge of how to get the massive timber from forest to mill was a huge issue. The first of the northwest giant trees to be cut were generally those adjacent to bodies of water. The tree could be felled into the water then floated to a mill. Once those trees were gone, other methods of transporting the massive logs were used. Horses and oxen teams were used to drag logs along skid roads, "paved" with parallel poles. The animals were replaced by large engines called "steam donkeys," which dragged logs with cables and pulleys. Another method of transport, which was used here in Sylvia Creek valley, was a flume – a wooden trough with running water that conveyed logs or lumber to a location at a lower elevation. Railroads moved timber in the early decades of the 1900s. Since the mid 1900s most logs have been moved by truck. What might be used in the future?

Many of the trees in our coastal rainforest are coniferous, meaning cone-bearing trees. They stay green year round and have needles instead of leaves. There are four main coniferous tree species in the Montesano City Forest: Douglas-fir, western redcedar, Sitka spruce and western hemlock. Each of these species is represented in the stand around you. You can identify these trees by their shape as well as their bark, needles and cones. Study the characteristics of each species and see if you can identify them amongst the trees adjacent to the trail.

Getting to Know You



All of these species are desirable for commercial uses. How many of these tree varieties can be found in wood products in your own home?

Douglas-fir is one of the most valuable trees for lumber and plywood. It is also used for timbers, trusses, flooring, railroad ties, utility poles and Christmas trees.

Western redcedar is used for roofing shakes or shingles, house siding, outdoor furniture and fence posts. Historically, Native Americans used cedar to build canoes, longhouses, clothing, mats, baskets and more.

Sitka spruce is used for lumber, plywood, paper products, piano sounding boards, guitars and boats (particularly racing sculls). During WWI it was used for airplane production because of its strength and lightweight properties.

Western hemlock is considered one of the best pulpwoods for paper. It is also used for lumber and house construction.

Douglas-fir
Pseudotsuga menziesii

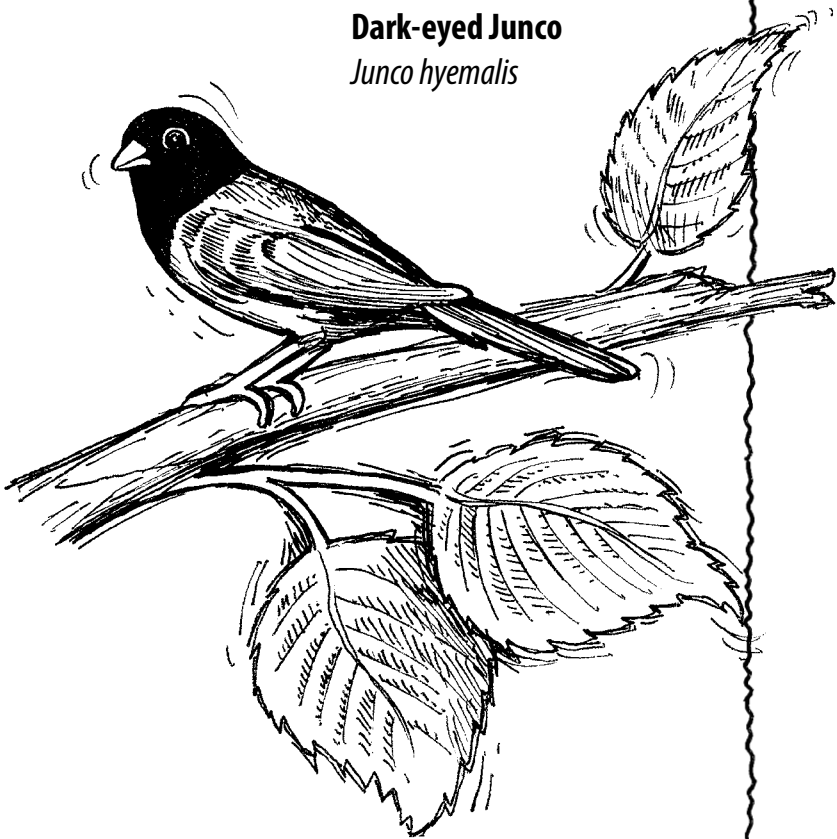
Western redcedar
Thuja plicata

Sitka spruce
Picea sitchensis

Western hemlock
Tsuga heterophylla

Arroyo-Cristal 2022

Dark-eyed Junco
Junco hyemalis

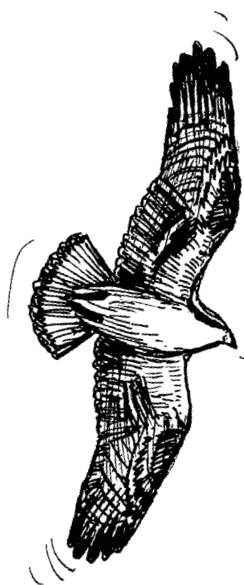


The trees in this area were harvested in 2011 and then replanted in 2012, primarily with Douglas-fir seedlings, a species that needs sunlight for optimal growth. Regrowth comes rapidly in this wet, fertile region. These forests are adapted to regrow after natural catastrophic disturbances such as windstorms, disease or fire. Over several decades, the forest develops through different stages. The trees will compete with each other for sunlight, moisture and nutrients. Some trees will succumb to this competition and die. The forester may conduct thinnings within the first three decades to remove some trees, thus optimizing growth for the remaining trees. At 50 to 75 years the growth rate slows. These trees will be approaching the optimal age and size for a new harvest around 2060.

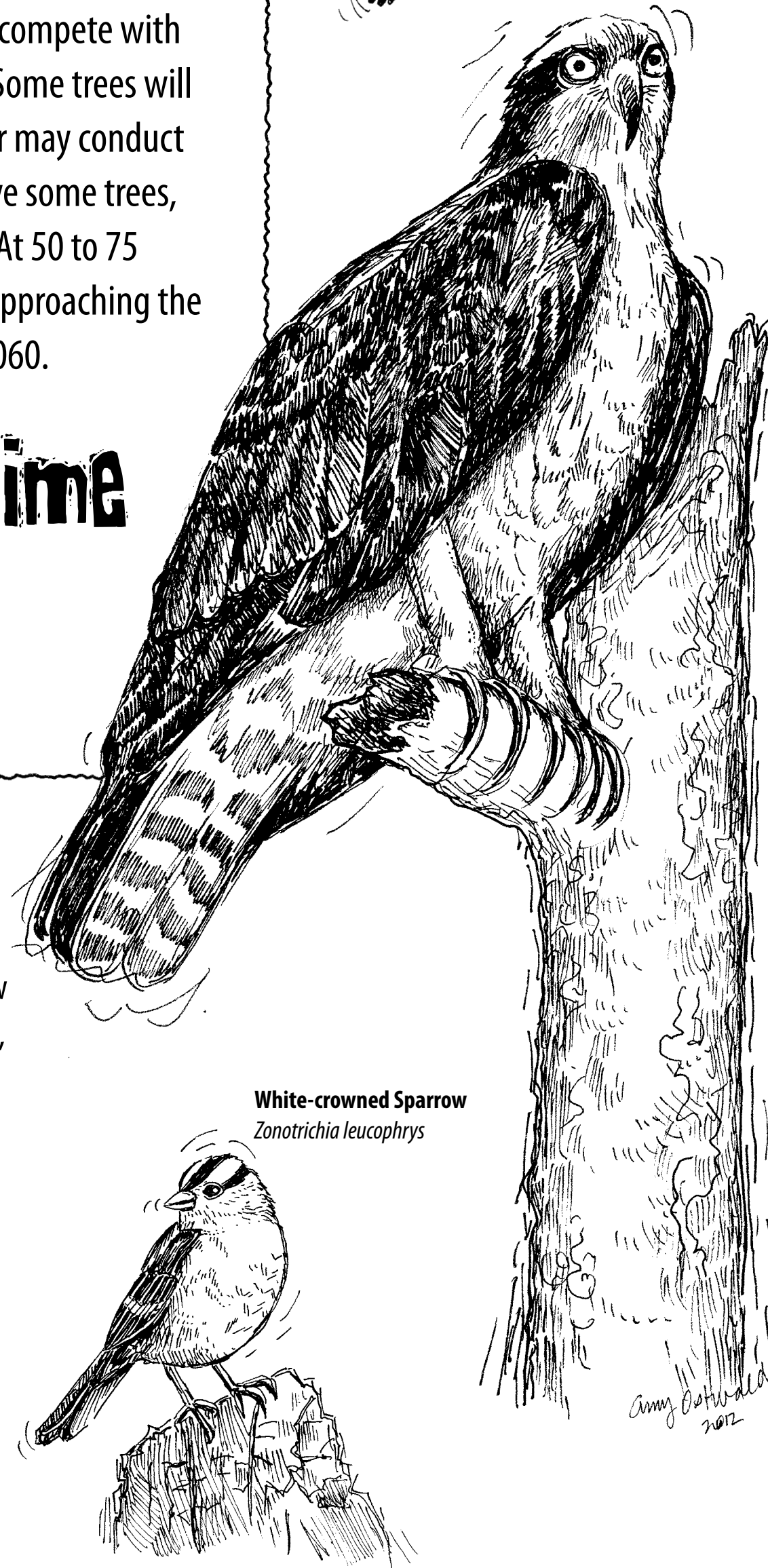
A Forest Over Time



Various birds will live here at different stages of forest growth, each occupying its own habitat niche. White-crowned sparrow or dark-eyed junco use open shrubby areas, clear-cuts and forest edges. Other birds such as the pileated woodpecker, wood ducks and black-capped chickadees nest in the cavities of snags (standing dead trees). Large raptors, such as bald eagles, hawks, owls and osprey, use tall, mature trees for nesting and roosting.



Osprey
Pandion haliaetus



White-crowned Sparrow
Zonotrichia leucophrys

Amy Ostwald
2012





Before you is the oldest stand of trees on the Sylvia Creek Forestry Trail. Most of the original trees in this area were probably cut in the late 1800s to early 1900s. The forest reseeded naturally and has been left to grow undisturbed since then. Take some extra time to observe and absorb the graceful beauty of this lush forest.



Pileated Woodpecker
Dryocopus pileatus

Over time this forest stand has begun to take on some characteristics of an older forest, deepening in complexity and beauty. These characteristics include multiple ages and species of trees, a lush understory of plants, snags (standing dead trees) and fallen logs (becoming nurseries for young trees). Even high in the forest canopy is a rich growth of mosses and lichens. The plants and animals in the coastal northwest have evolved to thrive in this forest community. The diverse and rich plant life provides food and shelter for pileated woodpeckers, flying squirrels, deer and other forest creatures. All of these components play an important role in the natural northwest forest ecosystem.

Living Large



Sword Fern
Polystichum munitum

Lady Fern
Athyrium filix-femina

Deer Fern
Blechnum spicant

