

Plant Profile

Hardhack (*Spiraea douglasii*)

Etymology: *Spiraea* in Greek means “a coil” and *douglasii* is after David Douglas.

Ecology: You will find this species growing in aquatic and semi-aquatic habitats such as bogs, wet meadows, and riparian areas of lakes and creeks. It blooms from July to August with the fruits (seeds) ripening between September and October. It can grow between 1-2m tall forming dense communities. *Spiraea douglasii* spreads by vegetative propagation of its rhizome making it a very effective colonizer.

Ecosystem Function: *Spiraea douglasii* provides many functions within the ecosystem such as brows for Black-tailed Deer, nectar for pollinators, and shelter to birds and small rodents. Additionally, the roots act to filter water and stabilize soil along the edges of streams and lakes, while the foliage creates shaded areas that help maintain cooler water temperatures needed for aquatic species.

Identification: Leaves are oval-oblong, margins smooth becoming toothed from the middle to the apex. The underside of the leaf is pale green often with grey wooly hairs. Flowers are pink and clustered into a “steeple” like arrangement.



Photo By: Emma Ross



Photo By: Emma Ross

How are we Using it?

We are planting this shrub in the mid riparian area of Somenos Lake, Quamichan Lake, and Somenos creek. Due to its ability to colonize an area rapidly, its root systems act in bank stabilization to prevent erosion. It will also help to create shade on the edges of the lakes and creeks.

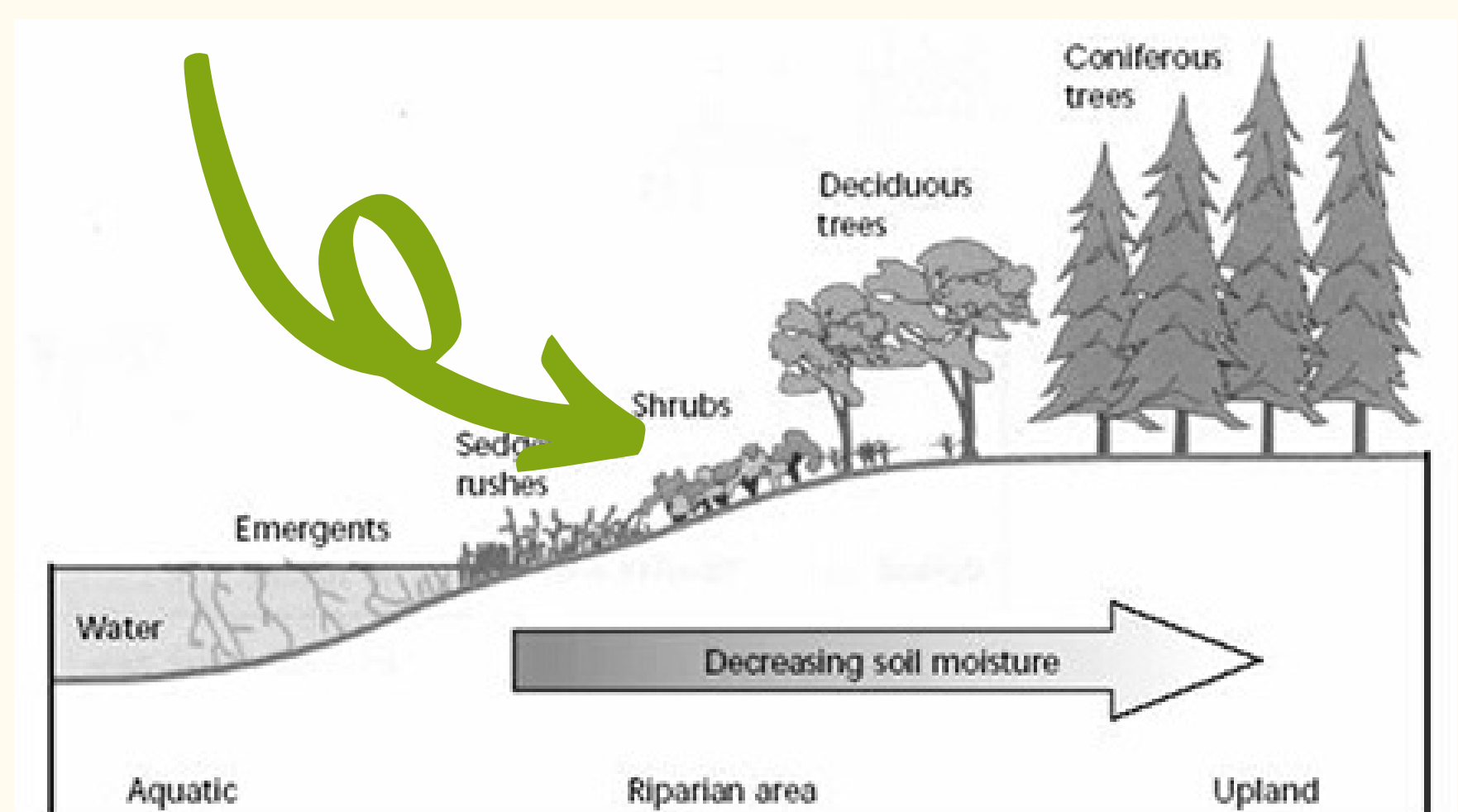


FIGURE 1 Illustration of the moisture gradient in a typical riparian ecosystem (from Stevens et al. 1995:2).

Plant Profile

Indian Plum (*Oemleria cerasiformis*)

Etymology: *Oemleria* is derived from the German naturalist Augustus Gottlieb Oemler responsible for the first collection of the species. *Cerasiformis* means cherry shaped and refers to the fruit produced by this species.

Ecology: Indian plum can be found growing in both dry and wet conditions such as open woods and riparian areas. This species can grow between 1.5- 7m tall. The bloom time is between February and April and the fruit ripens between May and July. Indian Plum is dioecious, meaning that in order for the females to produce fruit a male must grow nearby.

Ecosystem Function: This species easily grows into thickets through suckering, due to this they are very effective at stabilizing soil and helping with filtration. Berries are eaten by song birds and mammals.

Identification: Indian plum leaves are lance shaped with a smooth margin, and usually are a very bright green in the spring. Small white flowers often appear prior to leaves. The flowers have five petals and form in drooping clusters. Fruits are peach coloured at first turning to a dark purple-black.



0400967 © Mark Turner
www.turnerphotographics.com

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<http://www.vannattabros.com/plant41.html>

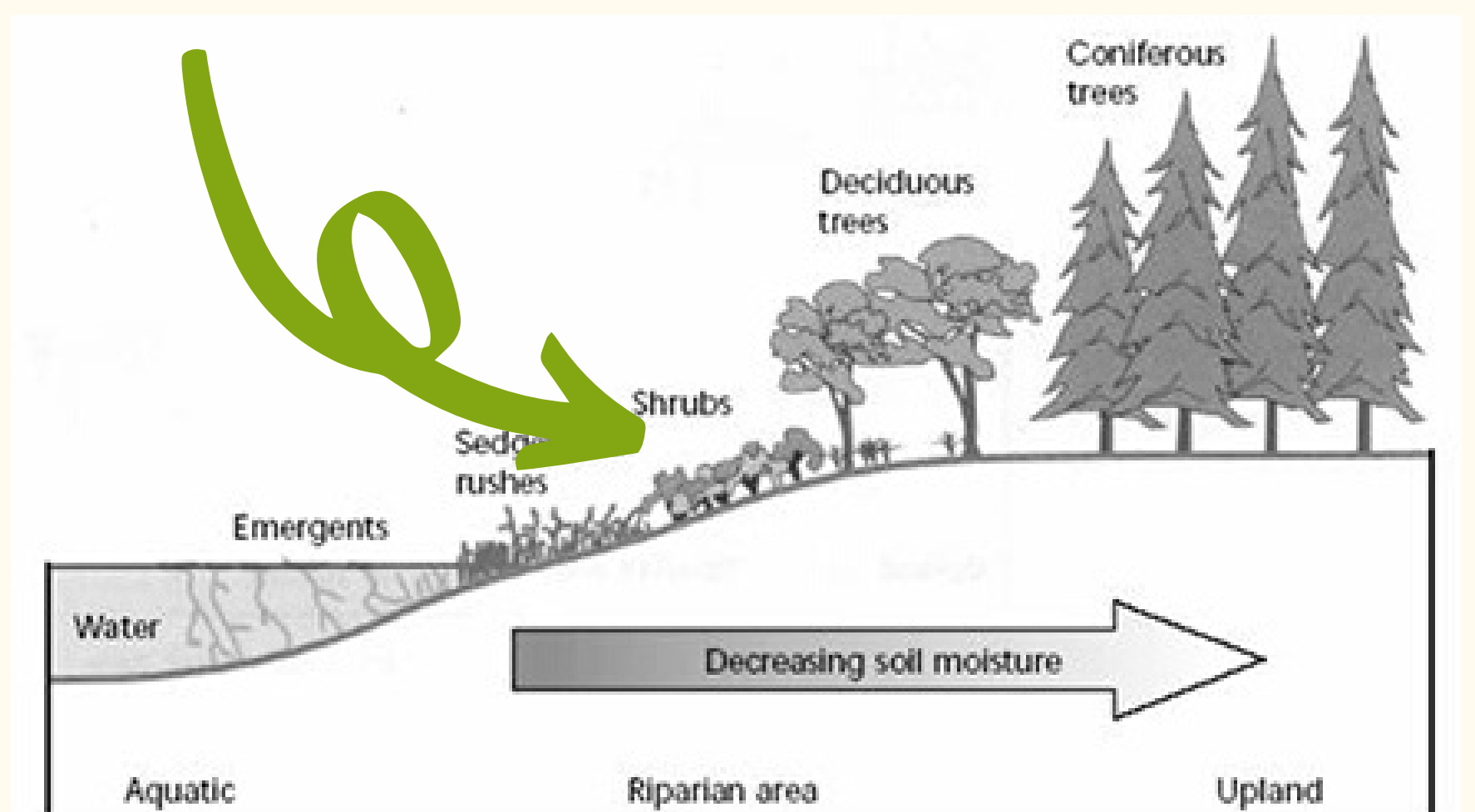


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Plant Profile

Red-osier Dogwood (*Cornus sericea*)

Etymology: *Cornus* meaning antler or horn, *sericea* meaning covered with fine hairs in reference to the hairs on the underside of the leaves.

Ecology: Red-osier Dogwood can be found in a variety of habitats such as forest edges, open forest, wet meadows, and in the riparian areas of lakes and streams. This is a larger woody shrub growing between 2-6m tall. They bloom between May and July with the fruit ripening between August and September.

Ecosystem Function: Red-osier Dogwood provides many services to the ecosystem from food to shelter. The berries, buds, and bark are eaten by mice, voles, turkeys, grouse, quail, pheasants, bears, ducks, and song birds. Deer and Elk also love to browse on this shrub. It also provides habitat for nesting and cover for mule deer fawning. Spring Azure Butterflies rely on this species as their larval host. Red-osier Dogwood is fast growing and forms strong root networks that help with soil and water retention in areas that experience seasonal flooding

Identification: Leaves are oppositely arranged, oval shaped with a smooth margin, leaf veins are smooth and unbroken from the center to the margin. Small white flowers form in flat clusters turning into small white berries. The twig of Red-osier Dogwood is an intense red colour that often stands out especially in the winter months.



Photo By: Ben Legler

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Photo By: Nancy Rose

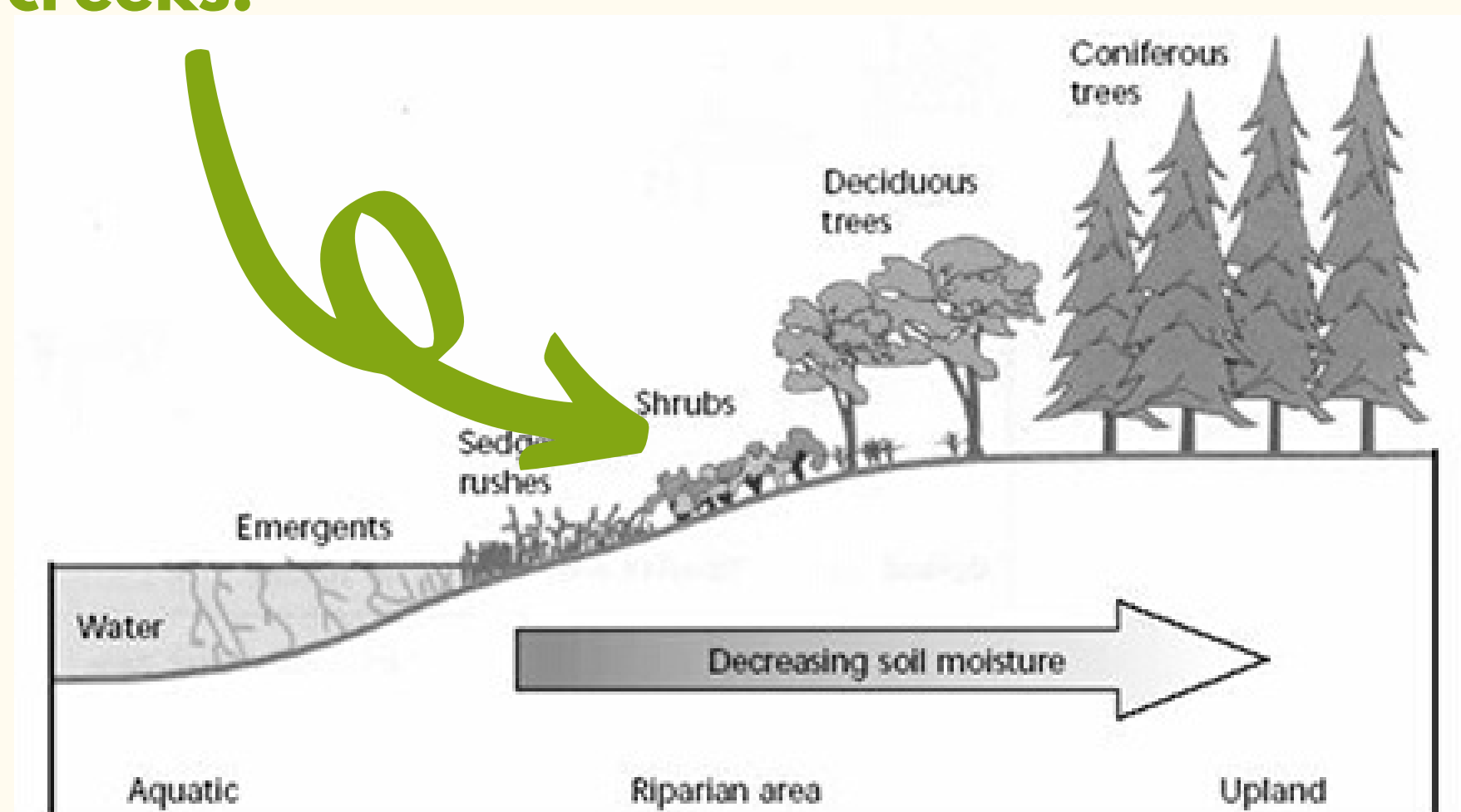


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Plant Profile

Trumpet Honeysuckle (*Lonicera ciliosa*)

Etymology: *Lonicera* is derived from a German botanist Adam Lonitzer, *Ciliosa* means small hairs on the edge in reference to the leaves that have hairy edges.

Ecology: Typically found along forest edges and in open forests. The Trumpet Honeysuckle is a vine and grows by twining itself around close by trees and shrubs. It can grow up to 6m in length. The flowers bloom from May to July with the fruit becoming ripe in September.

Ecosystem Function: Trumpet Honeysuckle is a favorite food for hummingbirds that like to drink the nectar from the long trumpet-like flowers. While the red berries are eaten by many different birds such as juncos, robins, finches, and flickers.

Identification: Leaves are oval shaped with a smooth margin, usually found in pairs at the end of a twig, at this spot is where the orange trumpet shaped flowers stem in a cluster. Fruits are red/orange berries.



Photo : NativeplantsPNW

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We are planting this shrub in the mid riparian area of Somenos Lake, Quamichan Lake, and Somenos creek. Due to its ability to colonize an area rapidly, its root systems act in bank stabilization to prevent erosion.

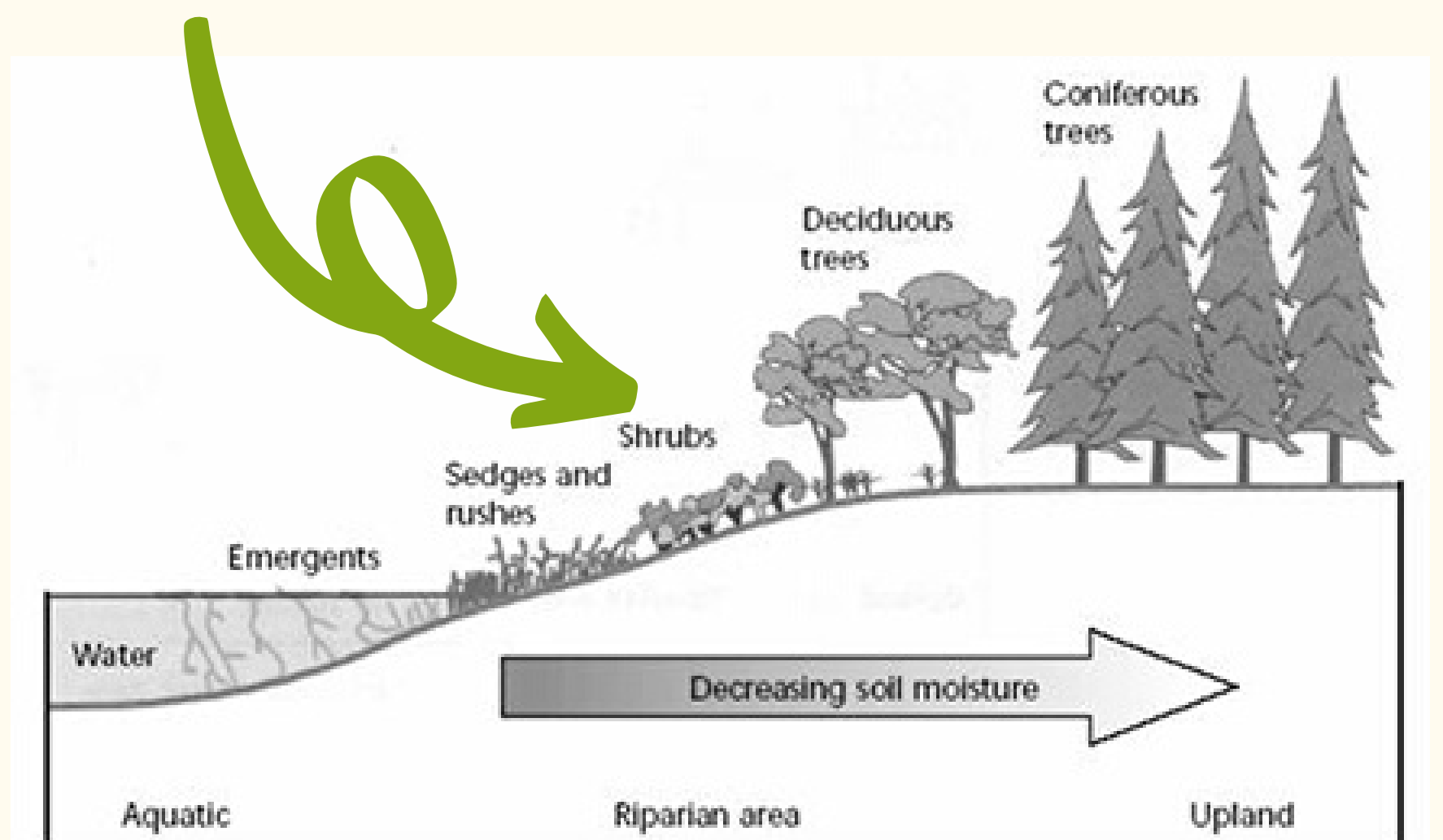


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Plant Profile

Common Snowberry (*Symphoricarpos albus*)

Etymology: *sumphorein* is a Greek word that means “to bear together” and *karpos* meaning “fruit”, *albus* refers to the white colour of the berries.

Ecology: Snowberry is found in moist and dry habitats such as rocky outcrops and open forests. It can also occur near the edges of lakes, streams and wetlands. They bloom between May and August after this time the berries ripen between September and October, they will then persist through the winter. This is a small species typically growing to about 2m tall. Common Snowberry propagates through root suckers and can create dense thickets.

Ecosystem Function: *Symphoricarpos albus* provides many different functions within the ecosystem. This shrub is an important food source for bears, robins, grouse, grosbeak, and thrushes. Deer and elk enjoy browsing on the buds as well. The small pink flowers attract pollinators such as hummingbirds and bees. The dense thicket that is formed by new growth creates the perfect nesting and cover habitat for small game birds and rabbits. This shrub also helps with shoreline stabilization in restoration projects to help stop soil erosion.

Identification: Oval shaped leaves are in an opposite arrangement on the stem, leaves have a waxy or smooth margin occasionally with hairs on the underside. Flowers are bell shaped and vary from pink to white in colour, they grow in small clusters. Small white fruits form and persist through winter.



Photo: <https://www.coldstreamfarm.net>



Photo <http://nativeplantspnw.com/>

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We are planting this shrub in the mid riparian area of Somenos Lake, Quamichan Lake, and Somenos creek. Due to its ability to colonize an area rapidly, its root systems act in bank stabilization to prevent erosion. It will also help to create shade on the edges of the lakes and creeks.

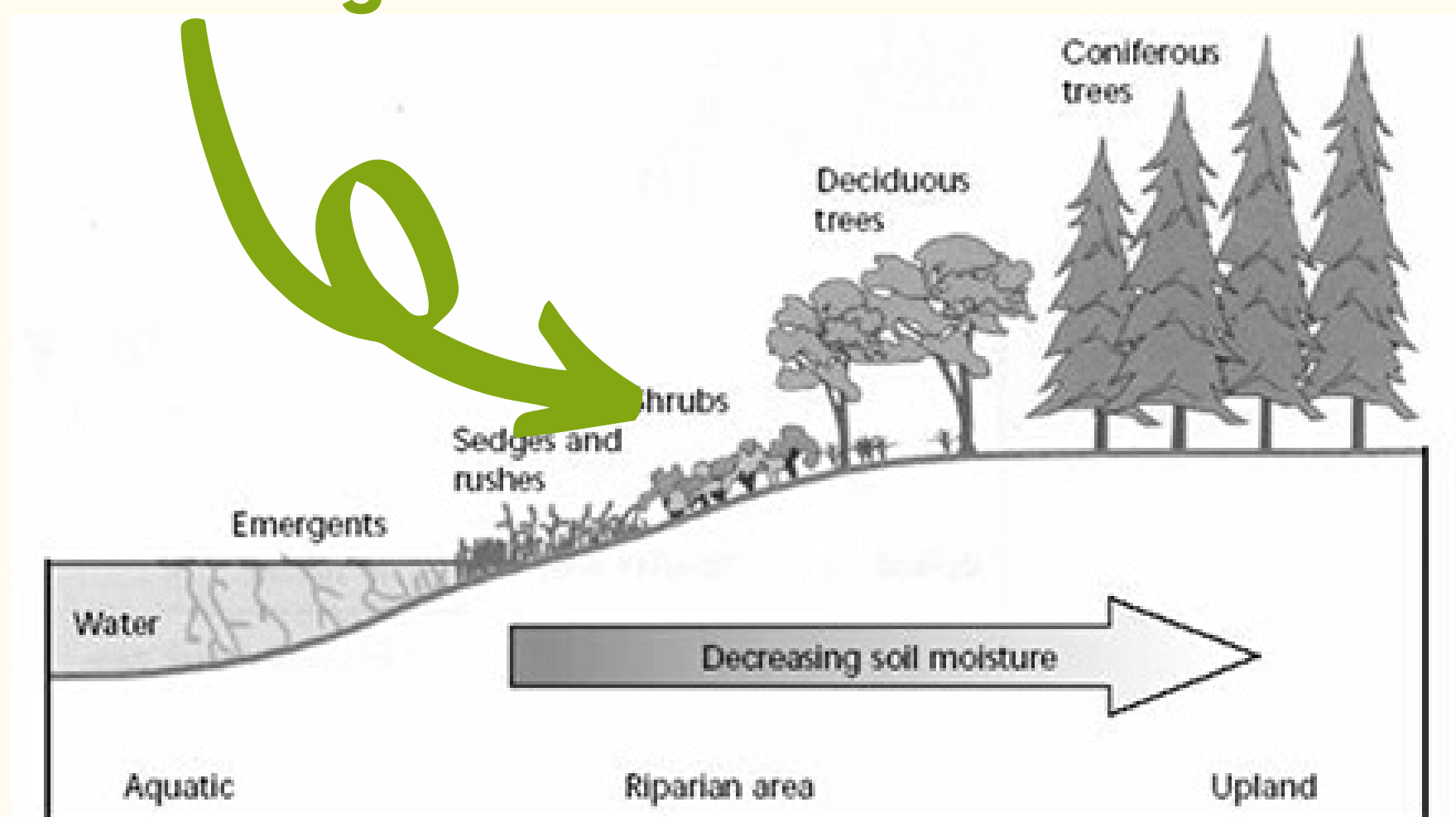


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Plant Profile

Big-leaf Maple (*Acer macrophyllum*)

Etymology: *macrophyllum* translates to big leaves.

Ecology: Big-leaf Maples prefer to grow in moist soil along the banks of streams and lakes, they can also be found in drier areas. In the early years it is a fast-growing tree with growth slowing with age. They can grow to be up to 30m tall and more than one meter in diameter, with a life span of up to 200 years. They bloom between March and June, seeds ripen from September to October.

Ecosystem Function: The Big-leaf maple is known for the diverse ecosystem it can support on its deeply furrowed bark. The grooves of the bark trap and hold moisture creating ideal conditions for epiphytes such as lichens, mosses and ferns. These organisms colonize the surface of the tree and create habitat for insects. The large crown of the Big-leaf Maple creates shaded habitat, ideal for keeping streams covered in the summer time to create more favorable conditions for fish.

Identification: As it's name suggests the Big-leaf maple has large 5 lobed leaves up to 30cm across. Green/yellow flowers emerge prior to or at the same time as the leaves. Seeds are paired in a helicopter like arrangement typical of maples.

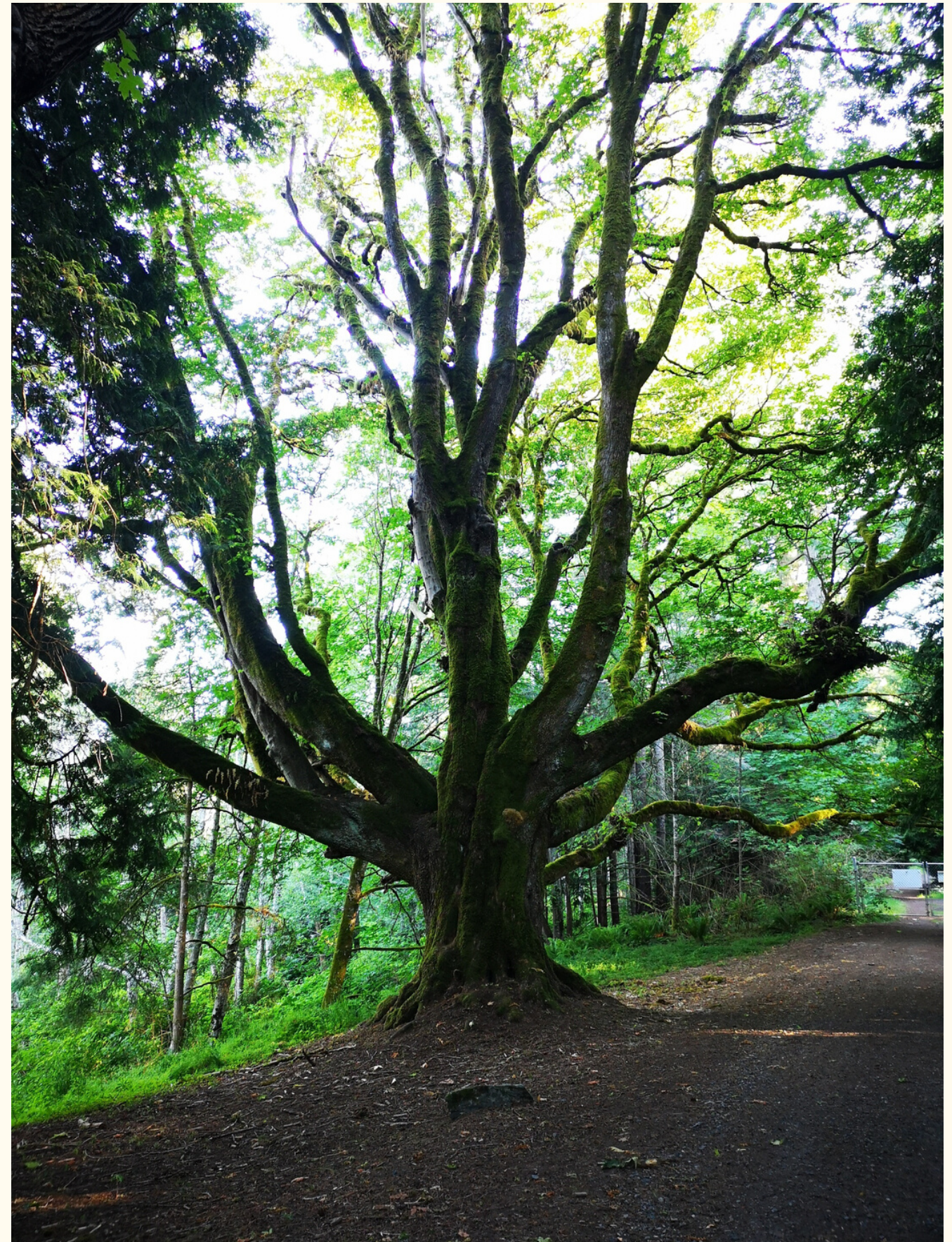


Photo By: Emma Ross



Photo By: Emma Ross

How are we Using it?

We are planting this tree in the upper riparian areas around Somenos Lake and Quamichan Lake. Due to the scale of this tree and its large leaves, the canopy can create large shaded areas to help reduce the temperature of the lake edge. The deep roots help to retain water and minimize erosion.

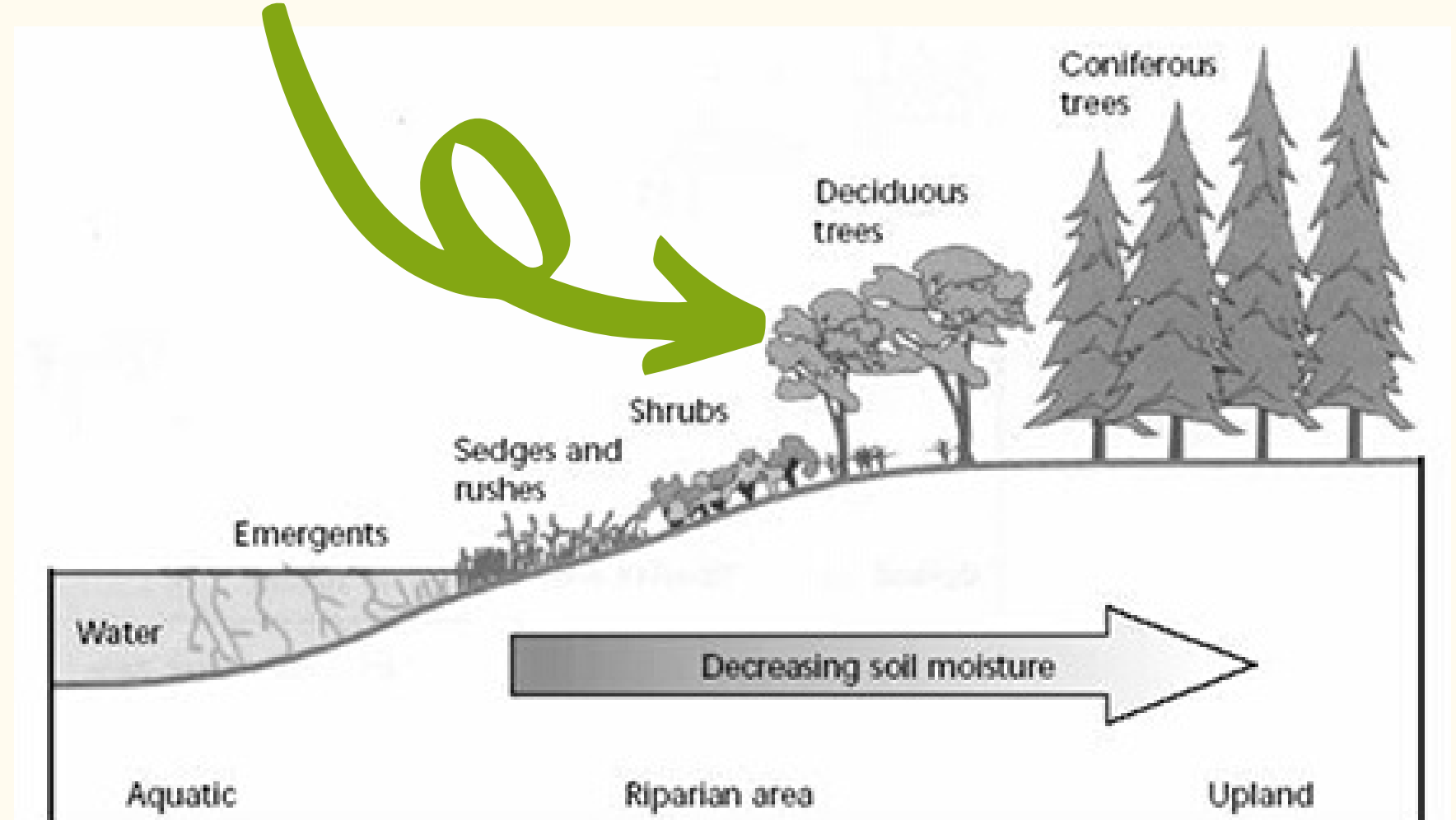


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Plant Profile

Black Hawthorn (*Crataegus douglasii*)

Etymology: Named after David Douglas

Ecology: Black hawthorn like to grow in moist soils in open areas, in riparian areas along streams and at the edge of forests. They grow to be between 7m and 15m tall. They bloom between May and June, with the dispersal of fruits from July to August.

Ecosystem Function: The roots of Black hawthorns help to stabilize the soil to prevent erosion. Due to the density in which they tend to grow they are great habitat and provide safe nesting sites and cover. They also act as a food source for birds and some mammals.

Identification: The defining characteristics of a Black Hawthorn are the 3cm long sharp thorns. The leaves have a thick leather-like texture with 5-9 small lobes at the apex of the leaf. The flowers form in clusters turning into small dark purple/black fruits.



Photo from NativeplantsPNW.com



Photo from NativeplantsPNW.com

How are we Using it?

We are planting this shrub in the mid riparian area of Somenos Lake, Quamichan Lake, and Somenos creek. Due to its ability to colonize an area rapidly, its root systems act in bank stabilization to prevent erosion. It will also help to create shade on the edges of the lakes and creeks.

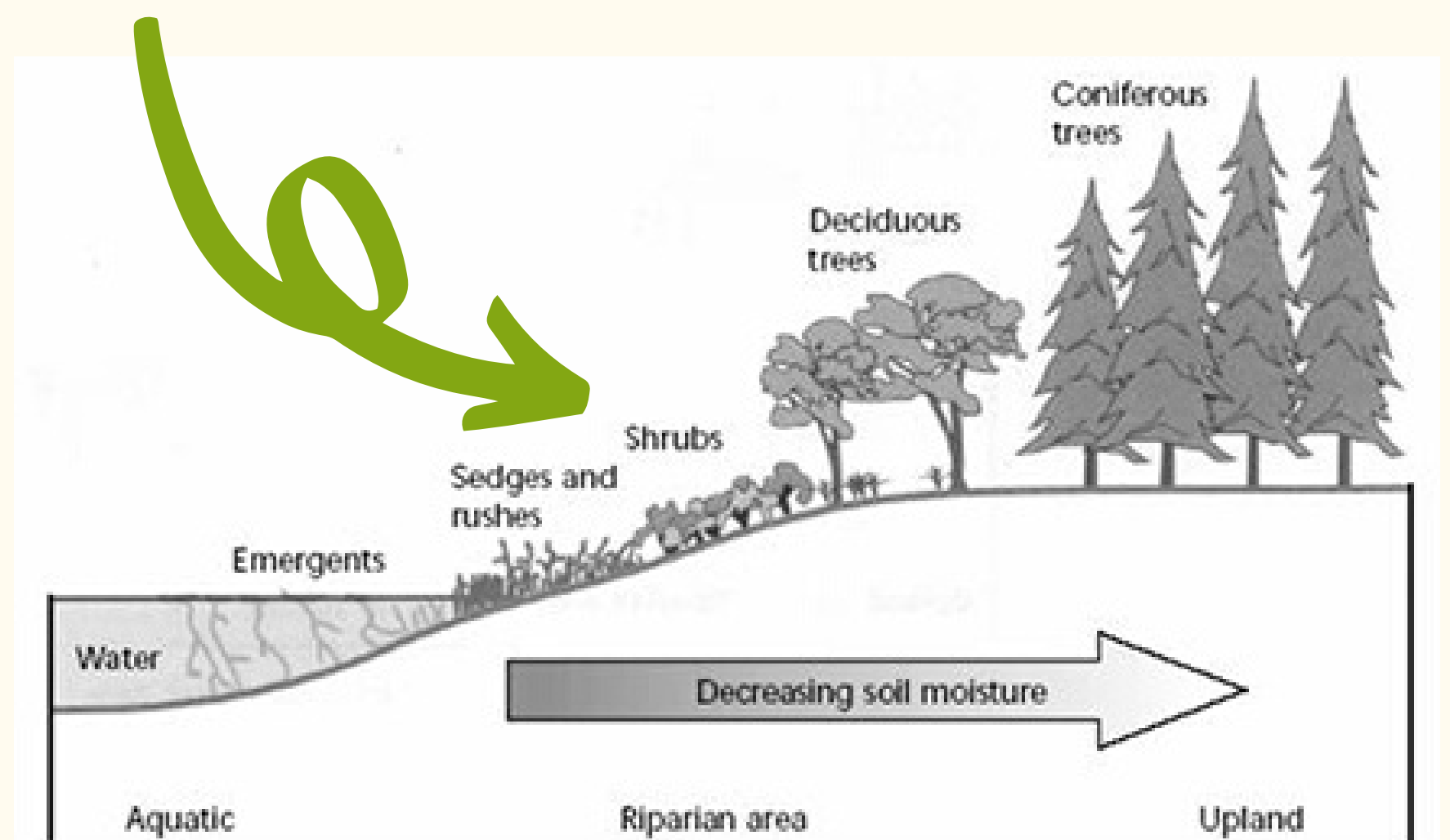


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Plant Profile

Black Cottonwood (*Populus trichocarpa*)

Etymology: *Balsamifera* translates to aromatic resin-bearing, *trichocarpa* means with hairy fruits.

Ecology: Black Cottonwood like to grow in moist soils in floodplains and riparian areas. They are a fast-growing tree putting on several feet every year reaching a total height of up to 50m, with a lifespan of 200 to 300 years. They bloom from early March to June with seeds ripening from late May to July, trees are either male or female.

Ecosystem Function: Black Cottonwood helps in water retention and soil stabilization in riparian areas and flood plains. Cottonwoods growing on stream banks shade the stream and create microclimates favorable to fish. The shedding of twigs and leaves also provides the ecosystem with nutrients. These trees provide habitat to many birds of prey for nesting and perching, they provide cover for Deer and Elk, while rabbits and beavers enjoy the bark.

Identification: Mature Black Cottonwoods have dark grey deeply furrowed bark. The leaves are triangular with a rounded base, the underside is pale and often mottled with brown spots. The buds are very large and sharp, they become filled with resin and are very sticky and aromatic. Catkins develop prior to leaves, and the fruit are round and covered with hairs, these open to disperse fluffy seeds.



Photo from: <http://nativeplantspnw.com/>



Photo From: <http://nativeplantspnw.com/>

How are we Using it?

We are planting this tree in the riparian areas of Somenos Lake, Quamichan Lake, Somenos creek and Bings creek to re-establish riparian vegetation succession. Due to the fast growing nature of this tree it is ideal for restoration planting, providing services such as water retention, soil stabilization, and shade.

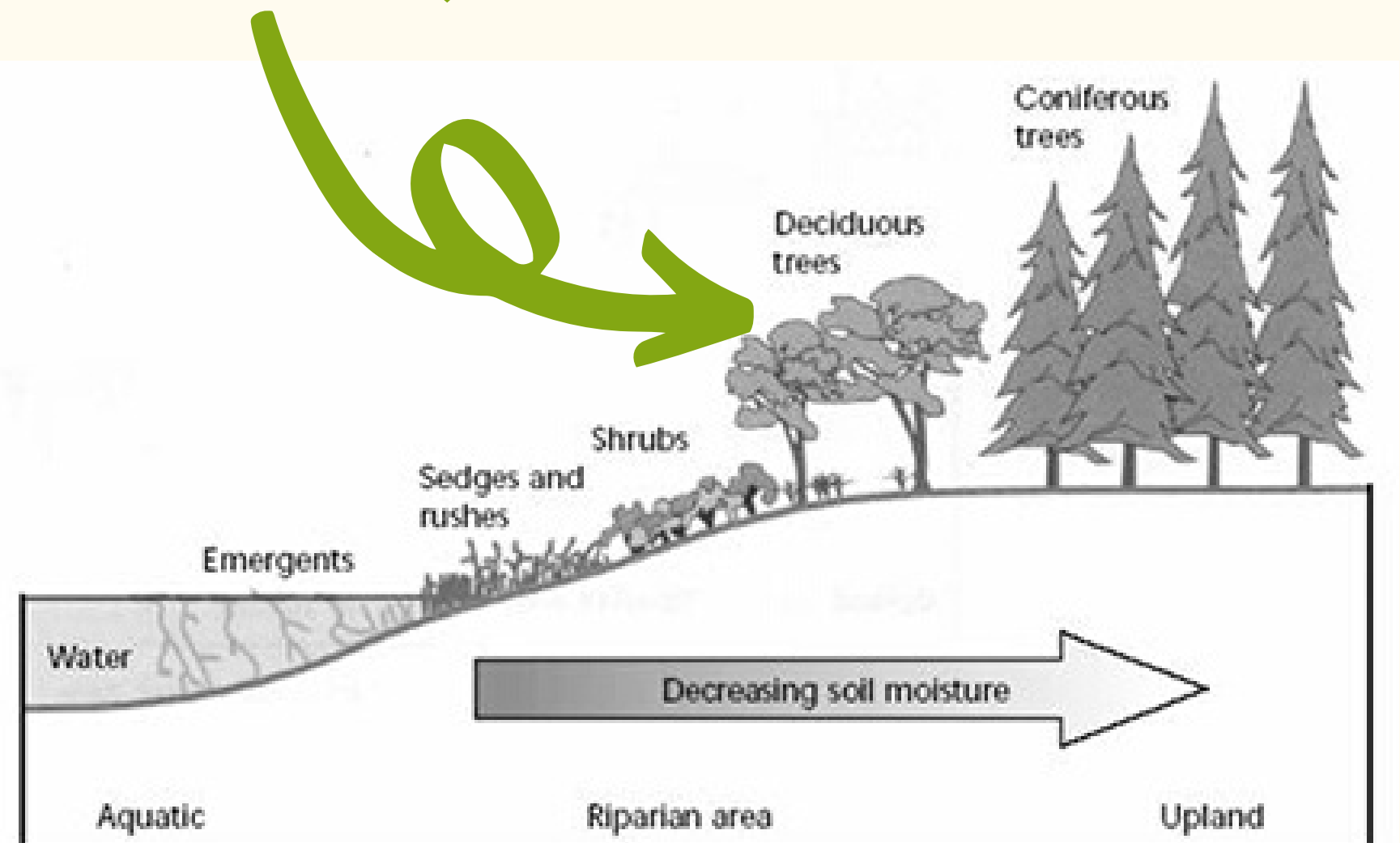


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Plant Profile

Red Alder (*Alnus rubra*)

Etymology: *rubra* comes from the Latin word for red due to the red inner bark of the tree.

Ecology: Red Alder is a secondary successional tree that often colonizes disturbed or cleared lands. It likes moist soils near wetlands and along stream banks. It is a rather fast-growing tree reaching about 15-25m tall. Because this is a successional species it has a short life span and does not often live past 100 years. Red Alders bloom between February and April. From September to December strobiles resembling cones release tiny winged nutlets which are carried by wind for natural regeneration.

Ecosystem Function: *Alnus rubra* has a symbiotic relationship with nitrogen fixing soil bacteria. The roots form nodules to house the bacteria, while the bacteria fix nitrogen for the tree to use. This helps to increase the fertility of the soil allowing for longer living species to colonize the soil afterwards. Additionally, Alders provide food for birds that eat the seeds, and Deer and Elk that eat the buds, leaves and twigs. Beavers also enjoy the bark and wood for food and as a building material for dams and lodges.

Identification: Bark is thin and grey on the outside with the underside being red, the outside of the bark is often mottled with lichens giving it a whitish appearance. The leaves are characterized by a toothed and serrated margin. Long catkins containing large amounts of pollen form in the spring prior to leaf growth, as well cone-like strobiles form and persist through the winter months.



Photo from Oregonstate.edu

How are we Using it?

We are planting this tree in the riparian area of Somenos Lake, Quamican Lake, Somenos Creek, and its tributaries to rebuild the natural succession of the riparian area. Since Red Alder is nitrogen fixing it is great for disturbed sites to replenish the soil nutrients. It also helps with soil retention, water filtration, and creates shade.



Photo from NativeplantsPNW.com

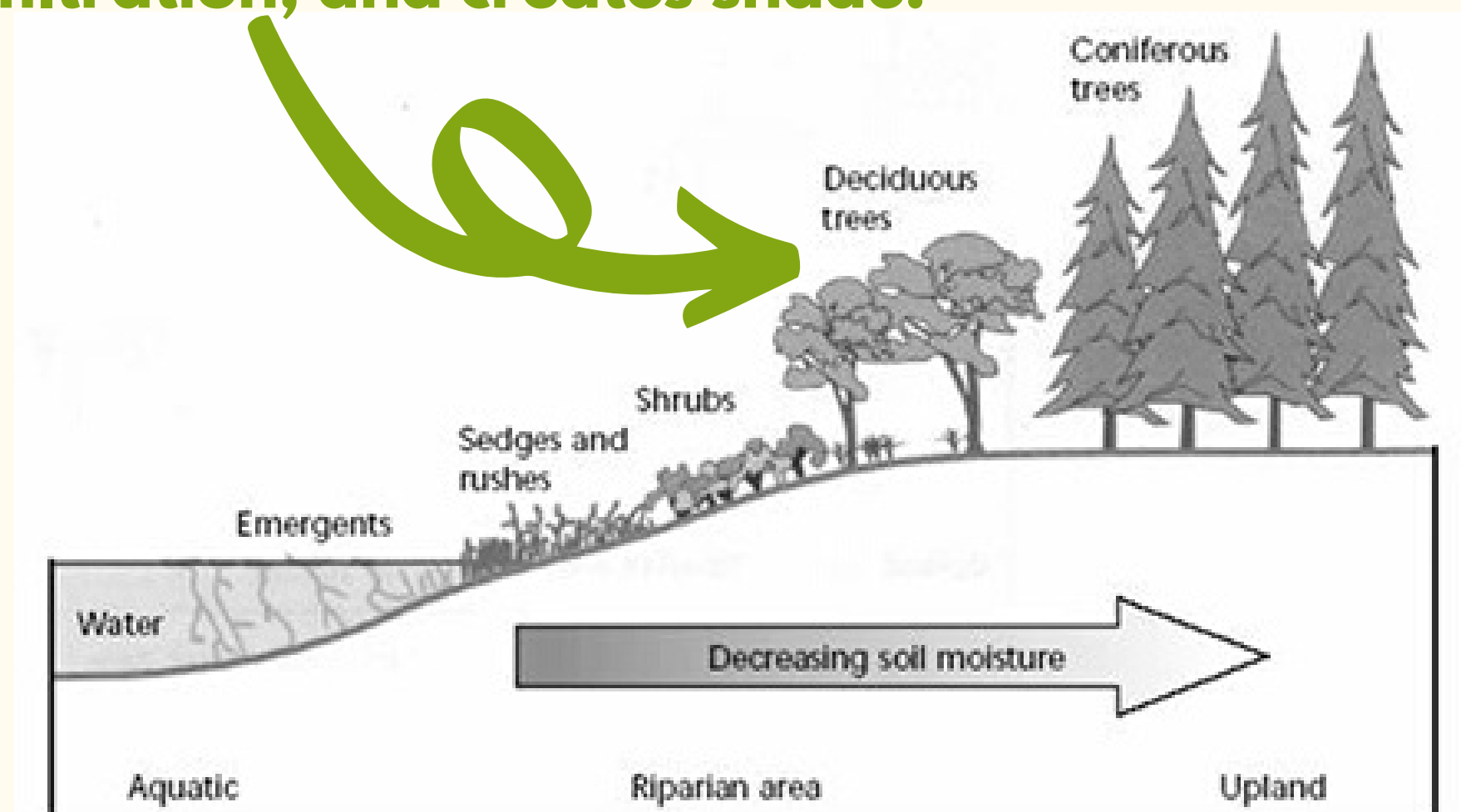


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Plant Profile

Sitka Spruce (*Picea sitchensis*)

Etymology: *sitchensis* comes from the word Sitka which originated from Southeastern Alaska from the Tlingit word Shee At'iká "people on the outside of Baranof Island".

Ecology: Sitka Spruce like to grow in raised microsites atop of nurse logs, this keeps them safe from fungal infections and elevates them above competition. They require moist climates such as rainforests and near wetlands. These trees can grow to be up to 75m tall and have been recorded at over 1300 years old. They bloom between late April and June with the Cones maturing in late August to early September, Seed dispersal starts in October.

Ecosystem Function: The Sitka Spruce provides food to animals that brows on the foliage such as deer, rabbits and grouse. The seeds are fed on by birds, chipmunks and squirrels. These trees also provide habitat in the form of roosting, nesting, and winter cover. The roots also provide soil moisture retention and stabilization especially in wetland habitats.

Identification: Needles are flat and approximately 2cm long with a sharp point, they can range from yellow-green to blue-green in colour, typically green on top and blue-green to white on the underside. Cones are 1 to 8cm in length, they appear woody with jagged edged thin scales.



Photo By: Emma Ross



Photo By: Emma Ross

How are we Using it?

We are planting this tree around Somenos lake and Quamichan lake to re-establish natural riparian succession. The deep roots of the Sitka Spruce will aid in water filtration and soil stabilization. Additionally this tree will grow tall enough to create shade, which aids in reducing the temperature of the lake.

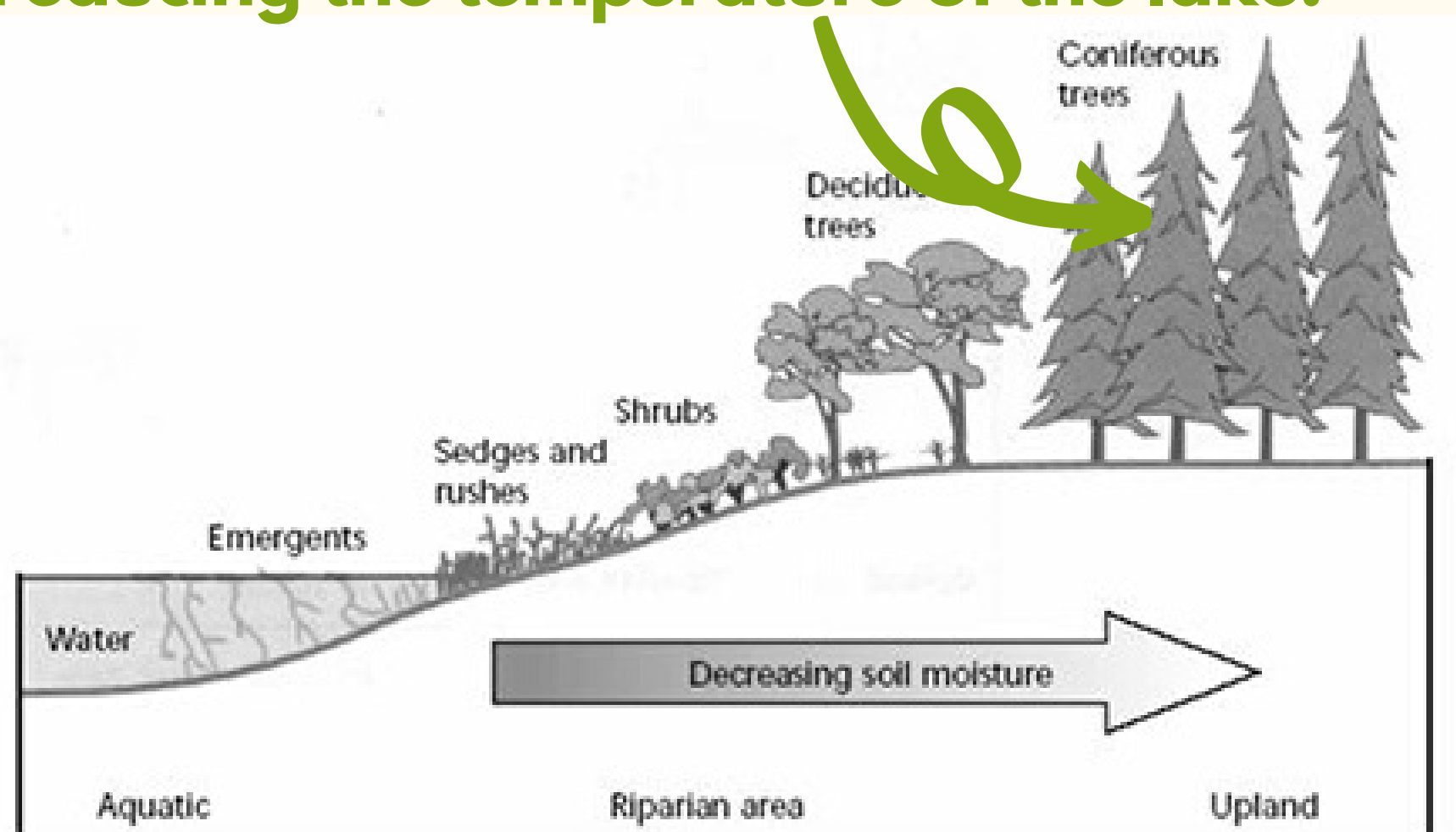


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