

Titillating Facts and Features of the Plants Around Us

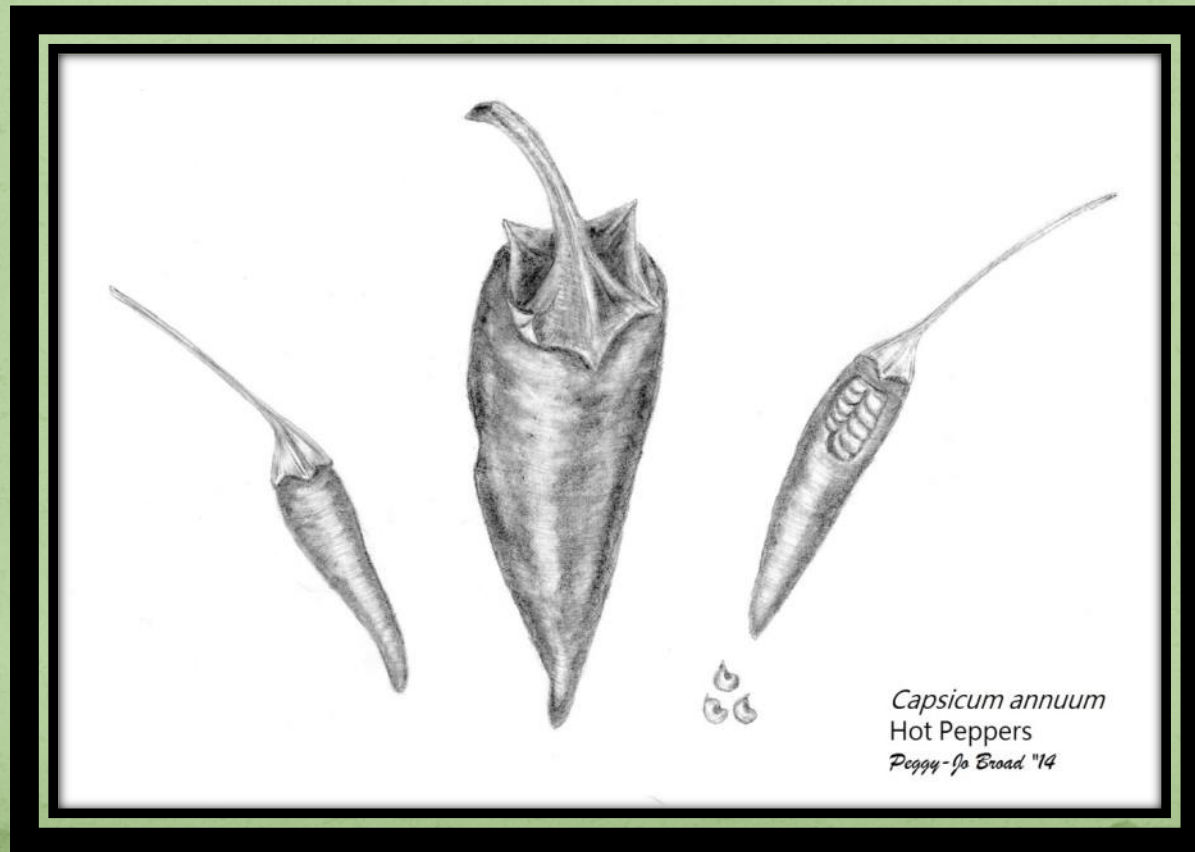


An Illustrated Botanical Portfolio
by Peggy-Jo Broad

Hot Peppers – *Capsicum annuum*

In Pencil

- Hot peppers are members of the Solanaceae or nightshade family and were once thought poisonous to consume as were other members of this family such as potatoes and tomatoes.
- Peppers were one of the first plants cultivated by man and are now spread worldwide showcasing many varieties.

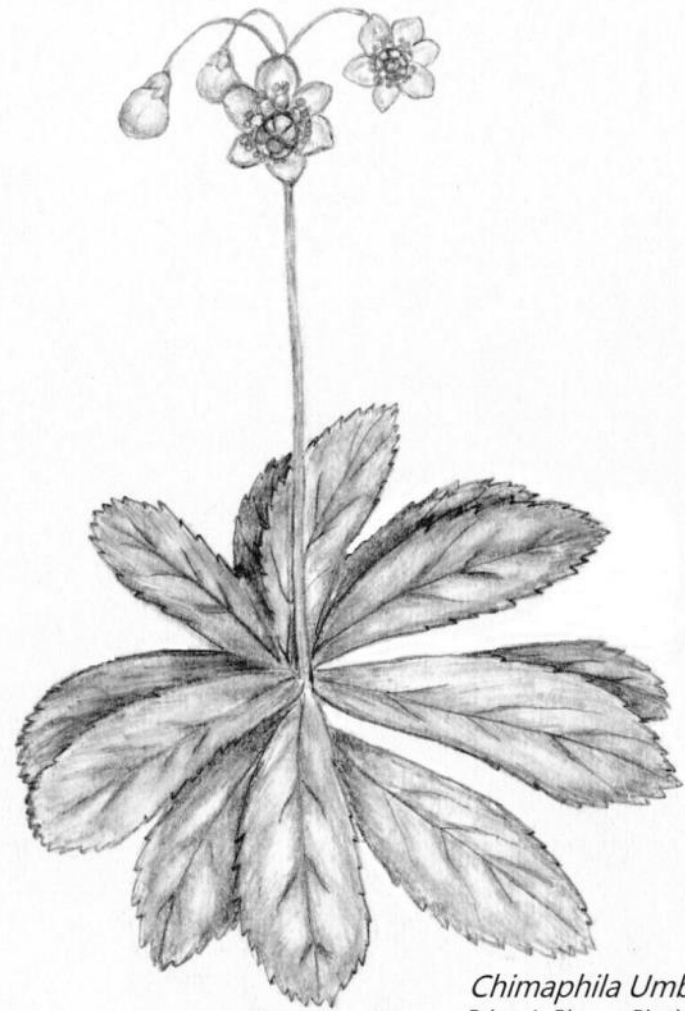


Prince's Pine

Chimaphila umbellata

In Pencil

- This evergreen species is a member of the heath or Ericaceae family and is also known as “Pipsissewa” meaning “breaks into small pieces” in Cree which refers to it’s medicinal qualities for breaking up bladder and kidney stones.
- It is a common native species throughout forested areas in BC and can be recognized by it’s shiny serrated leaves and pink umbrella-like flowers.



Chimaphila Umbellata
Prince's Pine or Pipsissewa
Peggy-Jo Broad '14

Copper Beech

Fagus sylvatica 'purpurea'
In Pencil

- This tree is a member of the Fagaceae family and originated as a genetic anomaly.
- Copper Beech trees were recorded in German forests before 1488.
- Currently this species is used as an ornamental in many parks and gardens across the globe.
- Leaves are simple, have slightly dentate margins, and have a soft fringe of hairs.
- Tufts of hair may also be located at the junctions of the main leaf veins on the backs of the leaves.



Russian Olive

Eleagnus angustifolium

In Pencil

- A member of the Eleagnaceae family this tree is seen as an invasive species by some and a naturalized species by others in the semi-arid regions of BC's southern interior.
- The folklore behind it's establishment states that a man planted the original trees along the South Thompson River after his long trek to this area in honor of the passing of his beloved wife.
- To this day these trees exist in abundance spread by the birds, waving their soft sage leaves in the breeze, and producing yellow flowers to perfume the air each spring throughout the Kamloops area.



Oyster Mushrooms

Pleurotus ostreatus

In Pencil

- The oyster mushroom is a member of the Pleurotaceae family and was first cultivated in Germany as a subsistence measure during World War I.



Wood Lily

Lilium philadelphicum

In Charcoal

- Wood lilies are members of the Liliaceae family and are native but have a limited range in the forests of the southern interior of British Columbia.
- The Ktunaxa people ate the bulbs of this lily but today it is best left alone as its numbers are in decline.



Lilium philadelphicum
Wood Lily
Peggy-Jo Broad '14

Lady's Eardrops

Fuchsia hybrida

In Charcoal

- Fuchsias were named after the botanist Leonhart Fuchs and belong to the evening primrose or Onagraceae family.
- These flowers have been bred to a wide variety of colors and styles.
- Flowers and berries are edible and some varieties have blue pollen which has been used for make-up and roots which can be used as natural dyes.
- The oldest living fuchsia in the USA was planted at Olivas Adobe in Ventura California in 1899.

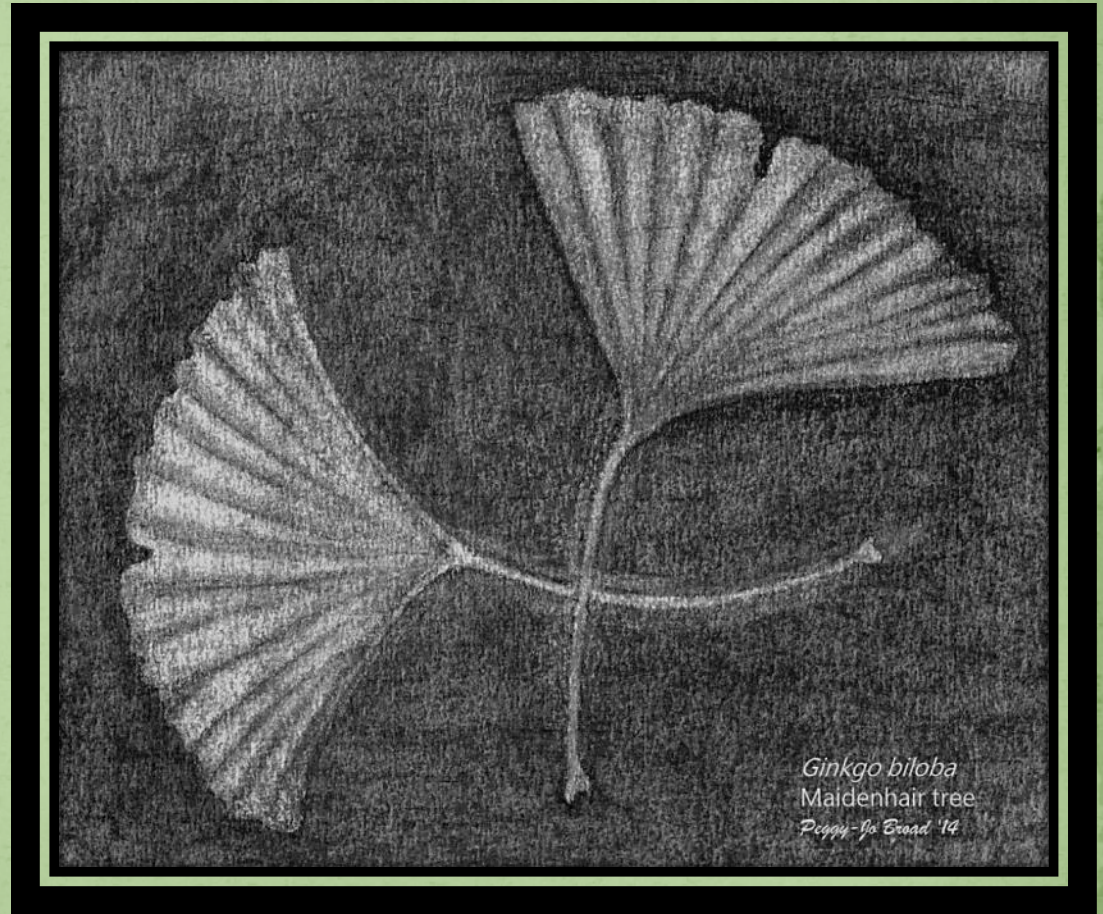


Maidenhair Tree

Ginkgo biloba

In Charcoal

- Ginkgo trees belong to the Ginkgoaceae family and although they look like most of our common angiosperm trees they are actually gymnosperms.
- These trees are the oldest living tree species and date back 225 million years in the fossil record.
- At about age 20, the female trees bear fruits which have a scent similar to that of rancid butter.



Linden or Basswood

Tilia americana

In Charcoal

- The Linden tree belongs to the Malvaceae family and many species are planted ornamentally.
- The leaf bases vary considerably depending on the species and age of the leaves.
- Uses for Linden include artists charcoal, herbal tea from the flowers, as a shade tree with fragrant flowers, and as wood for carving decoys and sculptures.

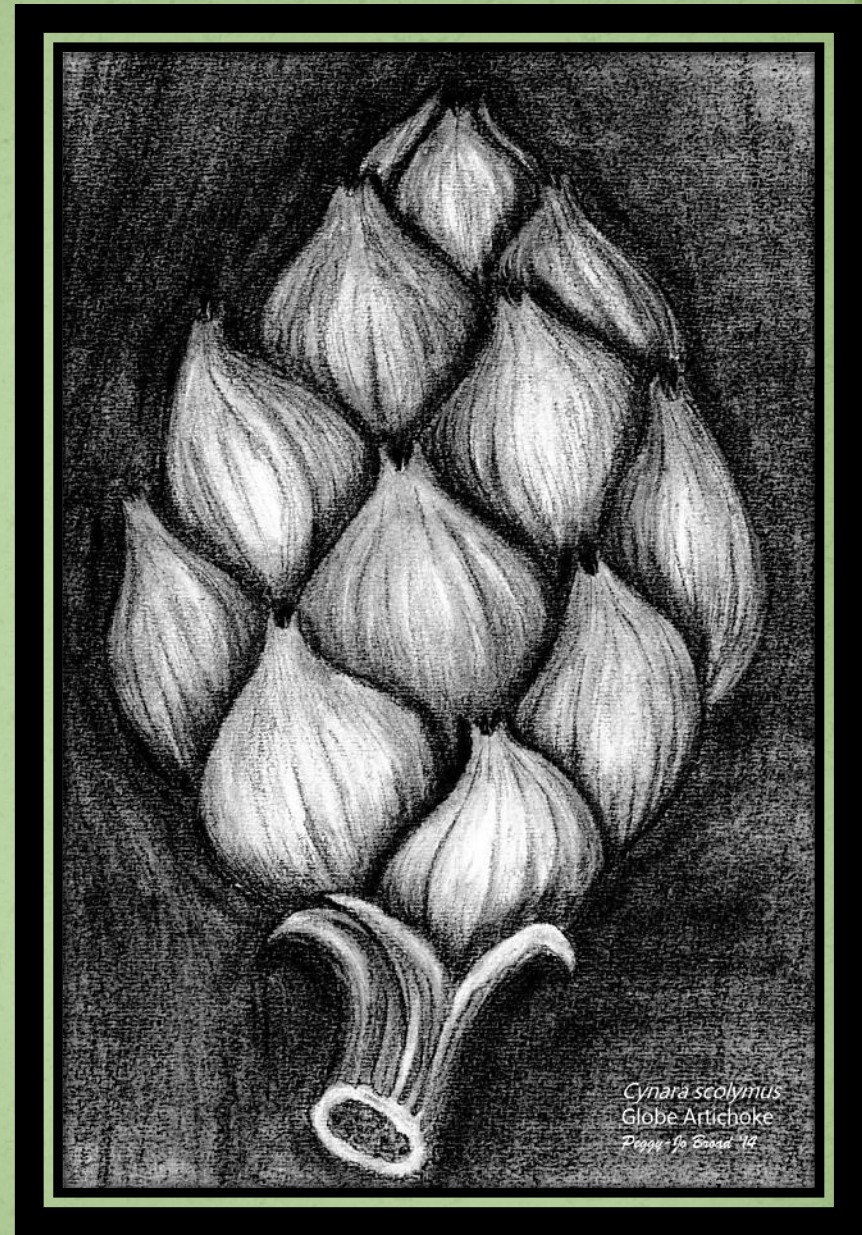


Globe Artichoke

Cynara scolymus

In Charcoal

- Artichokes are actually thistles and they belong to the Asteraceae family.
- The portion of the plant that we consume would be the base of the involucre bracts and the receptacle.
- The “choke” is actually made up of the pappus hairs of numerous flowers that haven’t yet emerged which are seated on top of the receptacle.

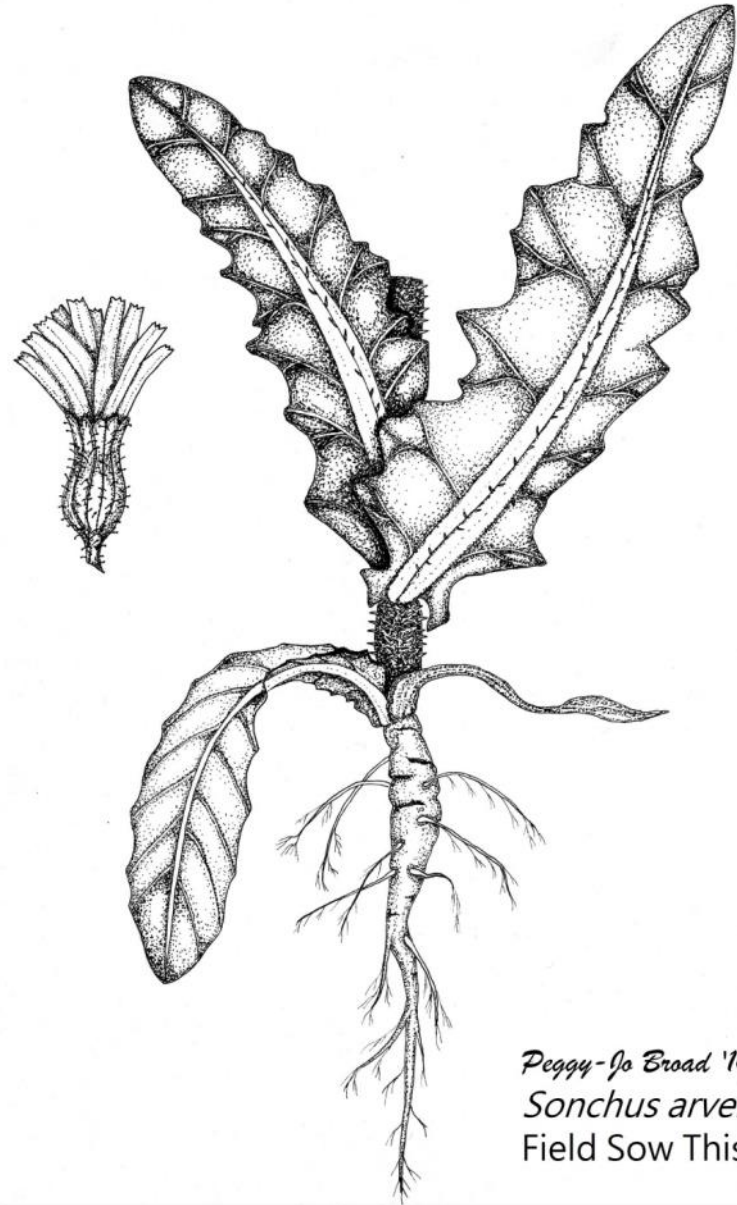


Field Sow Thistle

Sonchus arvensis

In Ink

- Sow thistle is a member of the Asteraceae family and an invasive species in BC.
- This species produces deep yellow ray flowers, a taproot, rhizomes, spines on the stems and leaf veins, milky latex, and has glandular hairs on the involucre bracts.



Peggy-Jo Broad '14
Sonchus arvensis
Field Sow Thistle

Conifer Cones

In Ink

- All conifers are gymnosperms.
- The Latin word “gymnos” means naked and refers to the type of seeds that conifers bear as they do not have the protection of an ovary or fruit.
- Norway Spruce is often planted as an ornamental in Canada but Douglas-fir and Western Hemlock are both native commercial species in British Columbia.



Bearded Iris

Iris germanica

In Ink

- The iris belongs to the Iridaceae family and the name iris comes from the Greek word for rainbow referring to the numerous colors and varieties available.
- The roots of bearded iris are a thick creeping rhizome allowing them to grow in large clumps that can be easily separated and shared with friends.



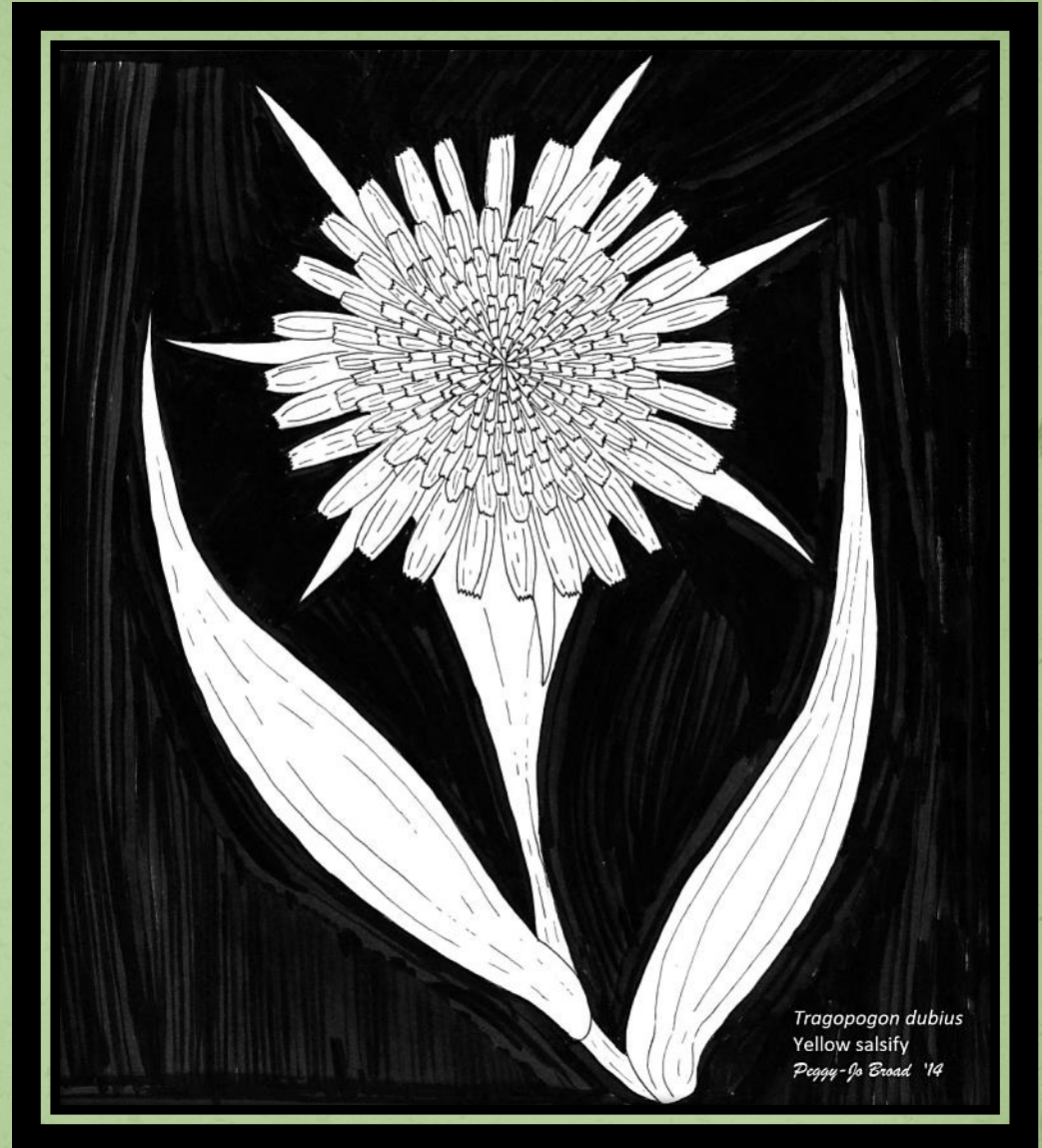
Iris germanica
Bearded Iris
Peggy-Jo Broad '14

Yellow Salsify

Tragopogon dubius

In Ink

- Salsify is a member of the Asteraceae family and an invasive species in BC.
- This species produces light yellow ray flowers, smooth hollow stems, smooth leaves, slender involucral bracts, and milky latex.
- It is a relative of the garden vegetable known as “Oyster Root”.



Red Oak

Quercus rubra

In Quill and Ink

- Oaks belong to the Fagaceae family.
- If you observe the end grains of red oak the pores are open while white oaks are plugged with tyloses which makes the wood watertight.
- Color does not always distinguish oak wood but blowing air really hard through lengthwise sections into a vessel of water will produce bubbles with red oak but white oak will not allow the air to pass through the tyloses.



Apple

Malus domestica

In Colored Pen

- Apples are members of the Rosaceae family and the fruit is known as a pome.
- Apples are borne from a flower with 5 petals, 5 sepals and an inferior ovary.
- Over 7,500 cultivars of apples are known to exist throughout the world.



Peggy-Jo Broad '14

Bleeding Heart

Dicentra spectabilis

In Colored Pen

- Bleeding hearts belong to the Fumariaceae family and produce seed pods filled with tiny seeds.
- This beloved garden species was derived from native plants like the *Dicentra formosa* found throughout moist forests in the Pacific Northwest.

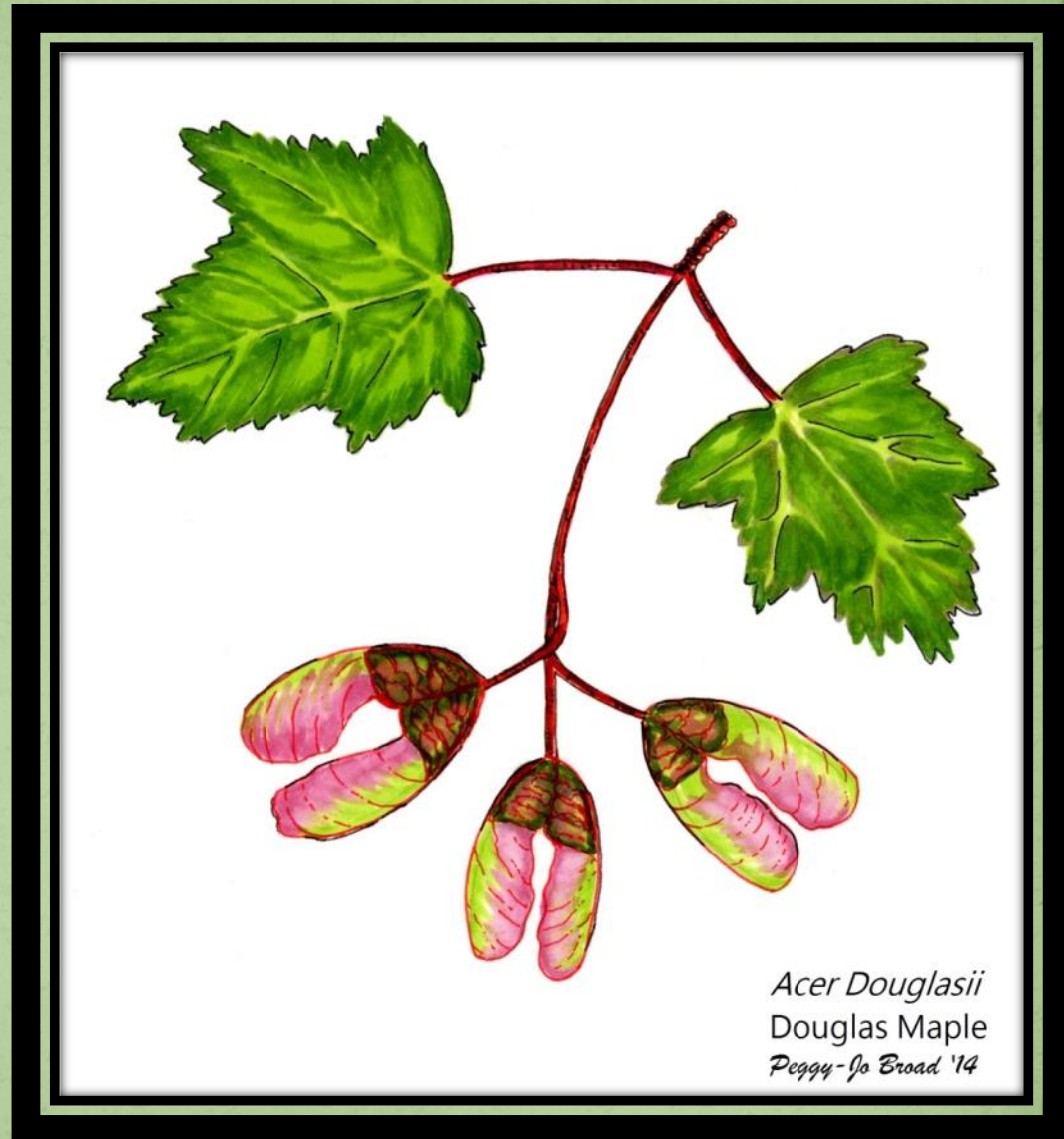


Douglas Maple

Acer douglasii

In Colored Pen

- Douglas maple is a member of the Aceraceae family and is a native species in BC.
- The maple “keys” or samaras of this species are brightly colored and as they mature they turn a light brown to honey tone.
- Many people think that only sugar maples can be tapped but Douglas maples can also be tapped to make maple syrup.



Grape Leaves

Vitis vinifera

In Colored Pencil

- Grapes belong to the Vitaceae family and the genus *Vitis* refers to the latin word meaning “vine”.
- The young leaves are edible and many varieties of grapes are grown worldwide for fruit, wine, and vitamin products such as resveratrol.



Rampion Harebells

Campanula rapunculoides

In Colored Pencil

- Part of the Campanulaceae family this species is considered invasive in many parts of North America due to its ability to establish and spread in a wide variety of environments.
- Flowers were called Harebell by witches, who were believed to be able to transform into hares.
- Scottish people also call this "Witches Thimble".



Saskatoon

Amelanchier alnifolia

Mixed Media

- The Saskatoon or Serviceberry is a member of the Rosaceae Family and although the berries of this shrub are treasured edibles it's bark contains toxic cyanic compounds.
- The city of Saskatoon Saskatchewan is named for the Cree word "Minsaskwatominihk" which means "at the place of many Saskatoon berries".
- This piece was completed with colored pens and colored pencils



Saskatoon Berries
Amelanchier alnifolia
Peggy-Jo Broad '14

Cottonwood Stroll

Mixed Media

- This scene depicts the old cottonwood trees in an area along Tranquille Creek and was completed using watercolor crayons, colored pencils, ink, and watercolor.



About the Artist

Peggy-Jo is an instructor for Thompson Rivers University in the Department of Natural Resource Sciences in Kamloops, British Columbia, Canada. She has taught students in Grassland Ecology, Forest Ecology, Forest Measurements, Introduction to Natural Resources, and Silviculture for over twenty years and has a strong love for BC's grasslands, it's diverse forests, and the plants and animals that reside there. If you wish to contact her she can be reached at pbroad@tru.ca.



An Expression of Gratitude....

To my instructor Marcia for all of her words of encouragement while I was creating my first illustrated botanical portfolio. To my friends and family who encouraged me to re-visit my artistic side. To the colleagues and students at TRU that have supported me while I have been working on this project. Finally, I am especially grateful to my Grandmother who developed a love for art in my soul and has kept art alive in my heart through all my years.

Thank-you all,
Peggy

