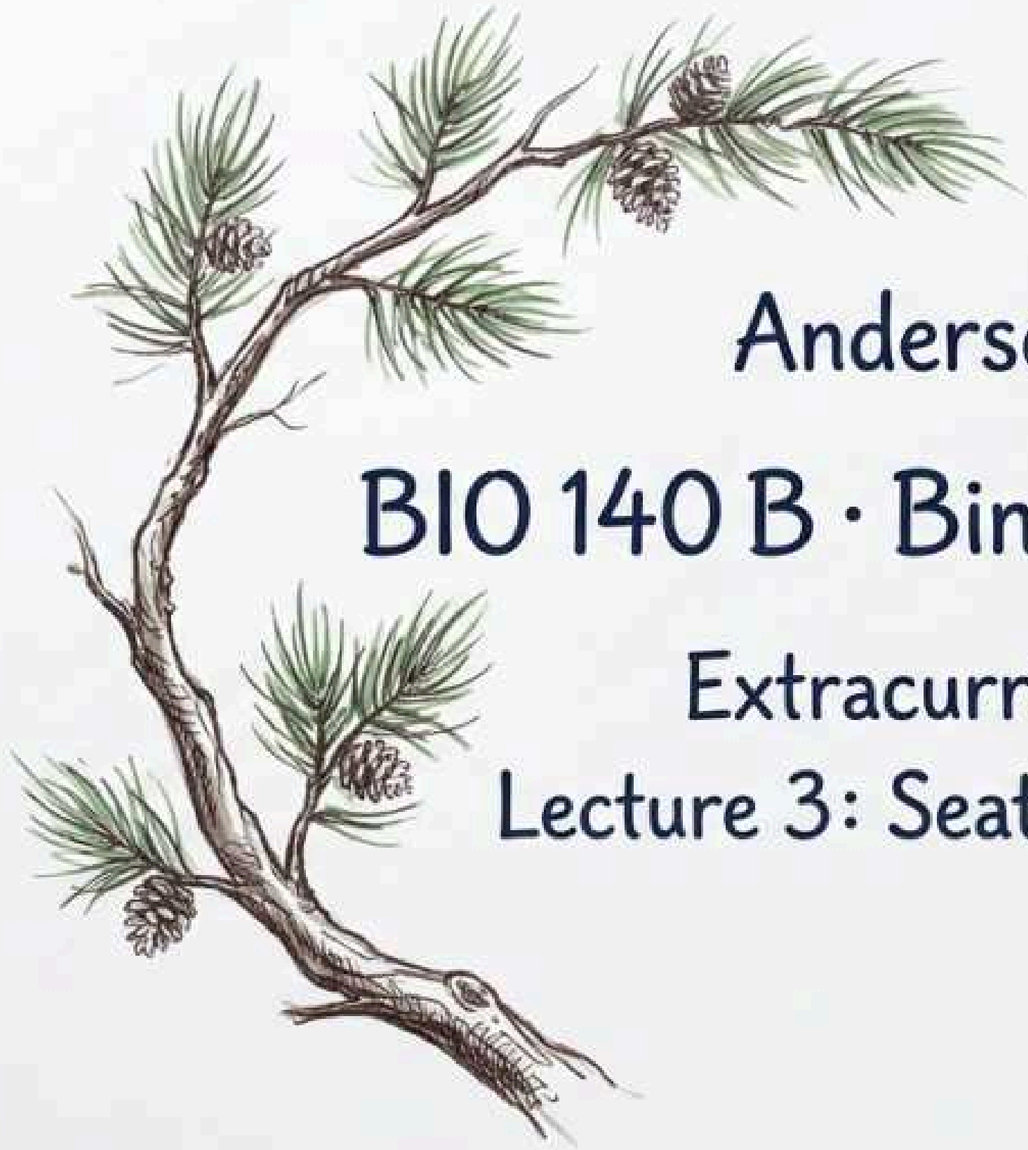


Anderson Academy

BIO 140 B · Binomial Nomenclature

Extracurricular: Biology

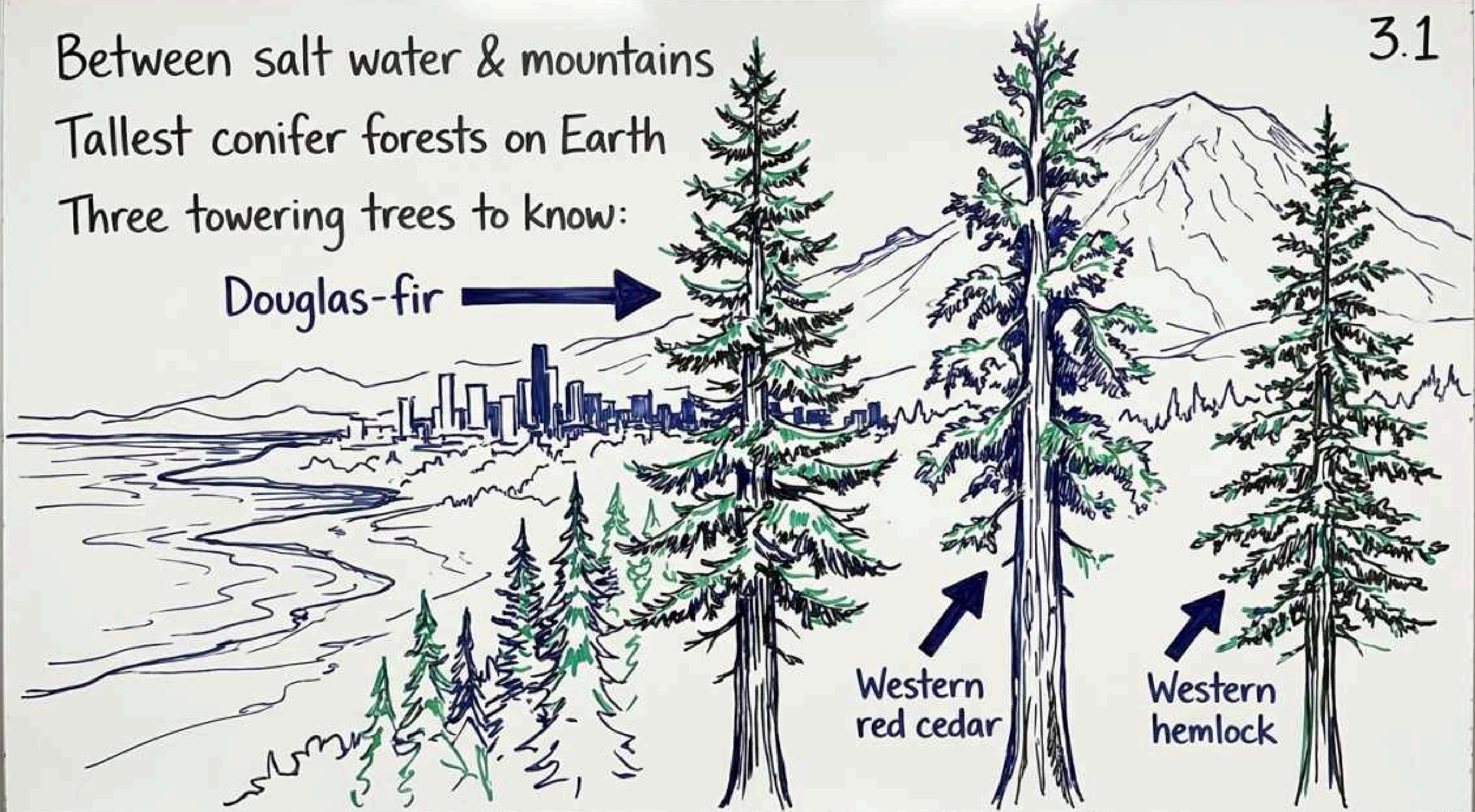
Lecture 3: Seattle and Puget Sound



Between salt water & mountains

Tallest conifer forests on Earth

Three towering trees to know:



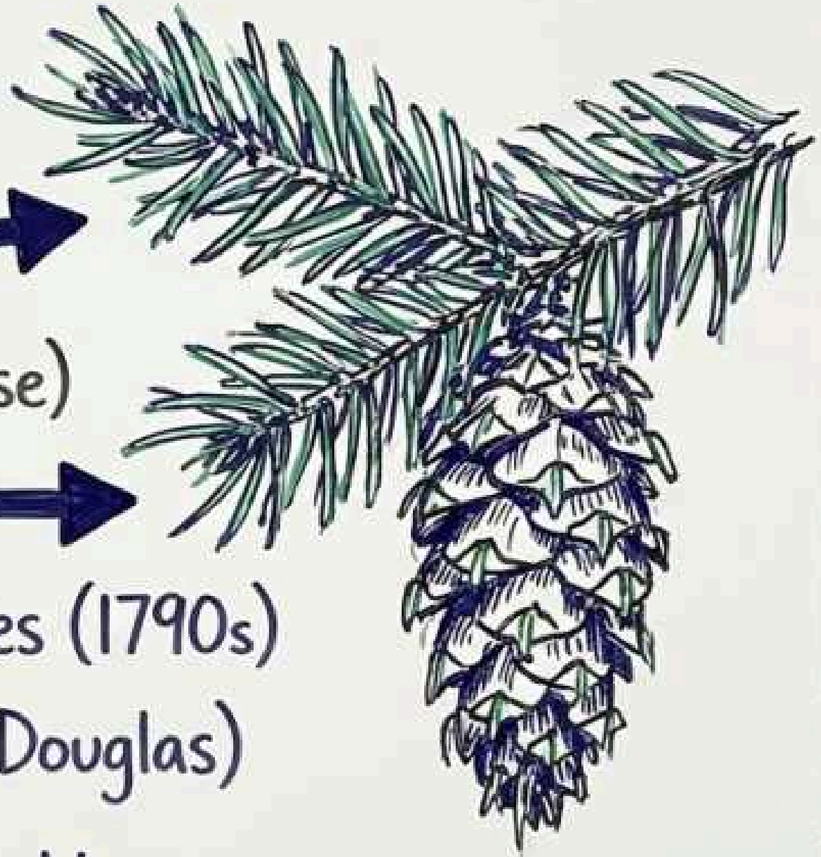
Douglas-fir (giant timber tree)

Pseudotsuga menziesii [Mirb.] Franco



Pseudotsuga

- Pseudo = false
- tsuga = hemlock (Japanese)
- **menziesii**
  - menziesii = Archibald Menzies (1790s)
  - (Common name honors David Douglas)



Franco moved it from Mirbel's older name

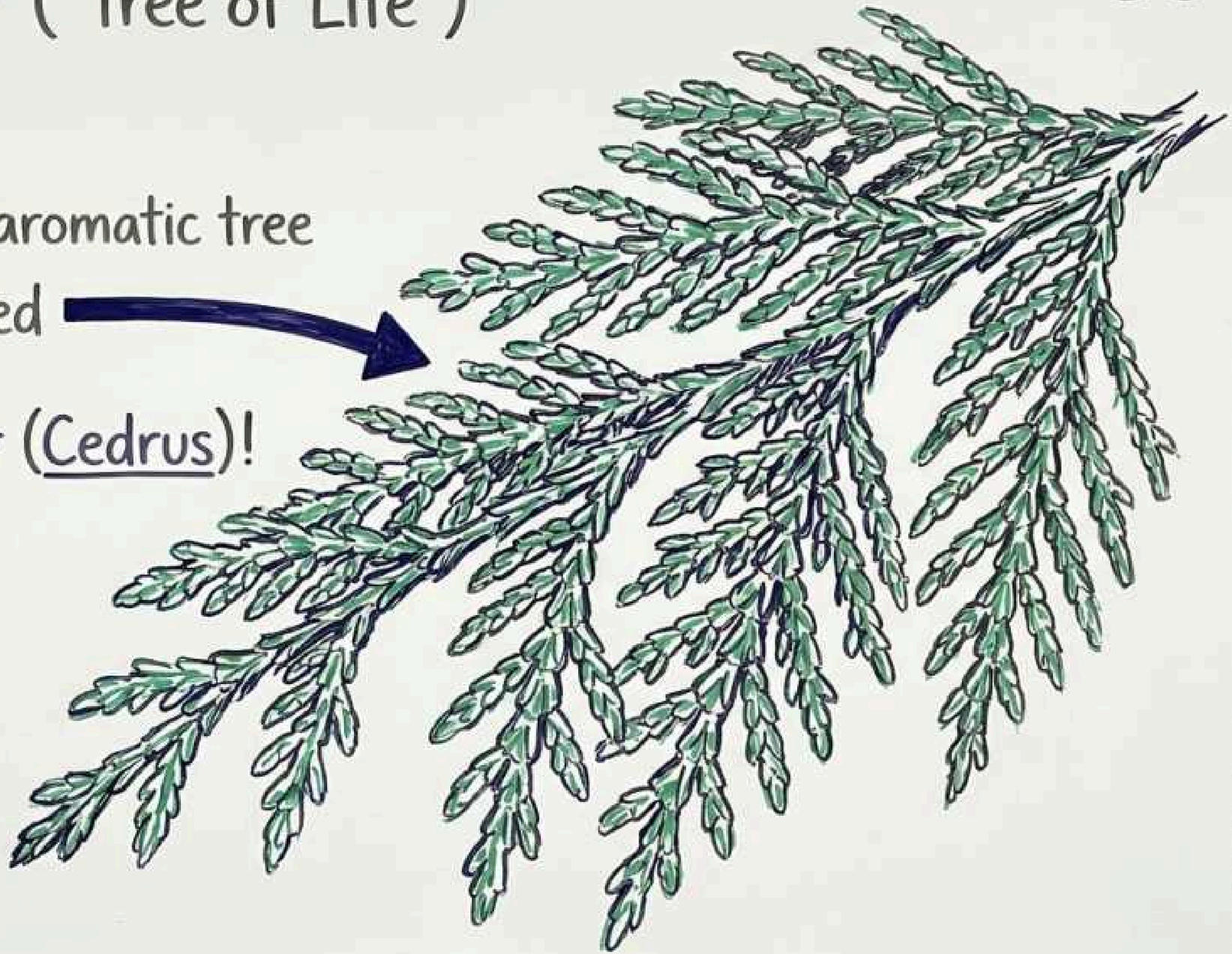
Western red cedar ("Tree of Life")

Thuja plicata

Thuja = ancient Greek aromatic tree

plicata = folded / pleated

Note: Not a true cedar (Cedrus)!



Western hemlock (WA State Tree, 1947)

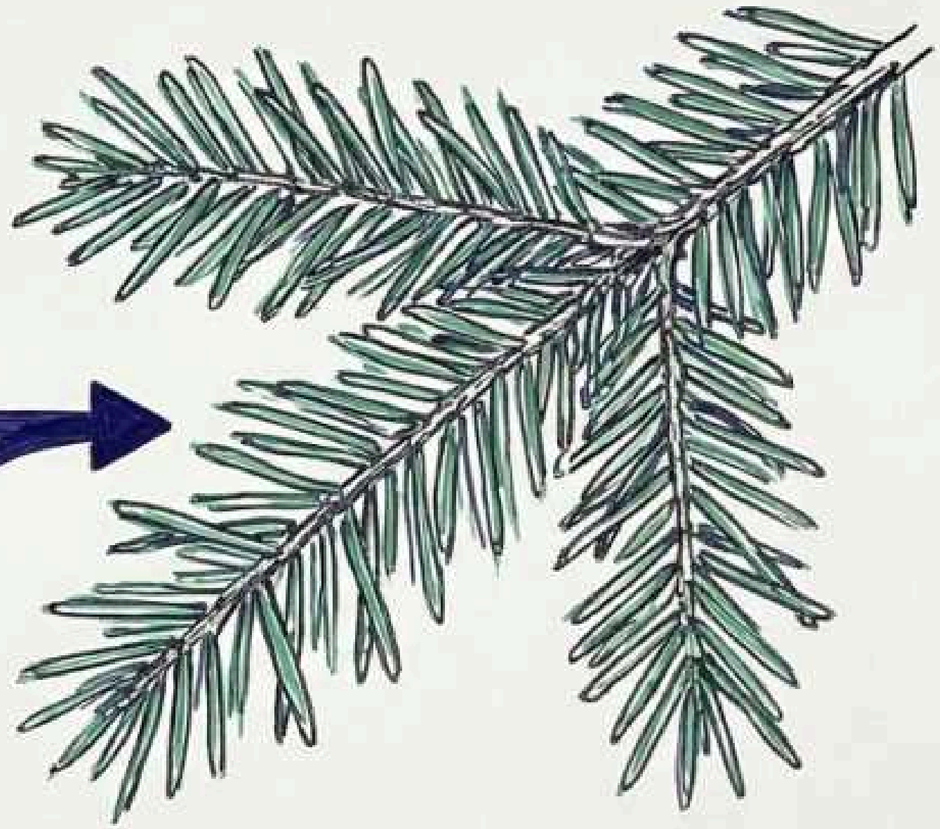
Tsuga heterophylla



Tsuga = Japanese for hemlock

hetero = differing

phylla = leaves



Watch for the drooping top!

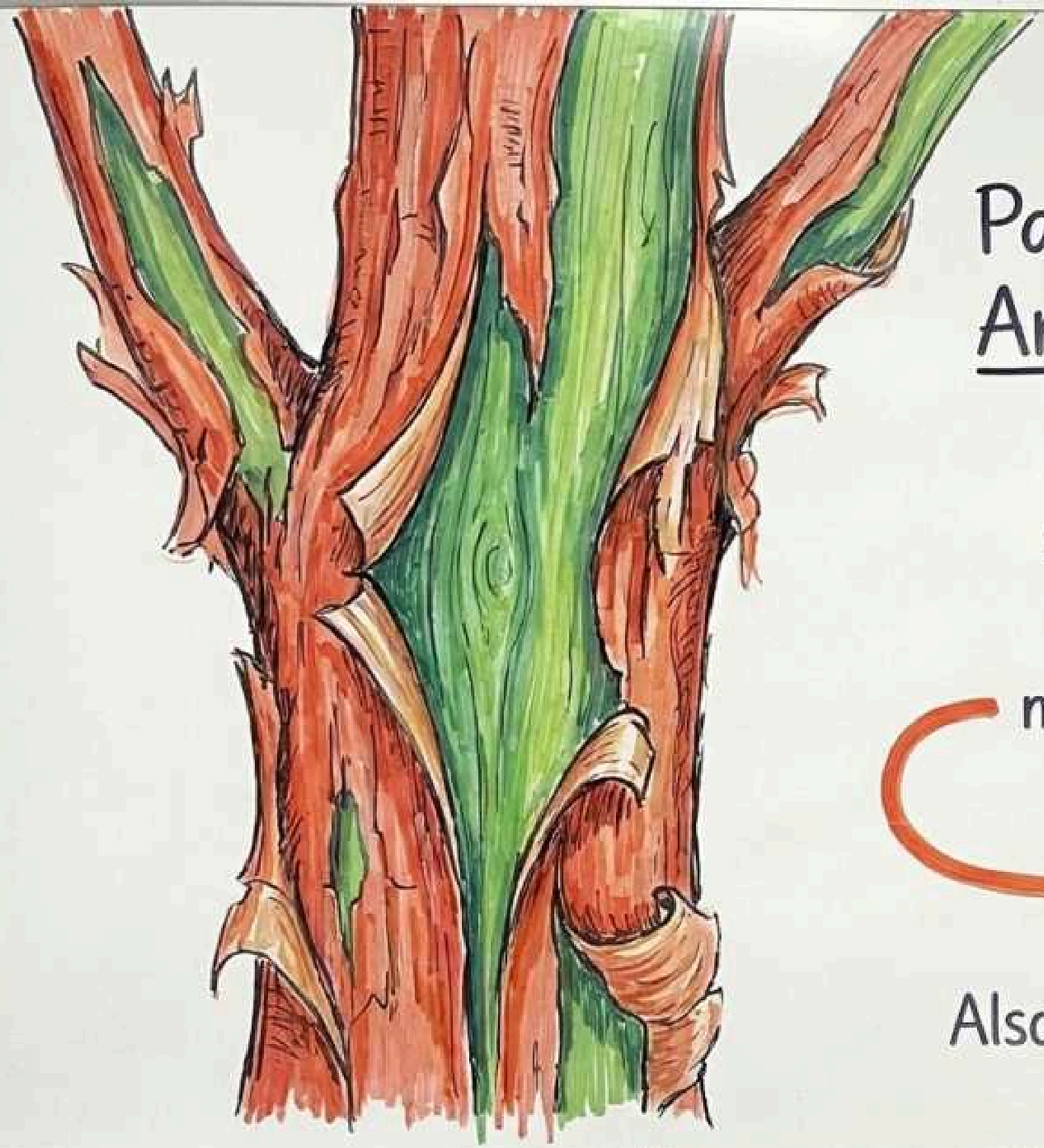


Gaultheria =
Jean-François Gaultier
(18th c. French doctor)

shallon = Chinookan word
(source of salal)

Salal (forest understory)
Gaultheria shallon

Two languages, one plant



Pacific madrone (sunny bluffs)

Arbutus menziesii

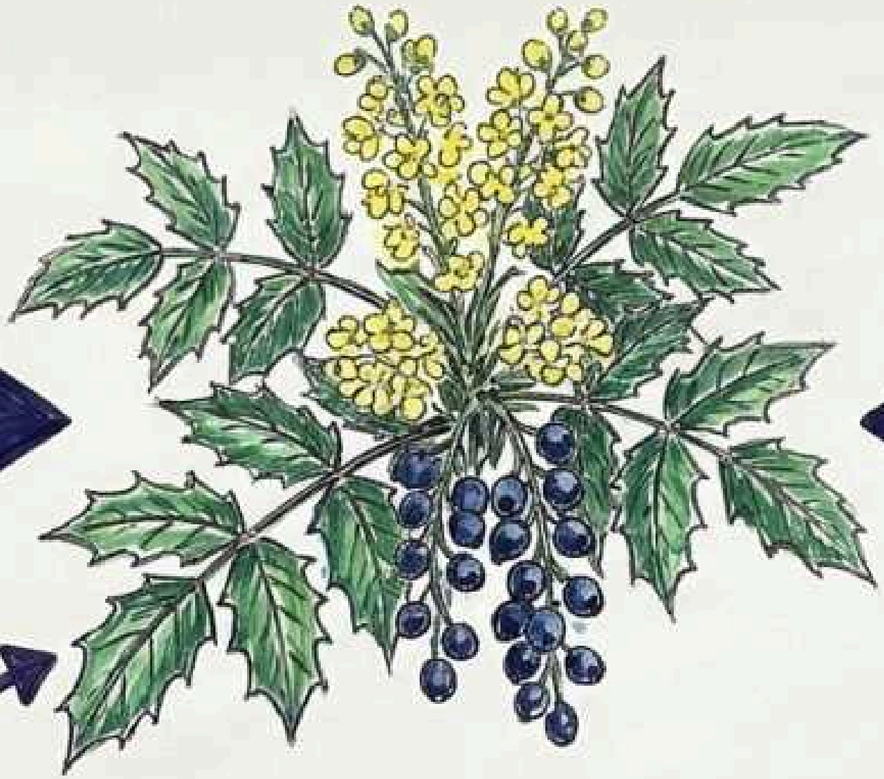


Arbutus = Latin for strawberry tree

menziesii = Archibald Menzies (honored again!)

Also called arbutus in British Columbia

Oregon grape (a live name change!)



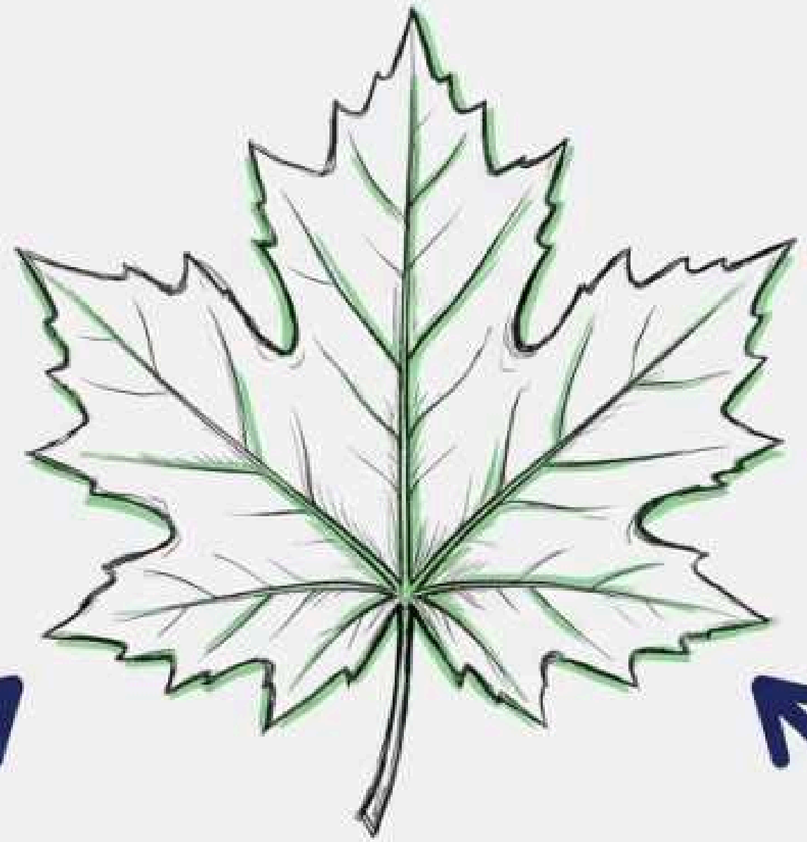
Berberis aquifolium (ITIS)

OR

Mahonia aquifolium (GBIF)

aqui + folium = holly-leaved

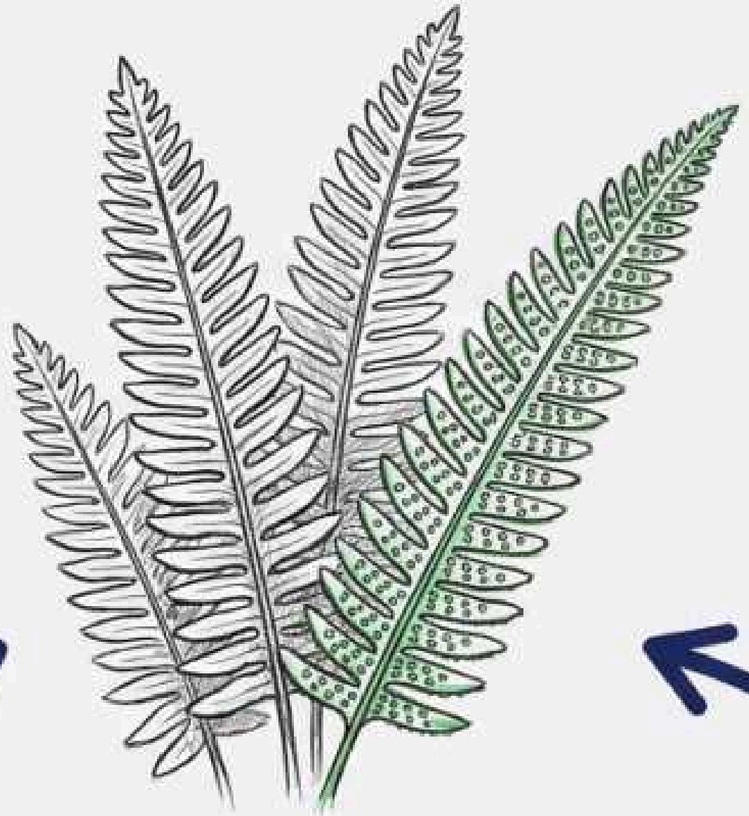
Both point to the exact same plant.



Bigleaf maple: Acer macrophyllum

Acer = maple

macro = large | phyllum = leaf



Western sword fern: Polystichum munitum

Poly = many | stichum = rows (spore dots)

munitum = armed/fortified (toothed edges)



Golden chanterelle
(OR State Mushroom)

Cantharellus formosus

Kantharos = Greek drinking cup
(funnel shape)

formosus = beautiful



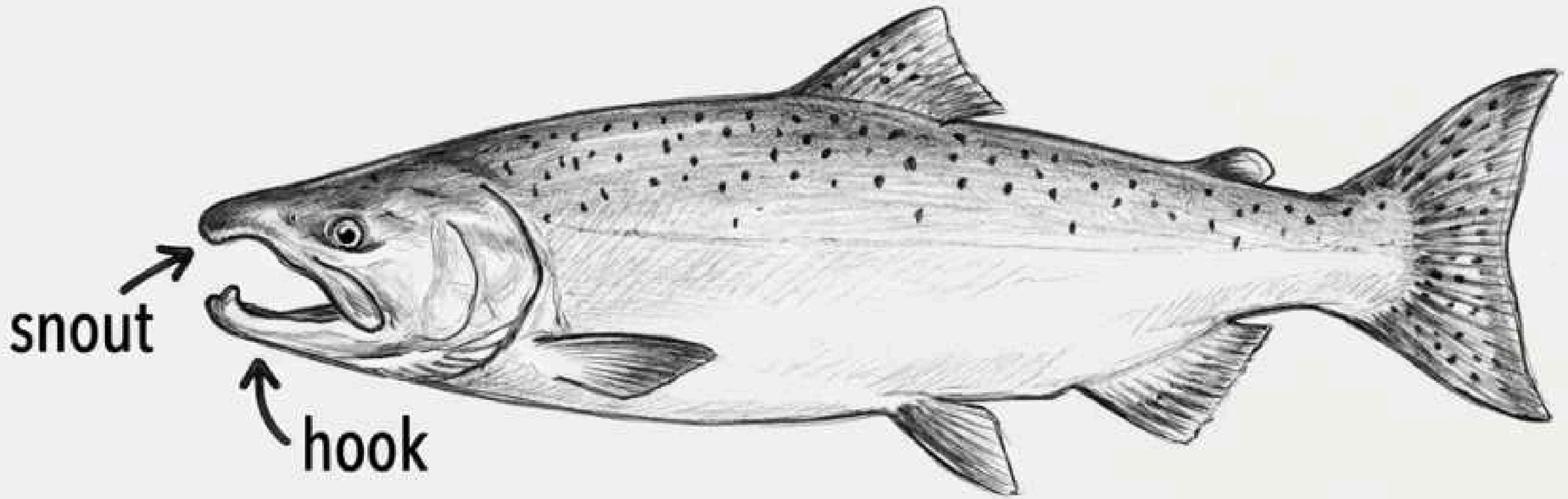
WARNING: Never eat wild mushrooms based on a name or picture alone!



Orca / Killer Whale (WA Marine Mammal, 2005)

Orcinus orca [Linnaeus] ← (Includes endangered fish-eating Southern Residents)

- Orcinus = belonging to Orcus (Roman underworld)
- orca = Latin for whale



Oncorhynchus = *onkos* (hook) + *rhynchos* (snout)

Chinook salmon: *O. tshawytscha*

(Name from Kamchatkan language)

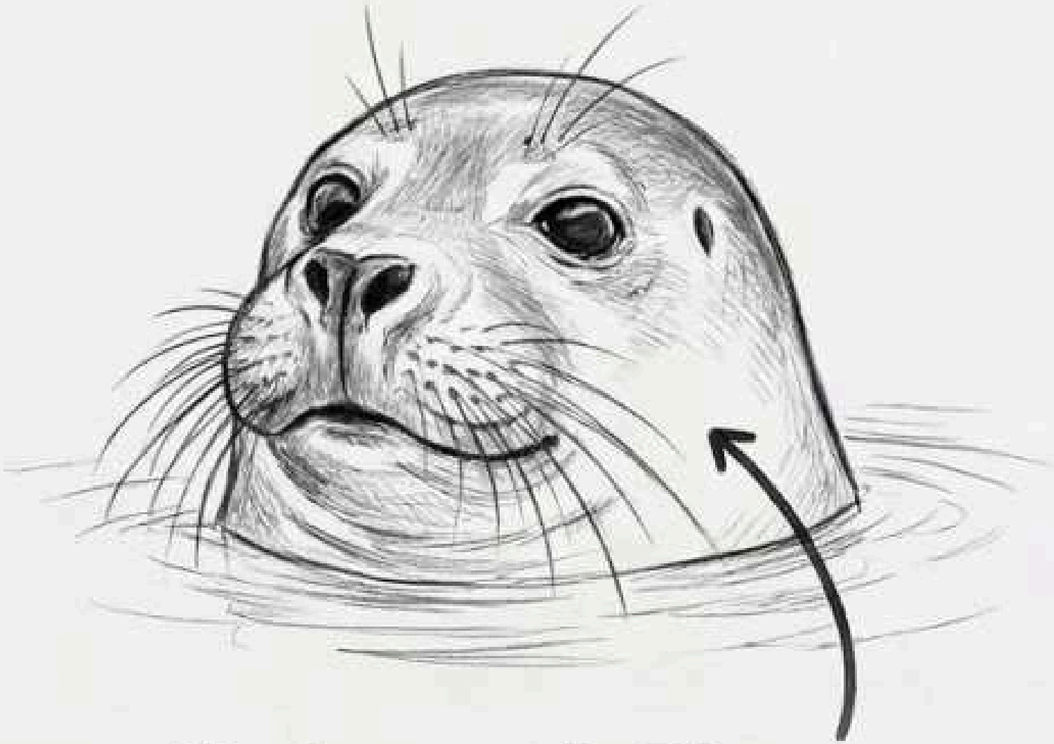
Steelhead / Rainbow trout: *O. mykiss* (WA State Fish)

(Moved from *Salmo* in 1989 due to Pacific salmon kinship)



Great blue heron: ***Ardea herodias***

Ardea (Latin heron) + *herodias* (Greek heron) = heron heron



Harbor seal: ***Phoca vitulina***

Phoca = seal

vitulina = calf-like



Steller's jay (park scolder)

Cyanocitta stelleri

Cyano = dark blue | *kitta* = Greek for jay *stelleri* = Georg Steller (Alaska, 1741)

Note: Not the eastern blue jay (*C. cristata*)!



C. caurinus → *C. brachyrhynchos*

American crow (The 2020 Lump)
Corvus brachyrhynchos

Brachy = short | *rhynchos* = billed

Old name: Northwestern crow (*C. caurinus* - of the NW wind) is now a subspecies.

(Same unique epithet as the bigleaf maple!)



Coast rhododendron (WA State Flower)

Rhododendron macrophyllum

Rhodo (rose) + *dendron* (tree)

macro (large) + *phyllum* (leaf)



American goldfinch (WA State Bird)

~~*Carduelis*~~ → *Spinus tristis*

tristis = sad (referring to its call)

(Moved from *Carduelis* in 2009)



American robin

Turdus migratorius

migrating thrush



Pacific banana slug:

Ariolimax columbianus

Arion + *Limax* (joined older slug genera)

columbianus = Columbia River region



Giant Pacific octopus:

Enteroctopus dofleini

Honors German zoologist Franz Doflein

The Seattle Pattern (Synthesis):



[1] People Honored:

Pseudotsuga, A. menziesii

[2] Plant Described:



Thuja plicata, A. macrophyllum

[3] Local Languages:

G. shallon, O. tshawytscha



[4] Name Changes:

Spinus, C. brachyrhynchos, Berberis/Mahonia

