



# Growing Hops in Your Garden

Laurie Gallant, Hazelton Hops  
Heritage Park Museum, Terrace BC

June 3, 2019

# Outline

1. about hops
2. planting
3. harvesting



# About Hops

- \* indigenous to North America but early French, English, Dutch and Germany settlers introduced cultivated European hop varieties
- \* hops, water, grain (barley), and yeast are the four main ingredients in beer
- \* hop gives beer flavour and aroma, acts as a natural preservative and gives the “head”
- \* brewers can create regionally branded and specialty flavoured beers since hops take on the terroir of the region where they are grown
- \* dominant hop producing regions are Western Europe, NW USA and China and in Canada, BC and Ontario.
- \* over 100 varieties of hops each with their own maturity timeline, yields and % alpha acids
- \* Hazelton Hops started in 2015 with 11 varieties in a test plot, now have 7 varieties

# Hop Botany

- humulus lupulus = earth wolf
- herbaceous perennial - 25 years
- dies back close to ground level each fall and sends out new shoots and rhizomes each spring
- under ideal conditions can grow 12" per day
- cannabis family; only female plants are used in commercial production
- can be propagated after 3-4 years
- lupulin - bitter, resinous yellow flower contains essential oils and acids
- alpha acids add bitterness and antibacterial properties - measured in IBUs and counteract sweetness of the malt
- beta acids add aroma and also have medicinal properties; there is no scale or standard to measure aroma - used in finishing stages



# Site considerations

- \* fertile soil (5 - 7% organic matter); pH 6- 6.5
- \* well-drained land
- \* high annual levels of sunlight
- \* good air circulation
- \* relatively dry climate (6-569 mm/yr)
- \* hardiness zone 3/4 to 7 depending on variety
- \* avg temp. April-Sept 10-19 degree C
- \* hops are a Top 10 crop under climate change conditions in north central BC
- \* hops need a support system to climb - can grow 18-24 feet in one season

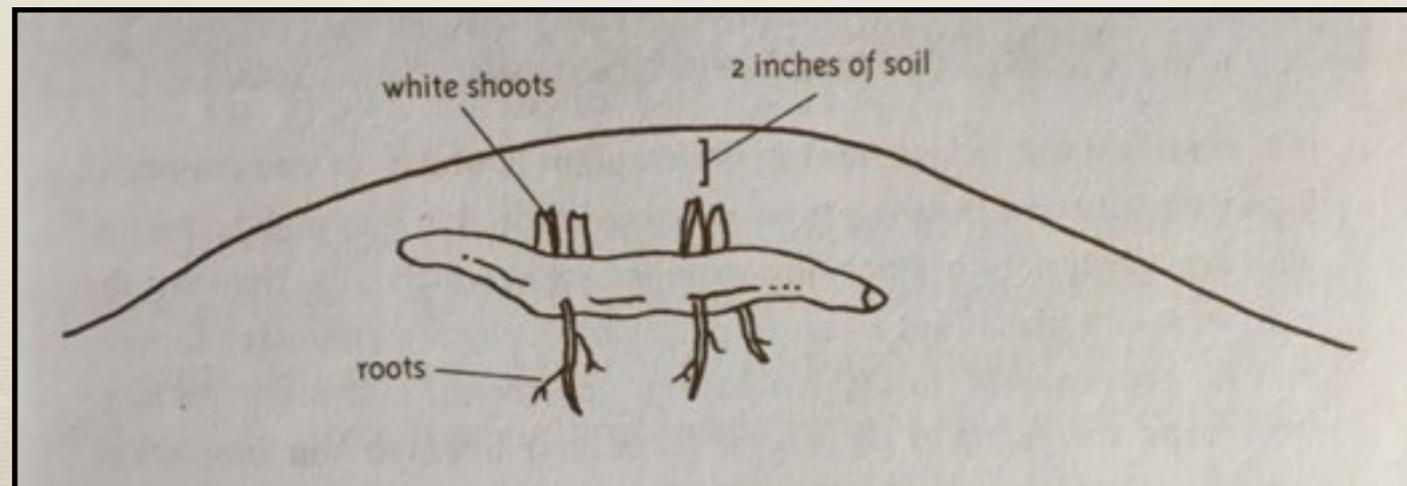
# Sourcing your rhizomes

- \* can be ordered through online catalogues (West Coast Seeds or Richters)
- \* or you can source local, organically grown and acclimatized hops through Hazelton Hops
- \* we sell 4 rhizomes for \$20 or 3 potted plants for \$25 and can make variety recommendations based on your site and needs
- \* some local nurseries also sell but usually they sell “hops” without knowledge of variety



# Planting your hops

- \* make a small hill in your soil and dig a small trench about 6" deep - add compost to increase nitrogen
- \* plant rhizomes with the white shoots pointing up
- \* cover with 2 inches of soil
- \* spacing - depends on how many plants and why you are growing them: 8" to 3' with one or two rhizomes per hill
- \* cover with 2 inches of mulch and mulch thickly in between the hills to prevent weeds
- \* keep the ground around newly planted hops moist
- \* add mulch throughout the season as needed
- \* you can plant in a 5 gallon bucket if you have limited space



# Caring for your hops

- \* keep your plants well-watered - moist but not saturated
- \* in dry weather and during cone production, water daily
- \* sprinklers not recommended in areas where downy mildew is a problem - use a soaker hose or a watering can and focus on the roots
- \* trouble shooting based on nutrient deficiency e.g. lower leaves bright yellow then brown and tie, spreads upward = not enough magnesium
- \* Homemade baking soda spray for fungal diseases: 1 tbsp per gallon of water

# Harvest and Post-Harvest

- \* plant will put out short side branches covered with round spiky burrs; add compost when burrs appear for best cones and water every day
- \* harvest season is from mid-August to early-October
- \* cones are ready when yellow powder (lupalin) appears and will be papery and light - pick a cone and pull or cut open; lupalin will be dark yellow-gold and strong aroma
- \* when past prime, cones turn tan colour around edges and eventually brown
- \* use a ladder to reach high cones or you can cut the whole plant and string down and harvest sitting down at a table
- \* pull off cones and put into a burlap or paper bag;
- \* if soil is acidic, add lime after harvesting
- \* after frost has killed green growth, cut back to ground, feed hill with some compost and cover with mulch
- \* can be chopped up and composted
- \* expect a few ounces in the first year, and up to 2 pounds per mature vine (3 or 4 years old)



# Using your hops

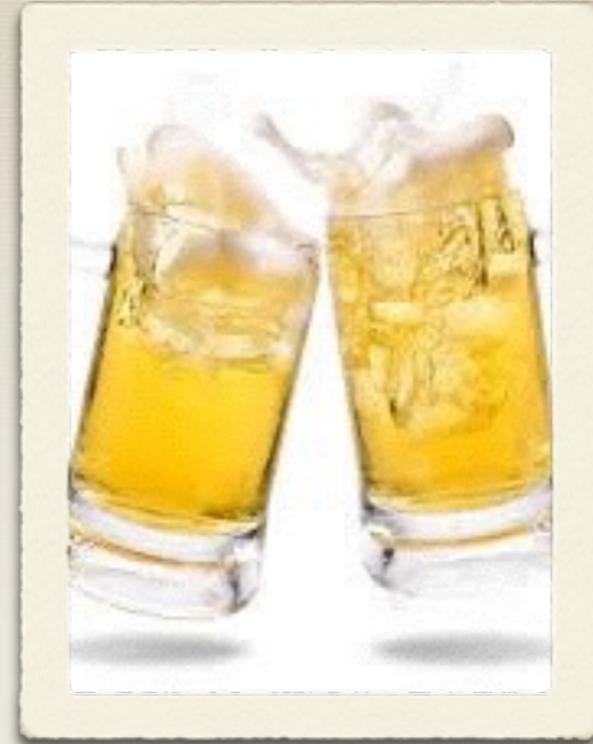
- \* can use fresh to make beer or tinctures; spring shoots are edible
- \* to preserve, dry asap using warmth, NO sunlight or strong artificial light as this will damage oils and have good circulation <air drying is fine!>
- \* whole dried hops can be used for dry hopping in beer or cider or in tea blends or in tinctures



# Thank you!

[www.hazeltonhops.com](http://www.hazeltonhops.com)

follow us on Facebook



## Resources:

The Homebrewer's Garden (Joe Fisher and Dennis Fisher, 1998)

Nova Scotia Hop Grower Guide 2013

