



Greenhouse Gardening 101

We hope to make the greenhouses a supportive and educational space for new gardeners. Follow these basic guidelines to help you get started on your gardening escapades!

Organic Gardening

- We are committed to organic gardening. It is VERY IMPORTANT that you do not bring in any plants, soil or fertilizer of your own. We need to monitor all materials that come into the greenhouse to keep the fragile environment in balance, reduce the risk of diseases and prevent the attraction of wildlife, such as bears. Please make sure the tools you use are clean as well.

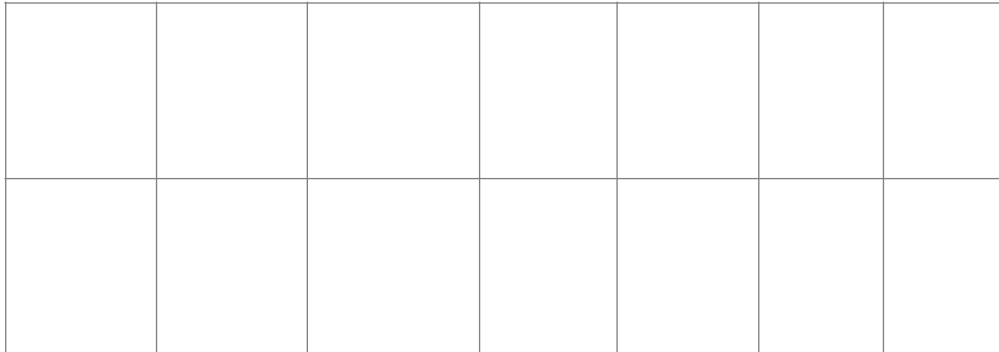
Selecting Seeds, and Planning Your Box

- Use the diagram of your plot below to plan the planting of your box.
- Each square in the diagram below represents a square foot in which one quantity of seeds can be planted. Each plant has a different number of seeds required to be planted per square foot (see seed order “seeds/sq ft” column) i.e.:
 - If you select 1 calendula you will need 9 seeds which need to be spread out evenly over a square foot for maximum growth.
 - If you select 1 basil you will need 4 seeds to spread over 1 square ft.
 - If you select 2 basil you will need 8 seeds to spread over 2 square ft.



Center Aisle

Wall Aisle



- Tall plants (tomatoes) need to be planted nearest the aisle, medium height plants (bush beans) in the middle and shortest plants (beets, carrots, lettuce) near the wall (as showcased in the diagram above).
- Some plants are short lived and can be planted in succession. You may want to select 2 or 3 sets of this type of seed, so that you can replant them depending on germination days for continuous harvesting.
- Cool weather plants (peas, spinach, kale, lettuces, mesclun, beets, radish, and arugula) can be sowed as soon as your boxes are ready and the water is turned on.
- Warm weather plants like cucumbers should be planted when the soil warms up around late May or early June.

Box Preparation

- **Remove old vegetation:** Organic material; moss, debris etc. from your box and compost it in the compost pile located beside the greenhouse. Please do not keep old vegetation inside the greenhouse as it will rot and cause disease.
- **Turn soil in the box:** There are 2 galvanized pipes buried half way down in some box, be careful not to disturb them, but dig around and below them for maximum aeration.
- **Top-up soil:** Use provided soil to fill your box up until 2” from the top edge.
- **Soil Additives:** Mix soil additives in when turning soil. Soil additives will be provided with your seeds.
- **Irrigation system:** irrigation is provided through the black plastic tubes that run

the length of your box and are held off the ground by wooden slats. It is important these tubes remain spread evenly across your box and are not damaged so please handle with care as you work around them.

- **Start to build your support for tomatoes, beans and peas:** Taller plants need support or they will fall over, break and die. Tomato cages are not good a good option for the tall, indeterminate¹ tomato plants provided through the GROW program as they will quickly outgrow the frames.

Seed Planting

- **Soak soil completely before planting seeds.**
- **Plant large seeds** i.e.: beans ¼” deep. **Small seeds** i.e.: basil should be broadcast on surface and covered with soil 1/8” deep. There are planting depth charts posted in the greenhouses.
- **Succession Planting:** To ensure a steady harvest, only plant a portion of the square foot initially. Plant the remainder of the seeds in the following weeks. Make sure to take germination time into consideration (detailed on seed order form & on the AWARE Website).
- **Thin Plants:** Crowded plants provide poor yield and are more likely to get disease. Make sure your plants have space to grow and take out the smaller plants - this process of ‘thinning’ can be done continually to ensure plants are just touching.
- **Cut and Come Again Plants:** Plants should be 4-5 inches tall before harvesting with scissors. Cut the entire plant about 1-2 inches above the soil or only harvest the outer leaves. HAND WATER the plant a generous amount after cutting it. Cut plants can be re-grown 2-3 times before a replant is needed. Harvest the entire plant when the seed stalk begins to form and the plant starts to ‘bolt’ (when the plant puts all it’s energy into going to seed).
- **Harvest plants** frequently i.e.: beans, peas to promote flowering and greater production.

Watering Systems

¹ Indeterminate varieties of tomatoes are also called "vining" tomatoes. They will grow and produce fruit until killed by frost and can reach heights of up to 10 feet although 6 feet is considered the norm. They will bloom, set new fruit and ripen fruit all at the same time throughout the growing season. They require caging and/or staking for support and pruning and the removal of suckers is practiced by many but is not mandatory.

- All boxes are hooked up to an automatic watering system.
- It is necessary to hand water plants until they germinate. Once germination has occurred gently water the seeds using one of the lighter watering settings on the hose nozzle, so that you do not disturb the seeds. Do not let soil dry out, especially around tomatoes and cucumbers. When watering by hose, turn water on by opening small black lever on 'Y' fitting. Make sure lever is OFF when finished.
- For hand watering by hose (NOTE Spruce Grove: there are 2 hoses in the left hand greenhouse at Spruce Grove, 1 inside hose, 1 outside hose).
 - To turn water ON: Turn the small black valve on 'Y' hose fitting to the "on" position (valve parallel (=) to hose).
 - To turn water OFF: Turn the small black valve to a position perpendicular (+) to hose. **VERY IMPORTANT because if the water is left on and the hose breaks, the automatic watering system to all of the boxes will be lost.**
- **IMPORTANT:** Do NOT touch any taped or wired water valves or timers.
- To ensure that your box is watered effectively, ensure the drip lines are not blocked by wooden slats or touching the soil. The drip lines (black plastic tubes) run across your box and have emitters holes every six inches.

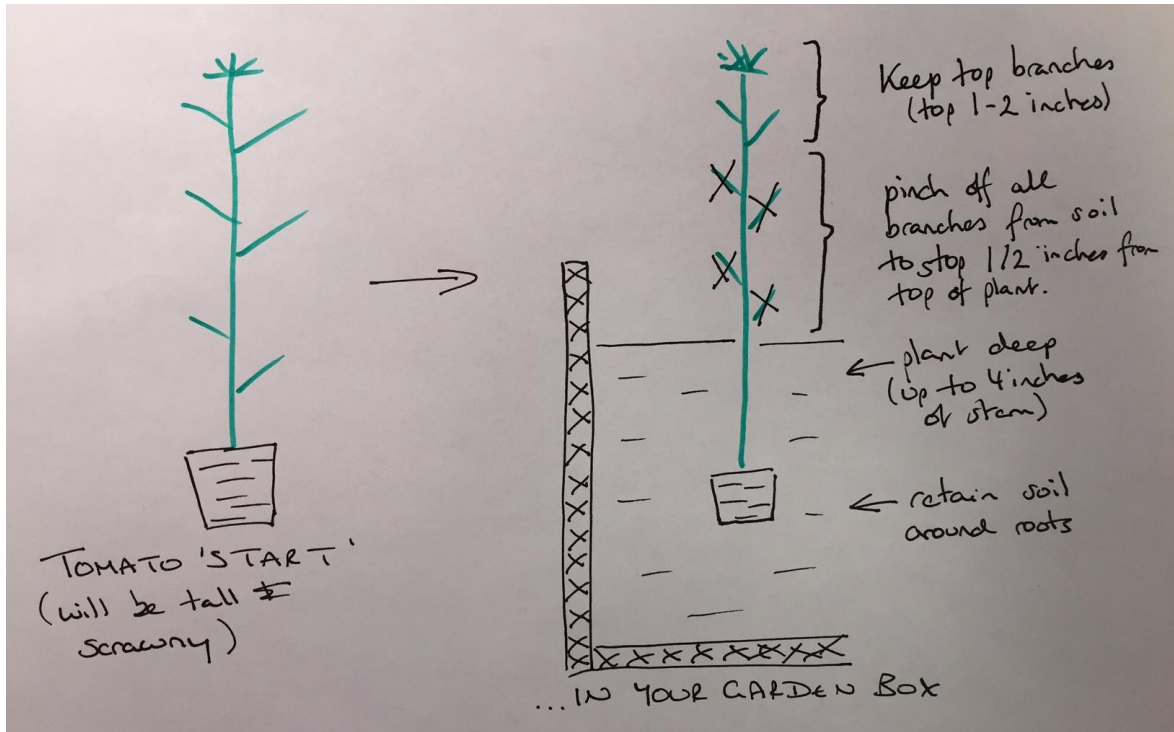
CARING FOR TOMATOES

Planting Tomatoes

- Smokers wash hands before handling plants to prevent transmitting the tobacco virus, which is DEADLY to tomato plants.
- Construct your staking system before planting so you do not damage plant roots.
- Wire tomato cages are not tall enough to support our indeterminate tomato. Stakes need to be around 6 ft. tall since the plants can grow to reach the top of the greenhouse.
- All our tomato plants are indeterminate; they grow very tall and produce through season.
- Plant tomato plant in the middle of the square foot. Plant only one tomato plant per square ft. nearest the aisle.
- Plant Deep – when you plant your tomato 'starts' (seedlings) you want to plant them deep as this will allow new roots to grow from the stem which will help the plant quickly grow sturdy and tall. Bury up to 4 inches of the stem underground. Then pinch off all existing branches that fall below 1" from the top bunch of

leaves.

- New plants need to be hand watered daily, for at least the first 2 weeks to establish roots. Remember neglect is your only enemy. Coordinate with your fellow gardeners if you are unable to attend to on a daily basis.
- **Do not water whole plant or leaves**, as this will promote rot. Always water soil around base of plant.



Taking Care of Your Plants

- Once a plant becomes big enough, it needs to be tied to a staking system, use a soft material and tie loosely.
- Prune leaf branches several inches up from soil to allow circulation. This will help prevent disease.
- Prune leaf branches that are very long, with no flowers on them, to ½ lengths. The plant will grow taller and not bushy. This will prevent accidental breaking of branches.
- You can pinch out suckers (small branch growing between main branch and vine stem) when they have grown 2 leaves. This will help produce quality fruit.
- Remove any dead or yellow leaf branches. Compost in the compost pile located beside the greenhouse.

- Never prune above the top blossom cluster to avoid accidental pruning out the 'leader' (main growing stem).
- About 3 weeks before the end of season 'top plant', so remove all flowers and tiny tomatoes to allow plant to devote energy to ripening tomatoes that are of good size.
- On hot summer days, if soil surface is dry, hand water. Remember a tomato is 95% water.

Harvesting

- Harvest tomatoes when they are firm, just before they have reached their colour peak. Store tomatoes at room temperature, out of sunlight.
- Tomatoes left hanging on vine will not taste as good as those harvested earlier. Their flavour components start to decrease.
- Harvest by gently breaking the stem just above the fruit. Always try to keep this bit of stem attached. Fruit will keep longer after picking.
- If your plant has an entire branch full of ripe tomatoes (e.g. Roma cherry type) cut the whole thing off with scissors. The intact branch lasts longest of all.
- Pick often to encourage the production of more fruit
- Green tomatoes ripen better in the dark than in light. Place green tomatoes in a single layer between full sheets of newspaper in a box. Tomatoes should start to ripen in about a week.
- For faster ripening place your green tomatoes inside a paper bags with an apple.

General Information

- Please report any problems with inside temperature, watering systems or pests to your greenhouse ambassador (details listed in each greenhouse) or AWARE (604-966-7806, email: grow@awarewhistler.org) immediately.
- There are thermometers hung in the middle of each greenhouse and should read between 25 – 30 degree Celsius.
- Regularly check your plants (and greenhouse) for pests i.e. aphids, slugs, spider mites etc. and report concerns immediately to AWARE (ideally send pictures) . Information on some common pest control will be emailed at a later date.

Online Resources



- Learn more about gardening in Whistler by visiting our online resource page:

www.awarewhistler.org/whistler-gardening-101/



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