

## March 28/29, 2025 Blueberry Pruning Workshop

- Types and varieties of blueberries grown
  - **Northern Highbush** (larger plants with heaviest yields, Zones 4-8); **Lowbush** (closest to wild, good for containers); **Half-high** (cross between northern highbush and lowbush); **Rabbiteye** (zones 8-9); Select multiple varieties to cross-pollinate and expand the harvest season
- The basics of plant growth, understanding wood age and terms used
  - Life cycle
    - Canes emerge from the base (crown).
    - Only one-year canes produce buds, which will fruit the following season
    - Fruit buds are located near the end of new branches and are plump and rounded. These become flowers and eventually fruit.
    - Vegetative buds are smaller and pointed and located further down the shoot. These become new branches (laterals).
- Proper growth
  - Fertilization requirements
    - pH level 4.5 – 5.5
      - 90% Elemental Sulfur (slow acting)
      - Ammonium Sulfate 1oz/yr at drip line up to 8 oz per plant (fast acting)
      - Aluminum Sulfate (fast acting and eventually toxic to BB)
      - Fast Acting Sulfur (Earth Science) 36% Sulfur – 26% elemental (free) + 10% fast acting sulfate (combined) + 12 calcium (in some forms raises pH, but not this form) + inert.
      - **Canadian** peat moss ~3.0 pH
  - Remove blossoms in first year
  - Full sun
  - Soil organic level (manure increases pH)
  - Mulch (pine needles don't acidify significantly)
  - Consistent irrigation (no wet feet)
- Pruning principles to address why pruning is important
  - Pruning maintains the vigor and yield; helps manage insects and disease; promotes larger and higher quality fruit and makes it easier to harvest. Its benefits are more long-term than short-term. 20% old wood removed doesn't affect yield.
  - Pruning has nothing to do with general cutting back (aesthetics) - it is very targeted and purposeful. Gurney's pruning description is terrible. "Prune the

tops back 3-4 inches.“ It does not differentiate between fruit and vegetative buds. This is a critical distinction!

- Pruning tools and timing
  - Bypass, snips, lopper, disinfectant, Feb-Mar when fully dormant
- How to choose the best fruiting wood when pruning
  - In general, treat each branch (lateral) as its own plant. Save those with enough vegetative buds to “feed” its fruit buds.
- Pruning from plant establishment to maturity
  - Yr1: no pruning and remove blossoms; Yr2: minimal and possibly remove blossoms, damaged crossing branches; Yr 3: If growth is stunted prune more heavily to stimulate new vegetative growth.
- Pruning mature plants. Moderate annual pruning spreads out the age of canes.
  - Daughter plants separate
  - Dead, diseased or weak canes
  - Rubbing
  - Old leaning out
  - Old unproductive
  - To open up the middle for air flow and sunlight for new canes
  - Thin to reduce to 10-15 (higher quantity if you can maintain openness for sunlight and airflow)
  - Thin down to 3-4 new, which should roughly match how many old canes are pruned out

How to fix poorly-pruned plants and plants that need rejuvenation

- Depends on the problem and to what extent.
- If little or no growth on old stems – prune heavily to encourage new growth. Heavy pruning results in much new growth, which creates other issues.
- If a lot of unmanaged growth on old and new stems, prune out canes to end up with ones of different ages.
- It will likely take a couple years to get plants stabilized. In most cases you will not want to remove more than 25% in any year.

### **Trouble shooting**

Netting is required unless your goal is to feed neighborhood birds.

Not producing at all

- pH out of range – you will also see little or no vegetative growth
- Pollination – lack of bees and other beneficial pollinators

### Many Small vs Fewer Large berries

- Too many stems per plant 10-15 ideal
- Older stems don't produce as well
- Plant multiple varieties for cross pollination even though they are self-pollinating

Disease/Insects - whether organic or not, it is better to maintain good cultural practices rather than fix issues after they arise.

- Dormant oil sprays
- Fungicides
- Insecticide
  - BB Maggot
    - Symptom - soft berries
    - Small black flies come out of soil at the right time to lay 1 egg in each blueberry; mid-section of plant; salt-water larva test
    - Leave NO fruit on the ground, throw in garbage (do not compost)
- Protect beneficial if spraying