

"Wherever fruit can be grown in abundance, a liberal supply should be prepared for winter, by canning or drying. Small fruits, such as currants, gooseberries, strawberries, raspberries, and blackberries, can be grown to advantage in many places where they are but little used and their cultivation is neglected." - MH

## Why Grow Berries?

- Almost universally loved.
- Can be grown in most areas of the U.S.
- Known for their many health benefits
- Conventional berries are often highly sprayed (especially strawberries), so you don't want to buy them from the store!
- Relatively small investment and quick return (compared to other fruits)
- Better chance of success (compared to other fruits)





## How Quickly Can You Expect a Harvest?

- Primocane bearing blackberries and raspberries 4-5 months to small first harvest, then every late summer/fall after that.
- Strawberries 7 months using the annual plasticulture system. 1 year using the matted row system. Spring production.
- Blueberries 3 years to first, small harvest, 5+ years to full production. Early to mid-summer production.

## Berries From Easiest to Hardest to Grow

(In My Opinion)

- Blackberries
- Blueberries
- Raspberries
- Strawberries



### Average Cost of Planting (Just Plants)

### (Per Acre) for Comparison

- Blueberries 1090 plants = \$8000 (4' spacing in row)
- Strawberries 14,500 plants = \$5000 (12" spacing in double row)
- Raspberries 2180 plants = \$3270 (2' spacing in row)
- Blackberries 1090 plants = \$3200 (4' spacing in row)
- \* All planting densities calculated at 10' between rows except strawberries which were calculated with double rows 6' on center.
- \*\* Does not include cost of trellis for raspberries & blackberries or any other establishment costs.





### Planting Life Expectancy

- Strawberries Annual production 9 months
   Matted row production 3 to 4 years
- Raspberries 10+ years
- Blackberries 15+ years
- Blueberries 30+ years

# General Cultural Recommendations (Applicable to All Berries)

- Use raised beds to avoid standing water (or grow on a hillside).
- Water regularly through drip irrigation.
- Berries love a soil rich in organic matter.
- Berries benefit from mulching.
   (Strawberries with straw or plastic mulch, all the others with wood chips or woven fabric.)
- Use a fence to keep deer out.
- You may want to consider bird netting (unless you are growing enough to share).





### Specific Cultural Recommendations

#### Brambles (Blackberries and Raspberries)

- Blackberries like it hot (They don't do so well in the far northern parts of the country).

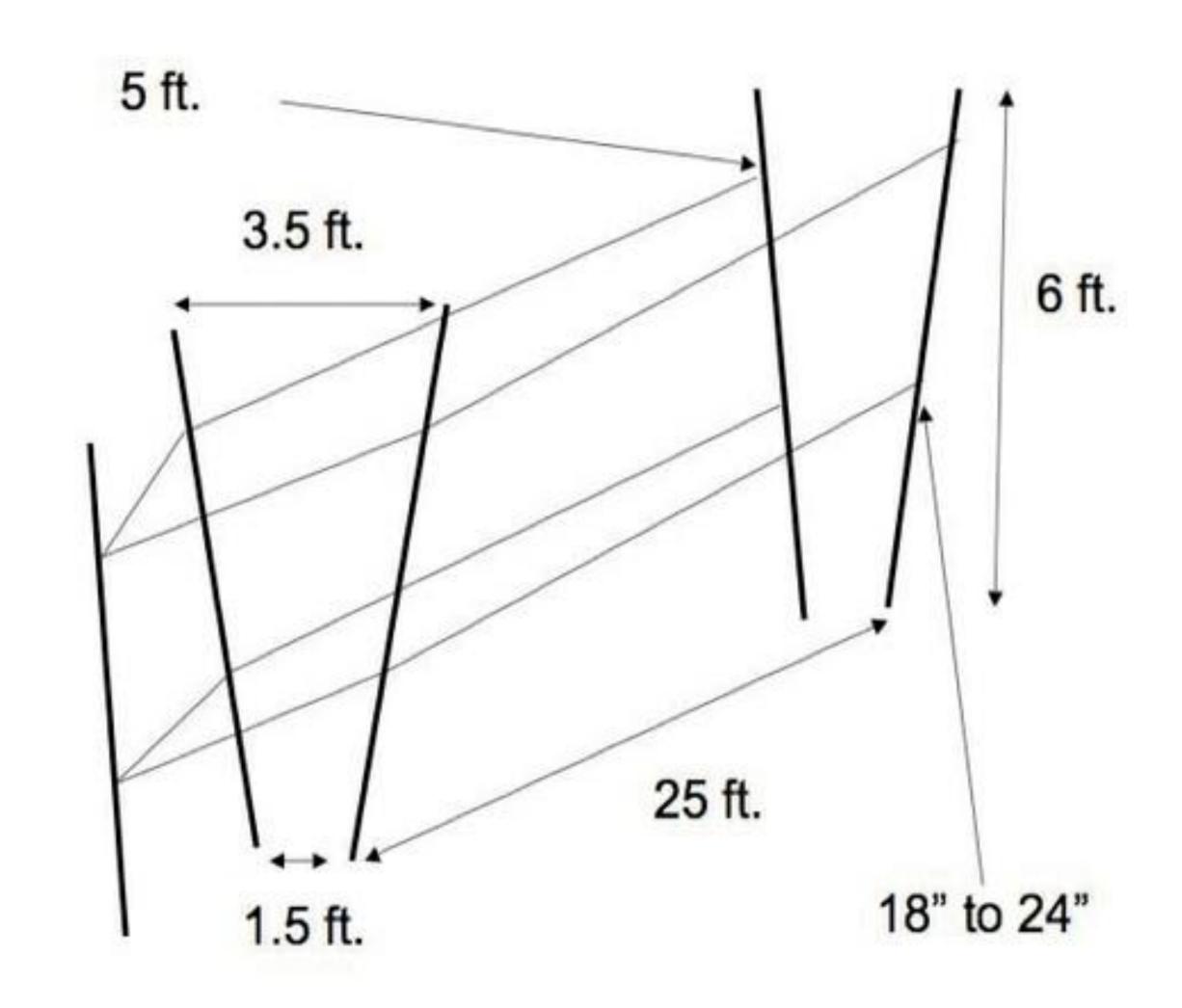
  Raspberries like it cooler so they won't grow well in the Deep South.
- Plant blackberries 3-4' apart in the row, raspberries 1-2' apart.
- I recommend starting with primocane bearing varieties (also called Ever-bearers or Fallbearers). They are far easier to prune and less disease-prone (vs. floricane varieties).
- A couple of recommended varieties:

Blackberries: Prime-Ark Freedom

Raspberries: Caroline

# Specific Cultural Recommendations Brambles (cont.)

- I recommend a V trellis for growing brambles using 6' or 8' t-posts (see illustration). I recommend 3 or 4 wires (instead of the two in the illustration).
- Primocane blackberries should be tipped (pinch 3/4"-1" off the growing tip) at 15" and 30" (alternately, southern growers may try just tipping once at 3')
- Primocane raspberries do not need to be pruned at all in the summer.
- Raspberries should not be allowed to grow out into your pathways. They will take over if you let them!



# Specific Cultural Recommendations Brambles (cont.)

- In January, cut primocane raspberries and blackberries all the way down to the ground (don't leave stubs sticking up).
- Fertilize in the early spring with compost and any specific amendments needed (according to soil test)
- Primocane brambles are perfect candidates for growing in caterpillar tunnels extending the season and increasing fruit quality.
- With experience, you may want to branch out into floricane brambles. Pruning information at <a href="https://www.noursefarms.com/news/post/bramble-pruning-weve-got-your-back/">https://www.noursefarms.com/news/post/bramble-pruning-weve-got-your-back/</a>





### Specific Cultural Recommendations

#### **Blueberries**

• You will choose different types of blueberries depending on where you live in the U.S.:

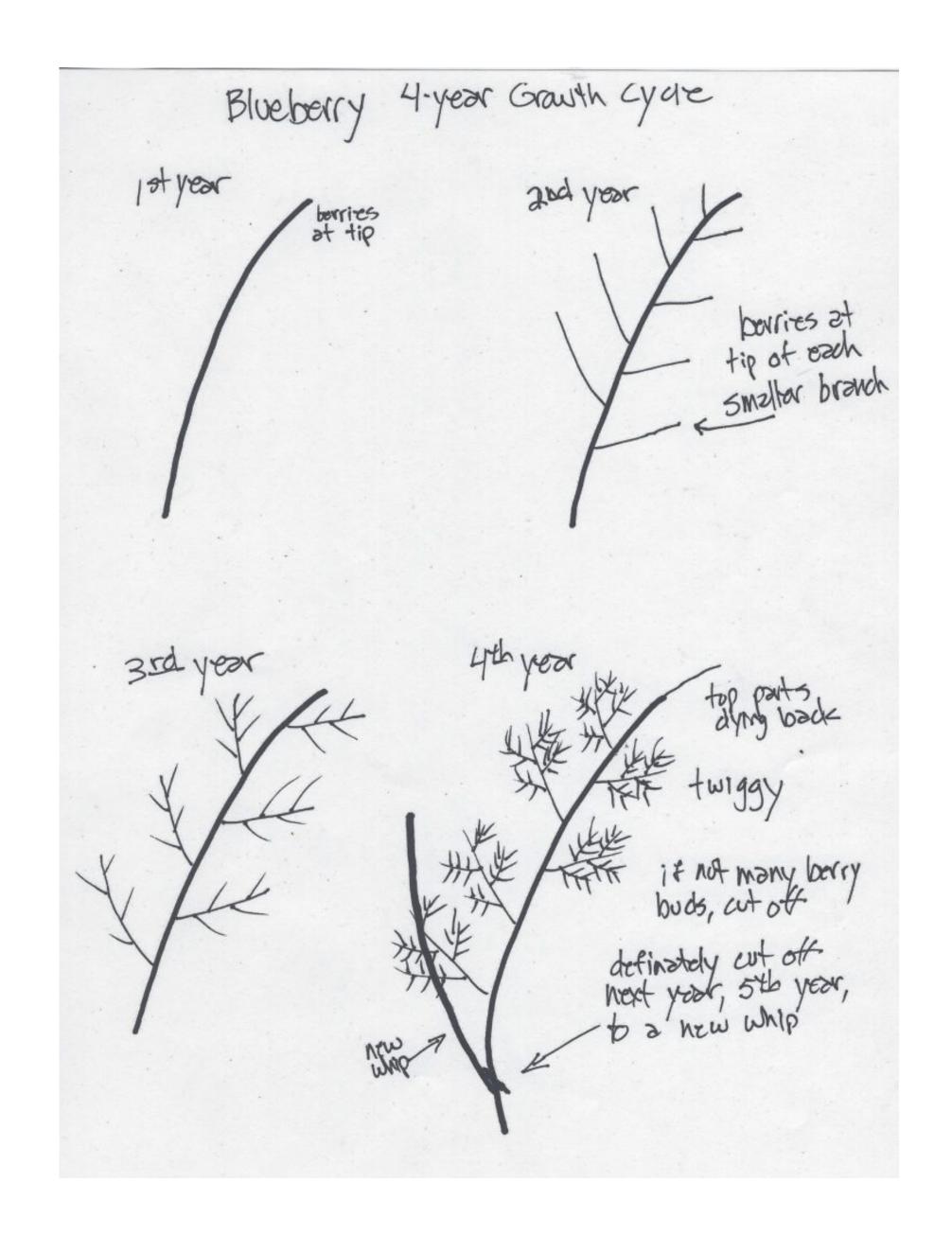
Highbush — for the middle and northern half of the country

Rabbiteye and Southern Highbush — for the southern part of the country

• Blueberries have very shallow root systems, so watering and mulching is extremely important. Also, you have to be very careful with cultivation. Only cultivate a few inches deep at the most.

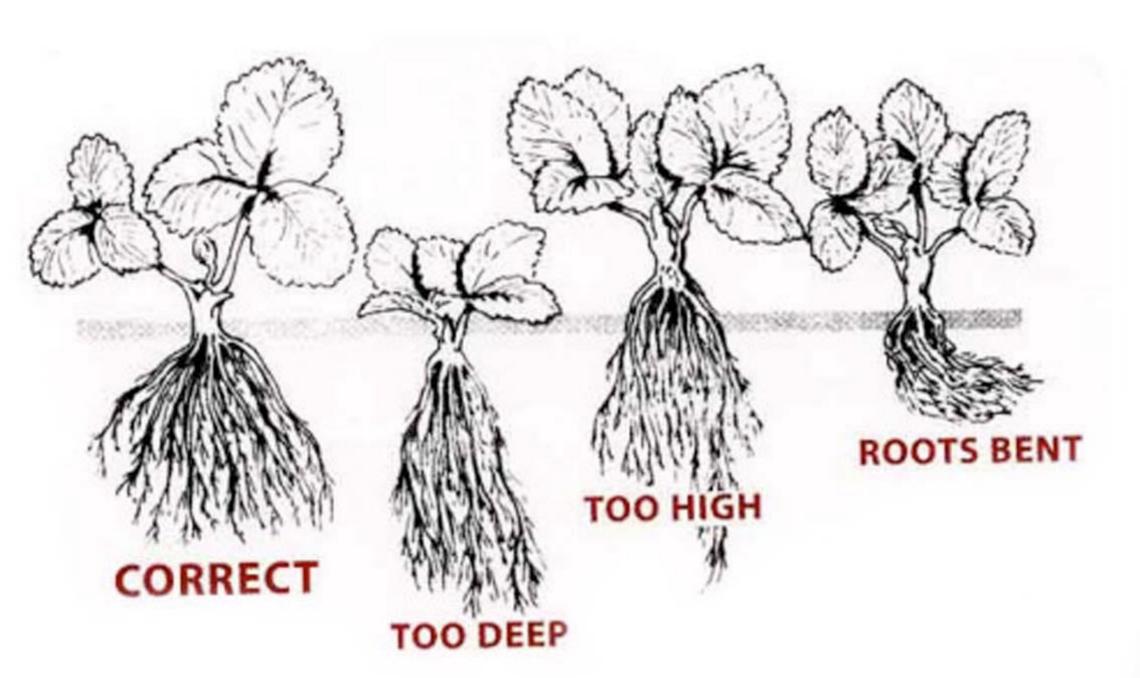
## Specific Cultural Recommendations Blueberries (cont.)

- Blueberries like an acidic soil (pH 4.5-5.5). The general recommendation is to fill your planting hole with 50% peat moss/50% garden soil when you start your blueberries.
- Other than deer and birds (and SWD), blueberries have (relatively) few pest or disease problems.
- Pruning is critical. Prune out all dead wood, low-to-ground shoots, and anything clogging up the center of the plant. Then prune out 1/5 to 1/3 of the old growth, keeping the shoots young and productive (see illustration to the right). Do this in late February.



# Specific Cultural Recommendations Strawberries

- Planting depth is extremely important (see illustration to the right)
- Strawberries need a lot of protection:
  - a. Protection from deer and voles (with fencing and traps).
  - b. Protection from cold (if winter temperatures go below 10 deg.), and protection from frost when they start to flower. Use floating row cover.
  - c. Protection from rain and wet conditions (use caterpillar tunnels) or just keep all ripe or diseased berries picked off.
  - d. Protection from birds when berries ripen.





## Specific Cultural Recommendations Strawberries (cont.)

- I recommend using the annual plasticulture system (unless you live in the way north).

  Although it seems like more work, it is actually less work than renovating the plants every year, watering and weeding all summer/fall, waiting a whole year from planting until harvest, and then having a matted mess to try and pick in. Plus, you get a longer picking season!
- I also recommend "June-bearing" varieties rather than Day-neutral or Everbearing varieties. It's easier to deal with a lot at once rather than dealing with a little bit over a long time. Also the Everbearers don't do well in the heat. We grow Chandler.
- Ask growers in your area what varieties they use.

### SWD

#### The three dreaded letters

- SWD stands for spotted-winged drosophila (a type of fruit fly).
- Most fruit flies lay their eggs in overripe fruit. What makes SWD so bad is that they lay their eggs in green/ripening fruit so that as the fruit ripens, the larvae are hatching out and eating the fruit.
- It has become a major issue in small fruits all over the country.
- It is very hard to control organically. Sometimes "ignorance is bliss".
- Keep fruit picked regularly (don't let it overripen on the plant). Freeze or eat fruit quickly after harvest.
- https://smallfruits.org/2020/07/organic-management-of-spotted-wing-drosophila-swd-in-small-fruit-production-systems



### Resources:

- These are plant sources I have used and been satisfied with. There are MANY others out there that may be just as good or better.
  - 1. <u>noursefarms.com</u>. MA (I consider this to be the premier source for small fruit plants.)
  - 2. <u>indianaberry.com</u>. IN
  - 3. hartmannsplantcompany.com. MI
  - 4. isons.com. GA
- These are great, trusted information sources for answering your small fruit questions.
  - 5. <u>attra.ncat.org</u>. Look in their publication library for excellent, well-researched articles on all these fruits.
  - 6. smallfruits.org. Small fruit information specifically for the Southeast.