

Training Dwarf Sweet Cherry for Processing

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Year One

At Planting

- Whip
- Head large trees at 4.5 to 5 ft.; smaller trees are headed lower
- No support

Summer:

- Large trees -- Spread new shoots above 3.5 to 4 ft. from ground with clothespins to achieve wide crotch angles. Place on tree above shoots when shoots are 3-5". Large clothespins work better than standard clothespins.
- Smaller trees -- Do nothing, as these will need to be nub whipped next season.

Year Two

Dormant

Options depending on availability of potential scaffolds

A. Trees with three or more wide crotch angle scaffolds above 3.5 to 4 ft.:

- Save 3-5 scaffolds. Completely remove limbs below scaffolds. Upright limbs above scaffolds with narrow crotch angles should be removed with a horizontal cut that leaves a bud at the base of the limb. Leave weak limbs above scaffolds and cut back dominant limbs with wide crotch angles to 8-10" stubs
- Head leader to about 30"-36", if last year's terminal growth exceeded about 36"
- Debud leader by removing the buds for 4"-5" below the terminal bud. This includes removing buds on either side of the terminal bud if the terminal was not headed. If last year's growth exceeded about 15", then also remove every other bud on last year's terminal growth (above 30", remove 2 out of 3 buds).
- Remove or bend down shoots (if any) that grew on last year's terminal growth

Scaffold Management:

Scaffold management the first 3 to 4 years deserves some discussion. Protocol coming from Europe indicates that scaffolds are never headed. This seems very appropriate if trees are placed close enough together so that scaffolds have little space to fill or if trees are growing in a location with strong growing conditions. However, in NW Michigan where vigor is generally low (due to sandy soils, cool climate and possibly orchard replant complex), I am seeing trees on Gisela rootstocks seriously over cropping in some situations in about year four. This over cropping can lead to a near shut down of terminal growth. If this happens to scaffolds before the trees have filled the allotted space, then yield will not reach desired levels. Therefore, my suggestions are as follows:

- If dwarf trees are spaced at over 6 feet (2 m) between trees and if they are growing under relatively weak growing conditions (most unirrigated and some irrigated situations in NW Michigan), I suggest heading scaffolds after first, second and possibly third years of growth. Always head to an upright bud. Under very low vigor conditions, the shoot developing from the upright bud may be desirable. However, under most conditions this upright shoot is removed in favor of a more outward growing shoot. This heading will reduce the fruit potential by reducing the number of future spurs.
- If trees are spaced fairly close, are growing under more vigorous conditions and/or the scion variety is particularly non-precocious, then heading cuts on scaffolds may want to be reduced in severity or scaffolds may want to be left unheaded.

B. Trees without three or more wide crotch angle scaffolds above 3.5 to 4 ft.:

- Whip below 3.5 to 4 ft.; above this height, "nub whip" side limbs growing from original tree (i.e. 1 yr. old limbs on 2 yr. old trunk) using a horizontal cut that leaves a bud at base of limb
- Remove shoots (if any) that grew on last year's terminal growth
- Head leader as in A
- Debud as in A

Year Two

Summer

Use clothespins on new shoots above 3.5 to 4 ft to achieve wide crotch angles. Place on tree when shoots are 3-5". Large clothespins work better than standard clothespins.

Year Three

Dormant

- Remove limbs below 3.5 to 4 ft. (if present)
- Select 4-5 scaffold limbs (if not accomplished in year 2)
- Remove limbs that are too upright (usually the top 1 or 2 limbs below the leader) with a horizontal cut
- Prune non scaffold limbs back to 8-12" stubs or bend down if too dominant
- Head leader if over about 36"
- Repeat debudding of leader described in year 2
- Scaffold management - See Year 2-A , page 1

Year Four

Dormant

- Remove limbs that are too upright
- Don't over prune. Leaving many limbs helps the lower scaffolds to grow more outward and less upright.
- Head leader if too tall (over 36")
- No more debudding necessary

Years Five - Seven

Dormant

- Keep pruning to a minimum
- Remove large, upright limbs, keeping the lower tier of scaffolds plus smaller fruiting wood up the leader
- Leader management ???
- With non-dwarf trees, the leader would be cut back to an outward growing limb at about 8 - 10 ft. My current thinking is that with dwarf trees, the leader will be maintained. Because trees are smaller, the amount of shaker force transmitted to the trees should be less, so leaders should be maintained adequately. The jury is still out on this.

Years Eight and Over

- Keep adequate light into trees
- Remove large limbs in upper portion of trees in favor of smaller limbs