

# Upright Fruiting Offshoot (UFO) Sweet Cherry Training

The Upright Fruiting Offshoots (UFO) system for sweet cherries was developed to:

- Simplify training, pruning, and crop load management
- Utilize the sweet cherry's natural upright growth habit and manage vigor by establishing multiple vertical structural fruiting units
- Achieve high, uniform light distribution to fruiting branches

At maturity, the UFO system yields a fruiting wall that is precocious, productive, and simple to maintain. Each tree is comprised of a permanent single horizontal trunk from which renewable fruiting shoots are grown vertically. Fruit are borne predominantly on spurs but also at the base of 1-year-old shoots, all on vertical wood. The UFO system is most easily configured to a single vertical plane, requiring trellising (about five wires). UFO training may be used to establish a pedestrian orchard where very short or no ladders are needed, though higher yields in the single vertical wall UFO can be achieved by maintaining a tree height of 12'-15'.

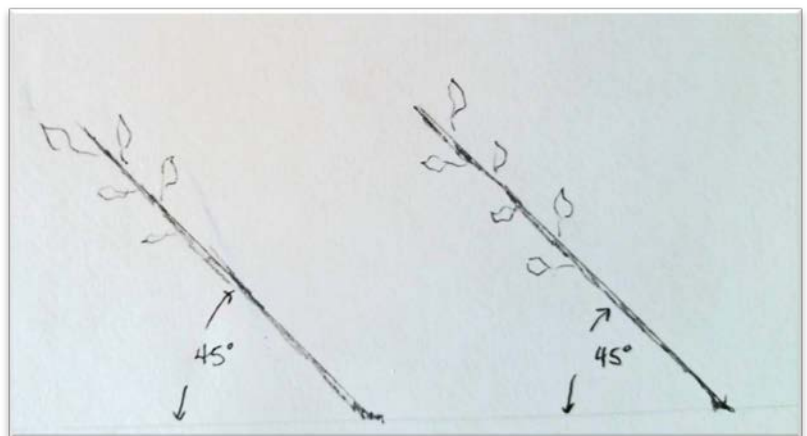
Establishing the UFO system is straightforward with little to no pruning required at planting.

## Spacing:

- Space rows 9'-10' apart
- In the row, space trees 5'-6' apart (Gisela 5 Rootstock)
- Trellis should be at least 5 wires, lowest wire at 20", then spaced every 18"-20"

## At planting

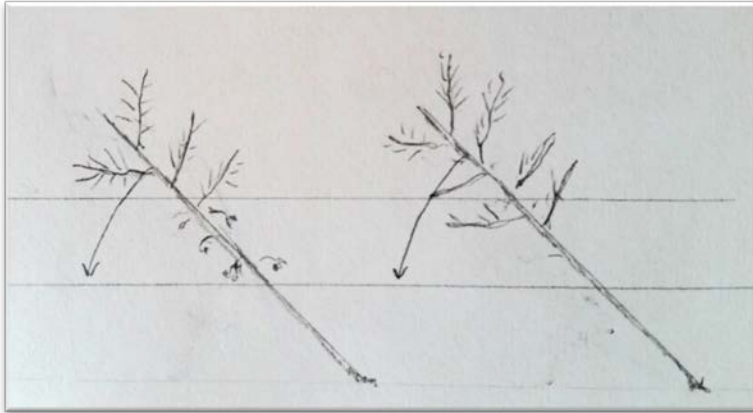
- Unheaded and unbranched (whip) trees are recommended.
- Plant trees at a 45-degree angle pointing the terminal to the south. This reduces the potential for sunburn on the trunk during establishment. Important: do not plant the trees vertically and bend them to a 45-degree angle.
- Clip/tie the trunk where it intersects the lowest wire (20 inches above ground) to maintain the planting angle. There is a single lowest wire in the UFO trellis.
- Remove any nursery tree branches with thinning cuts.
- Manually rub off all buds below the first trellis wire.
- Score the bark with a coarse saw blade above upper buds about every 8" to stimulate vertical shoot formation.



*At Planting*

## First growing season

- Remove any shoots that form below the first trellis wire. In late spring, evaluate growth uniformity of vertical shoots; head any excessively strong shoots to a stub of no more than 2 inches with several leaves to promote regrowth of each as new dual shoots to be more in balance with the existing moderate shoots.

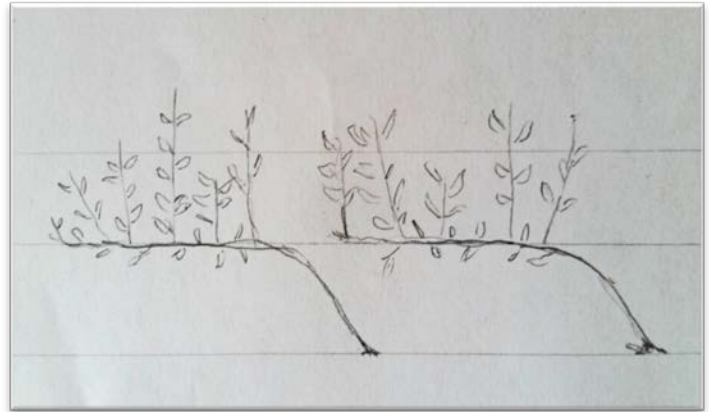


*Begin training trunk to horizontal*

- Once new shoots at the terminal end are 12 inches or longer, train trees to the lowest wire by removing the initial clip and placing it further along the trunk so that the orientation is slightly above horizontal.

## First dormant season

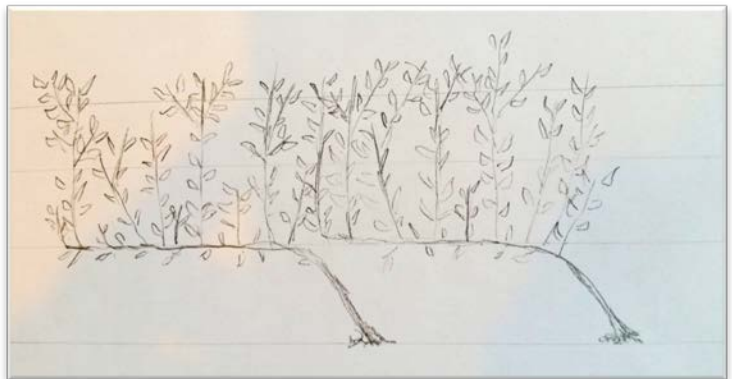
- Thin out weakest or most vigorous shoots if density exceeds one per approximately 8-10 inches per plain. Keep all shoots growing at same vertical elevation as much as possible.
- Where possible, clip or tie shoots to the second wire
- Using thinning cuts, remove any shoots growing below horizontal from the main leader.



*Trunks brought to horizontal.*

## Second growing season

- Where gaps on the horizontal trunk exist, score above upper facing buds to promote completion of vertical shoot formation.
- Tie or clip upright shoots to successive vertical trellis wires as growth allows.
- Using thinning cuts, remove any new shoots from below the first trellis wire.
- In late spring, evaluate growth uniformity of new vertical shoots; head any excessively strong shoots to a stub of no more than 2" with several leaves to promote regrowth of each as new dual shoots to be



more in balance with the existing moderate shoots.

- In mid-summer, remove excessively vigorous uprights with a thinning cut
- Thin out weakest or most vigorous leaders if density exceeds one per approximately 8 inches
- For highly productive varieties, remove all lateral shoots on upright leaders with thinning cuts; on moderately productive varieties, remove all lateral shoots on upright leaders with stub cuts (i.e., leaving three to seven buds at the base of the lateral shoots for additional fruiting). NOTE: this removal of lateral shoots also can be done by summer hedging about 4 to 6 weeks after harvest.
- Tie or clip upright shoots to wires.



*3 year old UFO cherry in bloom.*



*Fruiting Cherry Wall*