

Grower Experience with Tree Wall Training in Peaches

Gabe Spurgeon
South Baldwin Farms

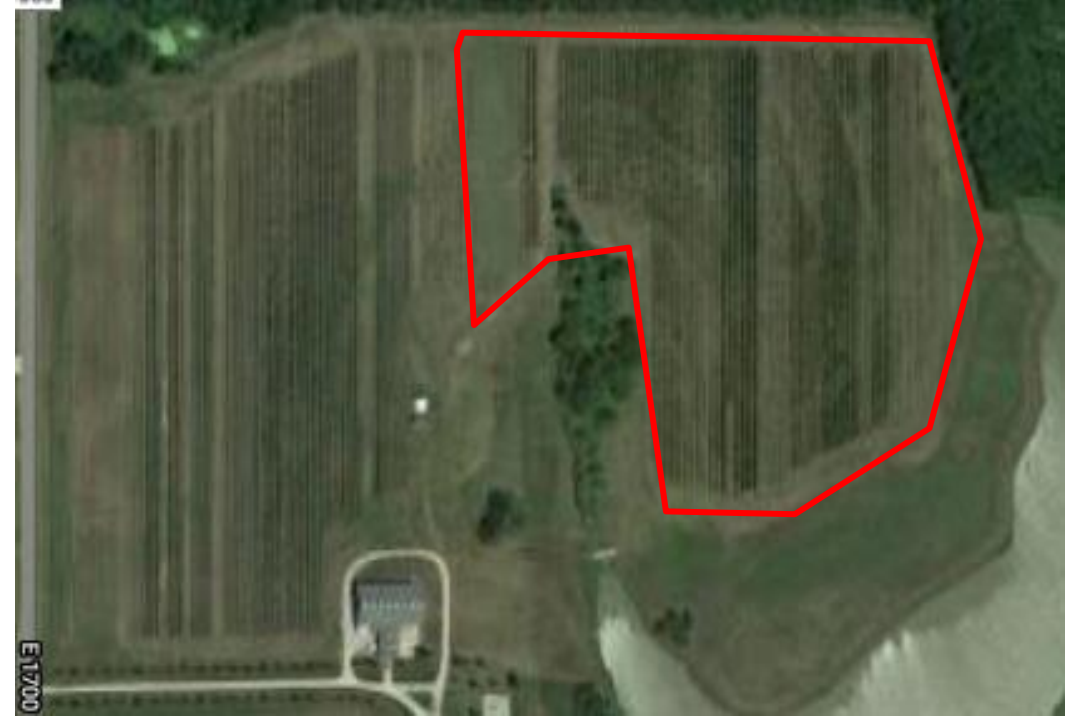
Farm Manager
Baldwin City, KS



South Baldwin Farms

South Baldwin Farms

- ▶ Gabe Spurgeon (Farm Manager)
 - ▶ Began in Missouri peach orchard at age 13.
 - ▶ Restless engineer for 8 years
 - ▶ YouTube channel The Orchard Engineer
- ▶ 35 acres of tree fruit in production
 - ▶ Peach, Apple, Nectarine, Blackberry, Pumpkin, Cherry, Apple Cider
- ▶ Expanding apple orchard from 15 to 55 acres by 2023.
- ▶ Test planting of trellis peach 2012
- ▶ Large scale trellis planting 2016-2019



SBF Marketing

- ▶ Pack our own fruit
 - ▶ Aweta 3 lane
- ▶ Market and Deliver our own fruit
 - ▶ On farm sales (~30% of revenue)
 - ▶ Other farm stands and direct to grocers
 - ▶ Regional distributor
 - ▶ Seconds for home canning and wineries



Varieties

- ▶ Mostly older peach varieties
 - ▶ Haven varieties
 - ▶ Stellar Series
 - ▶ Some PF
- ▶ Nectarine
 - ▶ Fantasia
 - ▶ Hardired
 - ▶ Sunglo
- ▶ Season: June 20 thru Sept. 5



Why High Density?

- ▶ Opportunity for higher yields and earlier ROI
- ▶ Harvest Labor Savings
 - ▶ Faster Harvest
- ▶ Simplifies work instructions for training, pruning, and thinning
- ▶ No ladders
- ▶ Mechanization
- ▶ Better spray coverage

Why NOT?

- ▶ Higher establishment cost compared to open vase.
- ▶ Need timely attention as tree grows.
- ▶ Summer pruning is necessary

3 Leader 8x12' spacing

- ▶ 32" per leader
 - ▶ Too close
- ▶ Difficult to space each leader exactly and not crowd
- ▶ Head cut ~26" at planting
 - ▶ Start outside leaders and delay central leader as it will suck all energy
 - ▶ Train sides out with twine and tapener gun



2 Leader 6.5 x 12'

- ▶ 39" per leader
 - ▶ Optimum
- ▶ Easier to Space out
- ▶ Head cut ~26" at planting
 - ▶ Start outside limbs simultaneously
 - ▶ Train with twine and clothes pins



Central Leader 40" x 12'

- ▶ Optimum Spacing per leader
- ▶ Most Simple System
- ▶ NO HEAD CUT
- ▶ Cut out dominant limbs that compete with leader in the first year.
- ▶ Less work in establishment, more difficult to control height.



Wires...and canker



Attaching trees to the wire

- ▶ Fasteners

- ▶ Klipon (did not work well for us)
- ▶ T-bands
- ▶ AgLok (pre-cut)

- ▶ Wire Rub Protection

- ▶ Coated wire
- ▶ Spiral wrap
- ▶ monofilament



Trellis Construction



Summer Pruning for Light Inception



- ▶ Mid-late July in Kansas
 - ▶ Maybe early August in Michigan
- ▶ Breaking off tall branches in the tops seems effective in slowing growth in that area
- ▶ Prune water sprouts to stubs in the bottom
- ▶ We do not do this for red fruit, but can be a benefit for some regions.



Mechanization

- ▶ Platform Harvest
- ▶ Summer Hedging for better interior light (untested)
- ▶ Root Pruning for Growth Management
 - ▶ 30-36" from tree one side btwn petal fall and shucksplit
- ▶ Extenday for low fruiting development





The Future of High Density Peach Planting

- ▶ Tree fills space before reliable bearing. Sometimes ready to crop in second leaf.
 - ▶ Research into precocity of rootstock and cultivar
- ▶ Dwarfing Rootstock
 - ▶ Can we control vigor and not limit growth of fruiting wood?
- ▶ Further mechanization

IDEAS?

QUESTIONS?

