

# Mechanical harvest of blueberry for fresh markets: field design considerations and pruning

Jeff Williamson

Horticultural Sciences Department

IFAS, University of Florida



# Florida's blueberry crop

- Currently southern highbush blueberries from Florida are hand-harvested for the early-season, fresh-fruit market (April, May).
- Uncertainty about the future availability of farm labor has increased interest in machine harvesting of fresh market blueberries.



# Field design considerations

- Minimum of 9 -10 ft. between-row spacing.
- Need a minimum of 30' clearance at end of rows for equipment turn around.
- In large fields, periodic row breaks (at 400 ft) suggested for unloading harvester, etc.
- In-row spacing – minimum of 3 feet between plants.
  - Exact spacing will depend on cultivar and site.



# Korvan harvester





# Korvan harvester



# Front of BEI harvester





# Catch plates





# Bed Configuration

- Raised beds bring the catcher plates closer to the base of the crown.
- Bed height – varies.
- Beds 12 to 18 inches wide at the top allow catcher plates to be lower on the plant.
- Wider beds should taper-off at edges.
- Remove suckers and low-hanging shoots from lowest 14” of plant.
- Keep crowns narrow

# Beds should taper-off at the shoulders

















# Catch plates



# Catch plates





# Wide crowns result in excess ground drops









Prune to remove low-hanging shoots and narrow plant crowns





# 'Meadowlark'



# Highbush blueberry, before (left) and after pruning to a narrow base



Courtesy of Bill Cline, N.C. State University





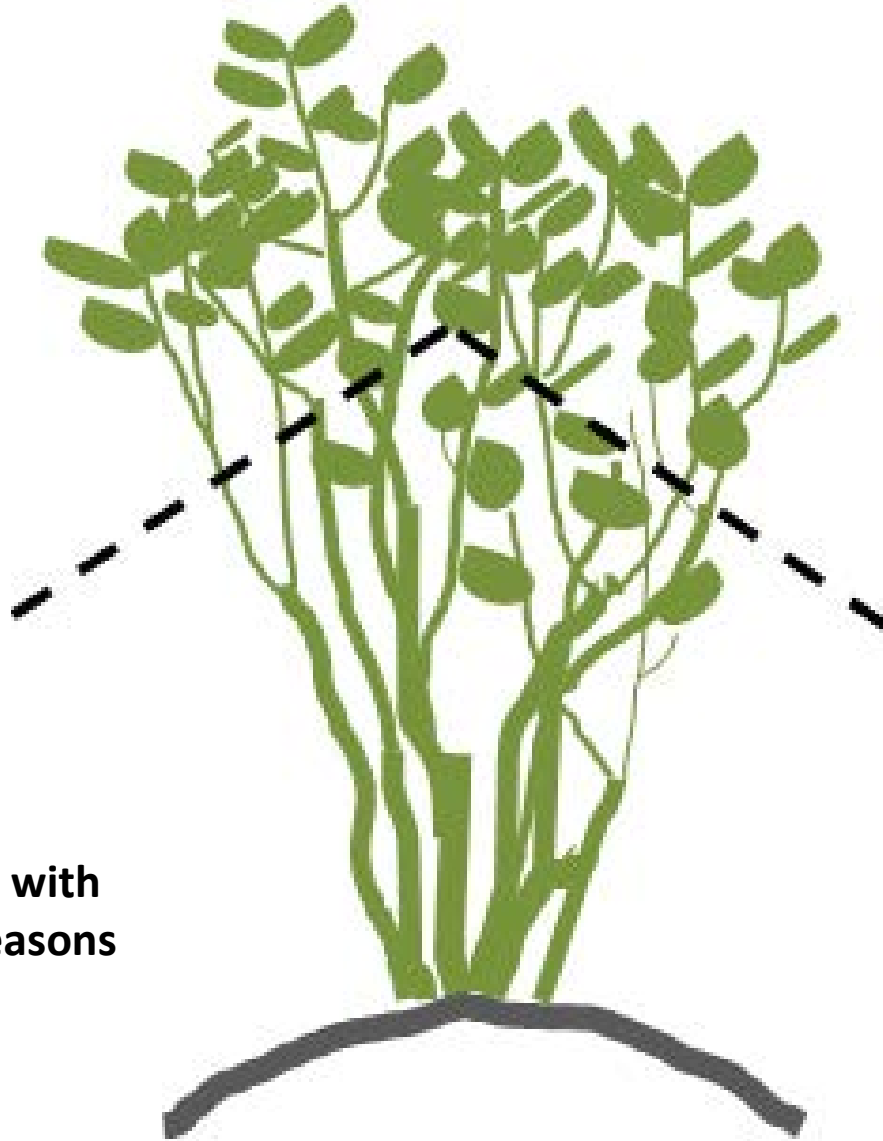






# Summer hedging and topping

**Summer Hedging**  
Immediately after  
Harvest on  
Southern  
Highbush

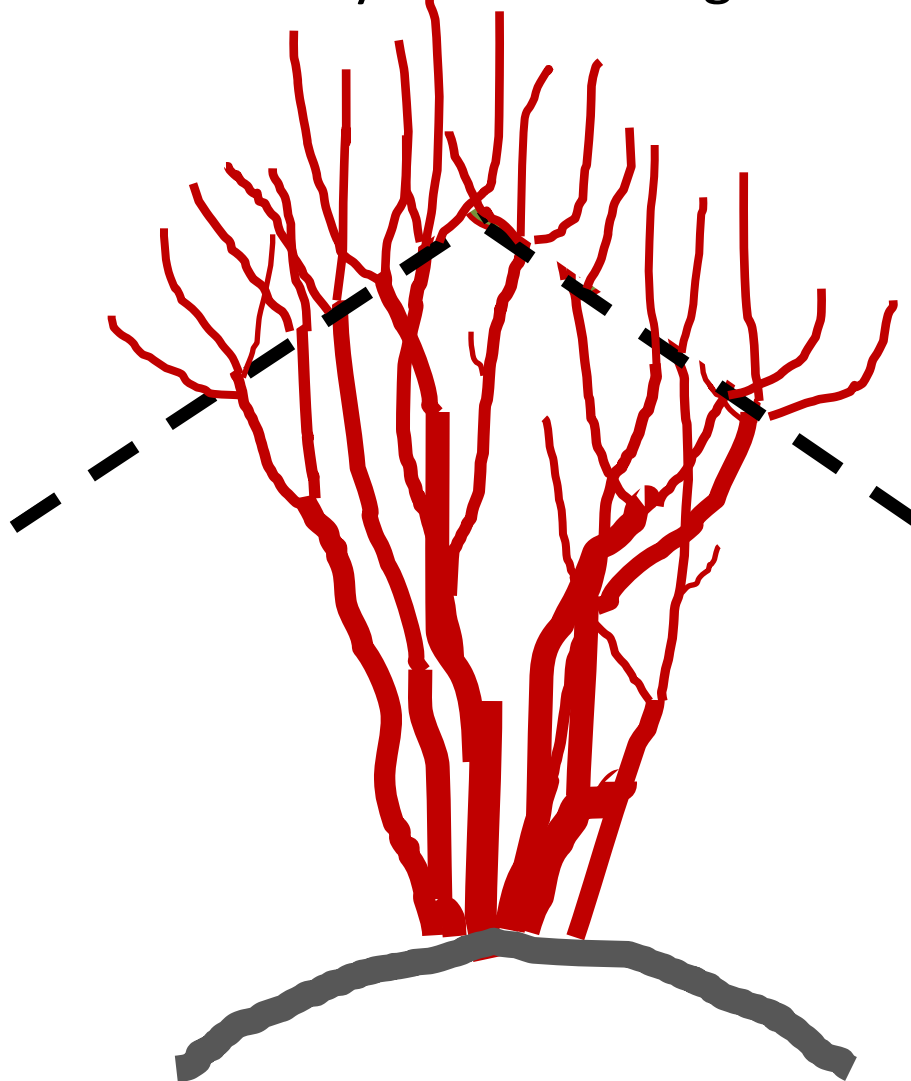


**36-48 inches**  
"Housetop"  
angled cut

**Only for regions with**  
Long growing seasons  
NC, GA, FL, etc.

Courtesy of Bill Cline, N.C. State University

Regrowth above the mow cut has time to produce new flower buds by the following winter





























Properly designed beds and pruning to a narrow crown will reduce ground drops









# Summary

- Planning for mechanical harvest for fresh markets should begin at planting establishment.
- Bed height, width and shape
- Plant and row spacing
- Training and pruning
- Cultivar selection

A close-up photograph of a blueberry bush with several clusters of ripe, dark blue berries and some unripe, lighter-colored ones. The leaves are green and serrated.

Thank you!

Questions?