## Chestnut Management for Intermediate and Advanced Growers

Tom Wahl & Kathy Dice Red Fern Farm

#### Management Goal



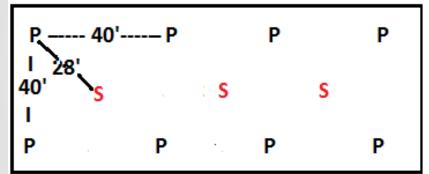
Red Fern Farm North Grove 2018

#### **Three Chestnut Planting Plan Stages**

Stage 1: The Tree Planted Spacing

P -2	0'- s - 2	20'- P	s	P	s	Р
s 20'	0'- s - 2 S s	s	: <b>S</b>	s	S	s
P	s	P	s	P	s	P

Stage 2: The First Tree Thinning



Stage 3: Final Orchard Spacing

P 40'		Р	Р	
P 40' I 40'				
H				
P	P	٠.	P	P

### Spacing

- 20ft x 20ft
- 108 trees/acre
- Thin to 40 x 40 by 20 years
- Then to 80 x 80
- 160 x 160 about year 500

#### When thinning consider:

- Nut size, quality & productivity
- Tree vigor
- Trunk health
- Crotch angles
- Canopy density

#### Nuts, size







#### Nuts, quality

- Peel ability
- Internal kernel breakdown
- Storability
- flavor



Nuts, productivity



Low Productivity

### Nuts, productivity



High Productivity

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## Tree vigor



#### Tree vigor



High Vigor

#### Trunk health



Questionable trunk health



Good trunk health

#### Southwest bark injury







Minor

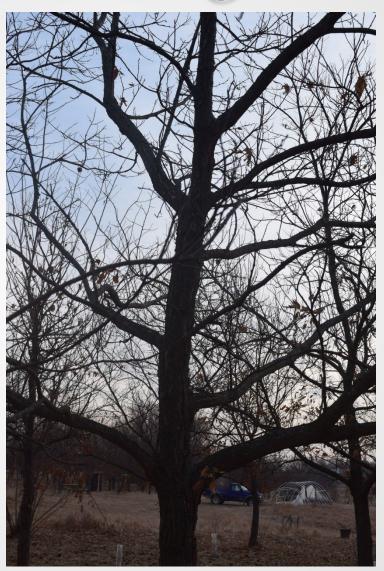
Moderate

Severe

## Crotch Angles

Bad





Good

#### Crotch Angles



Bad

Excellent



#### Canopy Density



June 24, 2018

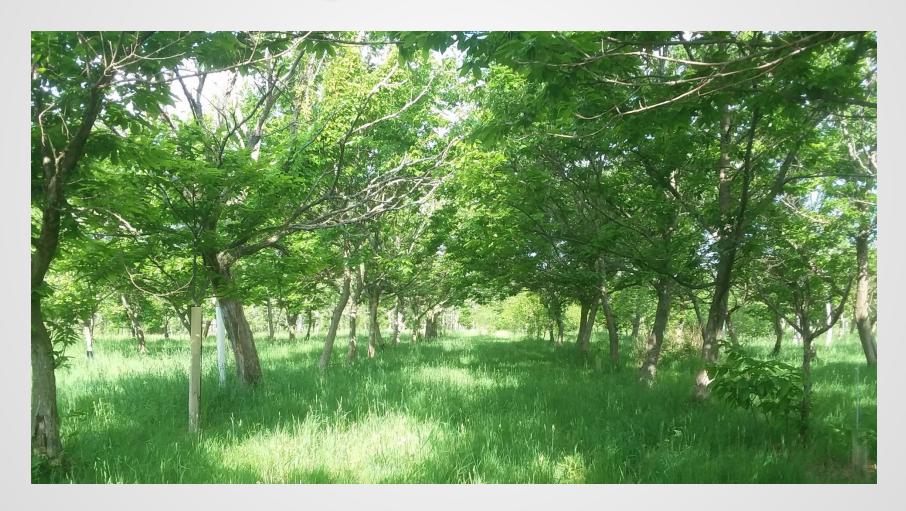


May 29, 2019

# Chestnut blight



#### Pruning, remove some



#### Space around trees



Plant pawpaws

#### Space around trees



#### Market Development



Our way: You-Pick by appointment

#### Market Development



Easiest:
use the
coop in
Columbus
Junction,
Iowa

#### Deer Management



5 foot tall Plantra tree shelters, then 20 inches of drainage tile.

#### Herbicide Drift



Dicamba damage

#### **Grafted Trees:**



- Known genetics
- Produce great seeds
- Less productive
- Graft Union failure

#### 27 year-old Chestnuts Seedling versus Grafted





#### Chestnut weevil







## Gall Wasps

