

case study

LIPE ORCHARD

arc550

Regional Graduate Architecture Studio

presented by

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contents

Lipe's location

Background

Produce

Facilities

Unique Characteristics

Owners' suggestions

Sources

LIPE OCHARD

LOCATION and BACKGROUND

3925 South Illinois Avenue | Carbondale | Illinois

4TH Generation orchard

owners

Sara and Rose Lipe

produce

peaches | apples | pears |
nectarines | peppers |
squash | beans |
cucumbers

repurposing food waste

pickles | jams | jellies |
peach pies |
feeds local wildlife |
sells to cider and apple
vinegar makers |
sells branches and wood
chips from trees

threats

Japanese beetles |
possums | raccoons |
deer | squirrels | birds

varieties of produce

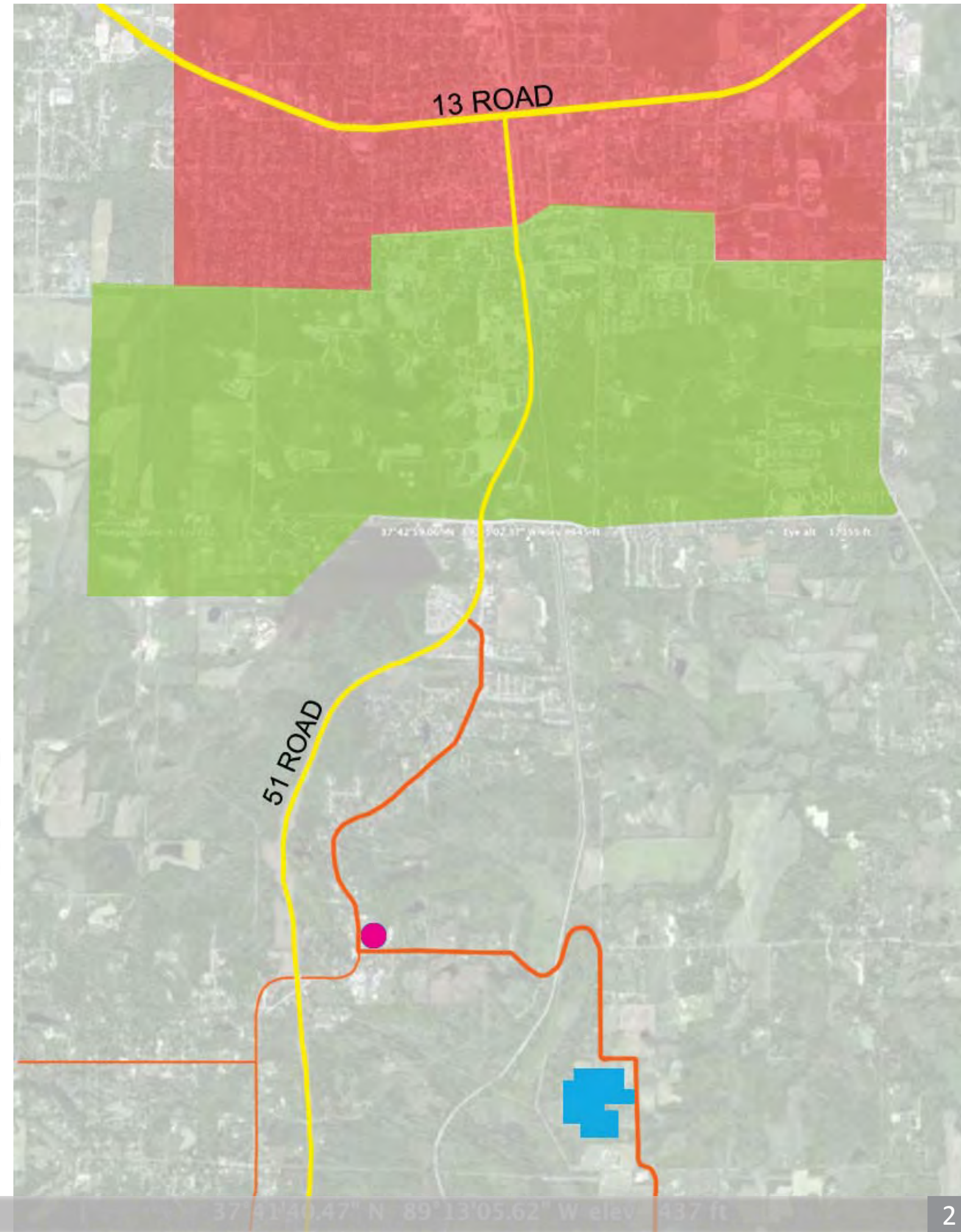
15 kinds of peaches
12 kinds of apples
Santa Rosa plums
Benoni apples - an heirloom variety
Green beans
Yellow wax beans
New potatoes
Peppers - Bell, Gypsy, Jalapeno,
Hungarian Wax
Eggplant
Cabbage
Green onions
Squash - Zucchini, Yellow and Pattypan
Garlic
Arugula
Oregano
Peppermint
Lemon balm
English thyme
Honey
Grilling wood

north



LEGEND

- Main Roads █
- The town █
- SIU █
- Local road █
- Lipe Orchard's shop █
- Lipe Orchard █



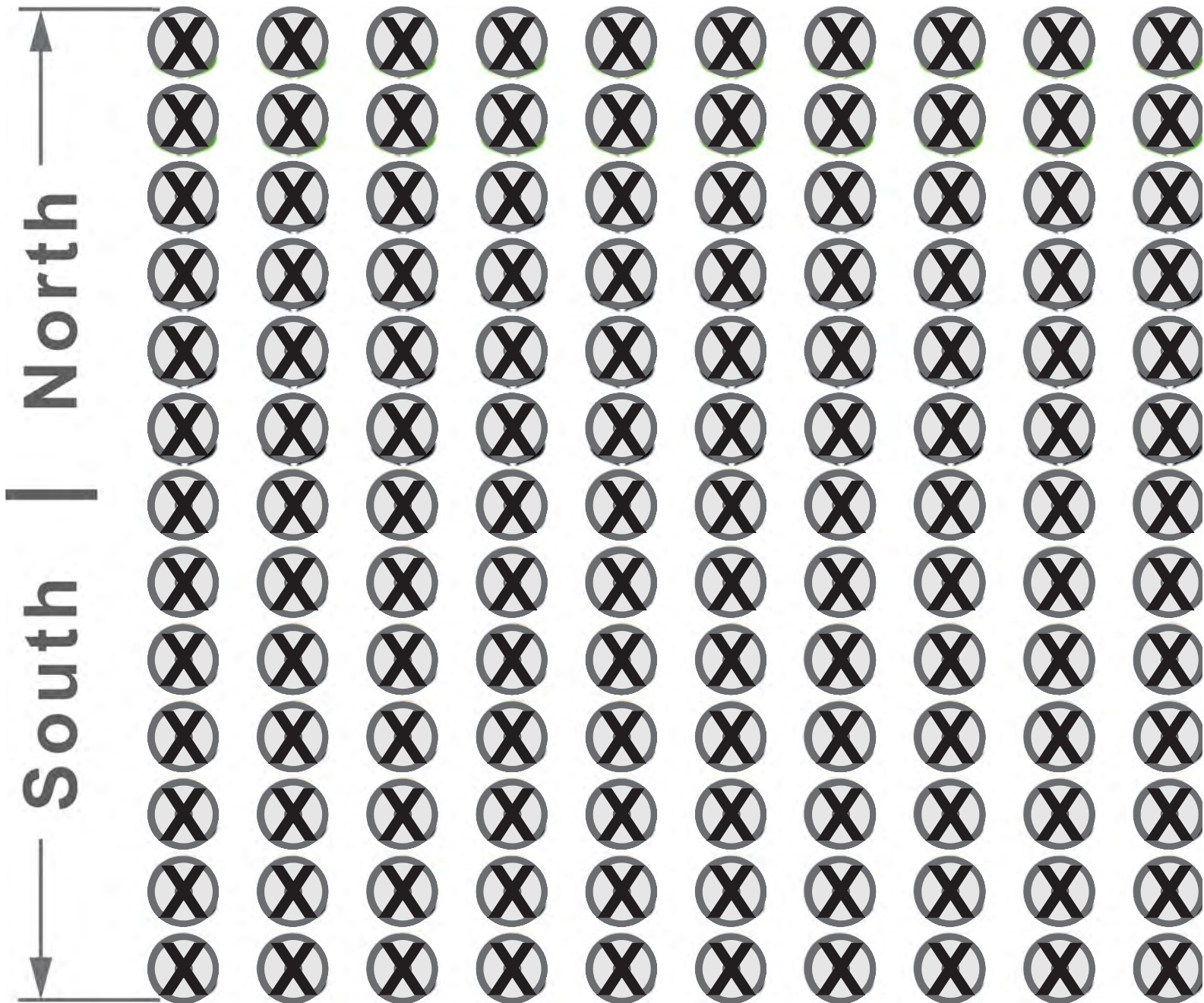
LIPE OCHARD

STAGING and SPECIES SELECTION

It is important to plant and harvest your crops in stages so as they produce and grow continuously. This also helps to maximize profits and availability.

Staging of Fruit Trees

Seed 🌱 Ripe 🍊 Growing 🌿 Harvested ✕



<http://urbanext.illinois.edu/apples/>



Division of Agricultural Sciences and Natural Resources

<http://pods.dasnr.okstate.edu/docushare/dsweb/ApplySimpleSearch>



Pollination

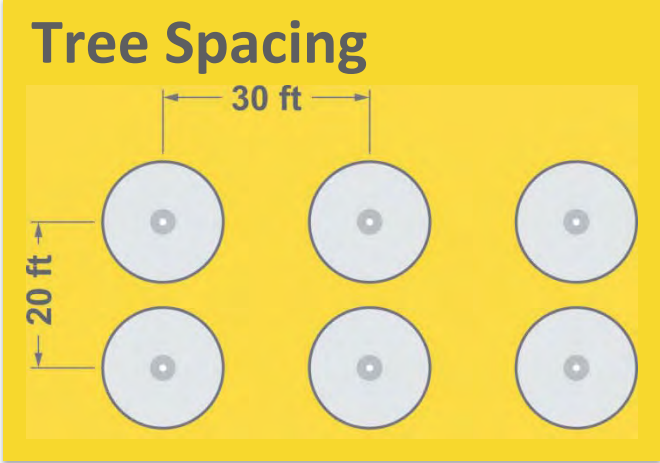
Cherries	
Apricots	■
Peaches	■
Nectarines	■
Apples	■
Jap Plums	■
Euro Plums	■
Pears	■
Figs	■
Grapes	■
Persimmon	■
Berries	■
Almond	■
Filbert	■
Walnut	■
Chestnut	■
Pecan	■

Notes

Self Fertile ■ Pollenizer ■

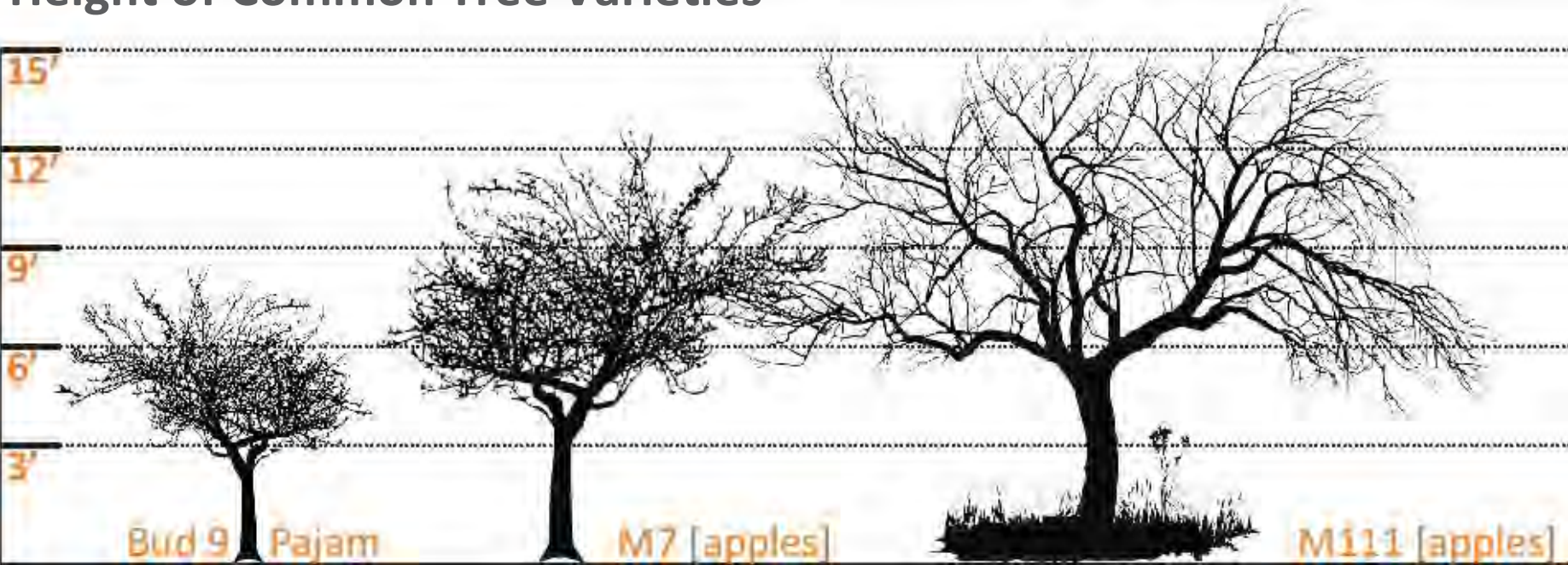
- Montmorency & Stella are Self Fertile
- Only a few varieties are not
- Only a few varieties are not
- Some Varieties are sterile
- Some Varieties are Self Fertile
- 2 or More Varieties Increases Production
- Blueberries | Plant Two or More Varieties
- Some Varieties are sterile
- Plant Two or More Varieties

LIPE OCHARD STAGING and SELECTION



A Width of 30ft between rows allows for easy movement of equipment that will be moving in and out between the fields. This also ensures your produce isn't harmed in the process.

Height of Common Tree Varieties



Tree Sizing | Choosing the Right Tree

Apples			
Rootstock	Planting distance	Final height	Size
MM106	8-12 feet	12 feet	medium
M26	5-7 feet	9 feet	
M9	4-6 feet	8 feet	
M27	3-5 feet	6 feet	small
Pears			
Quince A	8-12 feet	12 feet	medium
Quince C	6-10 feet	8 feet	medium
Plums, greengages			
St. Julien A	8-10 feet	12 feet	medium
Pixie	7-9 feet	8 feet	medium
Cherries			
Colt	8-10 feet	10 feet	medium
Gisela 5	4-7 feet	6 feet	medium-small
Peach, apricot, nectarine			
St. Julien A	10-12 feet	10 feet	medium

FIRSTS	SECONDS
90%	10%
There is usually a 9:1 margin of firsts to seconds. Seconds are most normally used unless they are infested or badly rotten.	

Relative Ripening Dates | Fruit and Nut Varieties

