Diversifying with Chestnuts & Asian Pears



(Apple Alternatives)



Tom Wahl
Red Fern Farm

Asian Pear vs. Apples



- Same soils/sites
- Same tools
- Easier to grow
- 1 2
 spays/year
 for perfect fruit

Asian Pear

Neglected Asian pear



- Fraction of pruning
- Fruitthinningneeded
- Plantblightresistantvarieties

Profitable



- \$1.50 \$8.00/fruit
- Popularyou-pick

Why grow chestnuts?



- Thrive
- Easier to market
- More profit

Lower Production \$



- Low or no spray
- Little pruning
- No ladders
- Easy harvest
- PYOfriendly

World Wide Favorite Nut



- #3 nut in world
- #3 foodcrop inChina

High-Value Crop



10x more profitable/ acre than other nut crops

Growing Chestnuts in Iowa



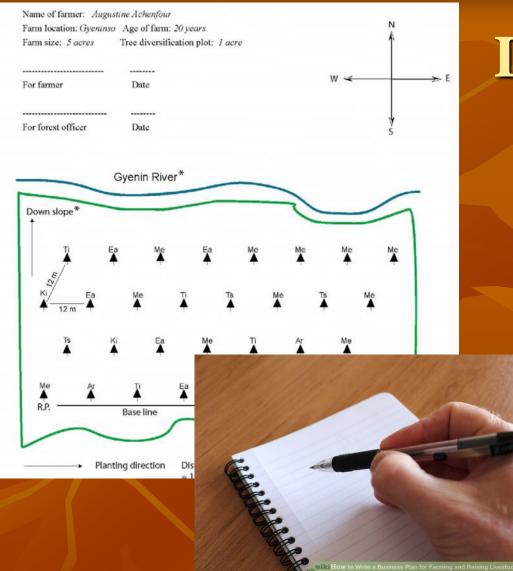
Suitable Site?



Google: Web Soil Survey



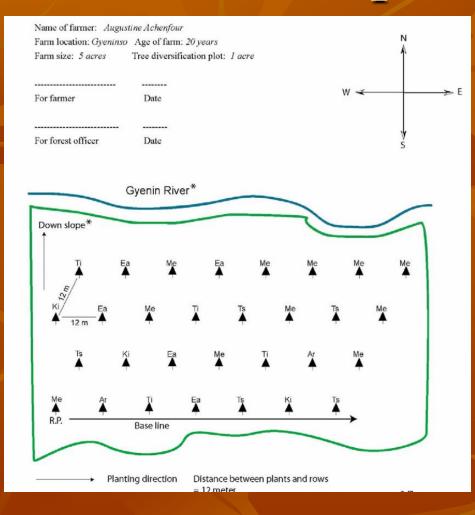
- WellDrainedsoil
- pH of6.5 orlower



Develop a Plan

- Site Map
- Spacing
- Weed Control
- Ground Cover
- Protection
- Sources
- Bare root or potted?

Site Map Includes:

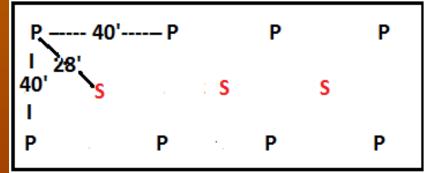


- Boundaries
- Features
- Drainages
- Roads/lanes
- Location of each tree

Three Chestnut Planting Plan Stages

Stage 1: The Tree Planted Spacing

Stage 2: The First Tree Thinning



Stage 3: Final Orchard Spacing

```
P —--- 40'----- P P P
I
40'
I
P P P P
```

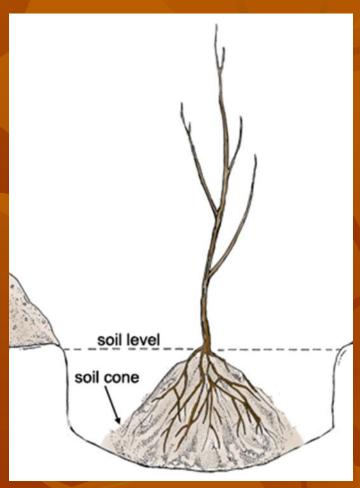
Spacing

- 20ft x 20ft
- Thin to 40 x 40by 20 years
- Then to 80 x 80
- 160 x 160 about year 500

Planting



Container trees



Bare root trees

Weed Control, 2 Choices:





Or

- 3 x 3 foot mat& wood chips
- SuflometuronMethylherbicide

Tree Shelter

- 5 footTall
- Vented
- Plantra







Mowing



- Frequent in beginning
- Fast, lightmower



Ground Cover



- Durable
- Shade tolerant
- Compatible with trees

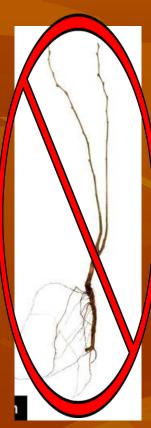
Genetics



- Chinese or hybrids best for Iowa
- Match local climate

Nursery Stock





- AvoidglossycatalogsNurseries
- Avoidspiralingroots inround pots

Marketing

Best customers

China →
Nepal →
Germany→
& Iowa→



Marketing

Worst customers

Americanborn Anglos



People Travel for Chestnuts



Marketing options:



- Farmers markets
- On-Farm stands
- Internet Sales

Marketing options:



- Grocers
- Health Food Stores

Marketing options:



- Cooperatives
- Wholesalers



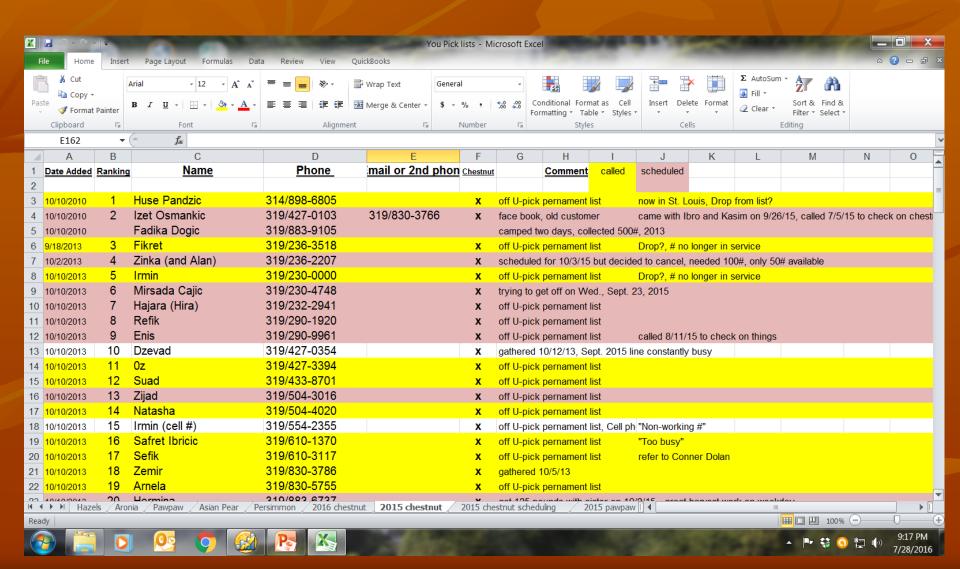
You Pick: Most profitable



Our costs:

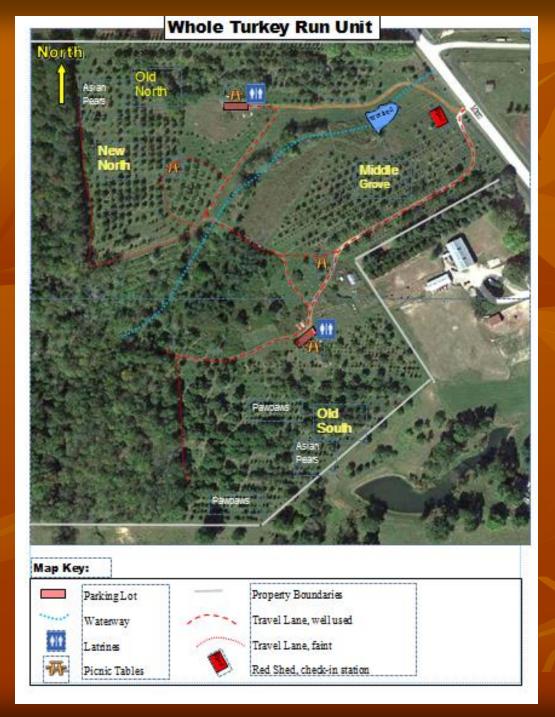
- Mowing
- Nut wizards
- Buckets &Totes
- Amenities

Keep details on customers



Make a schedule

/	A46	▼ J _{sc} Wed 10/14	4								
	Α	В	С	D	Е	F	G	Н	I	J	K
7	Sat 9/19	Aesuk Subdert	319/329-7103		got 40#						
8	Sun 9/20	Enis+ family (2-4)	319-290-9961								
9	Sun 9/20	Hajra	319-233-2941								
10	mon 9/21	Denis Bevic	319/290-6801		want 10 pounds	or less					
11	Wed 9/23	Mirsiha	319/939-0730		Got about 150#	gathered	l. 3 - 4 ac	dults, wan	it as much	as poss	ible
12	thu 9/24	"IB" Ibrahisa Pasic	319/290-1929	1:00 - 2:00	leaving waterloo	around r	noon, 2 -	4 adults,	want 400	- 500 pd	s
13	Fri 9/25	Royce	515/200-6030		wants 2-3 pound	ds					
14	Fri 9/25	Refik	319-290-1920		call ahead with	report, co	ming fror	n Sioux C	ity, wants	200-300	Olbs
15	Fri 9/25	Mustafa	319-883-9802		daughter called	to cancel	at 3:15 t	hat day			
16	Sat 9/26	Izet Osmankic+Party	319/427-0103		gathered 478.2	5 pounds,	Large pa	arty, will t	ake all fie	lds that o	lay
17	Sat 9/26	Chad Gelner	507/951-5183	9 - 10 am.	only a couple po	ounds					
18	Sun 9/27	Fatina Zelic	515-339-2616		NOT on Waiting	list!< Did	not shov	v, no call	either, 2	0-30lbs n	eeded, M
19	Sun 9/27	Semso Beganovic	319/230-3725	drove up	liked pawpaws	too					
20	Sun 9/27	Zijad	319-504-3016								
21	Sun 9/27	Suad	319-433-8701								
22	Mon 9/28	Xin	847/890-3815		Decided not to	come, "fo	rgot to ca	all to say	so" 30# o	r more, v	vants to b
23	Mon-9/28	Munir	319-493-0266								
24	Tue 9/29	Vahida	319-240-7687		got 113 pounds	, 3 adults					
25	Tuo 0/20	Emir	310_236_2636		ant 87 25 nound	le					



Show:

- Area to harvest
- Equipment



Provide Amenities



- Latrine
- Trash cans
- Handwashingwater
- Picnic table
- Cooler of ice water on Hot days

Afterward, We weigh and bag



Everyone is Happy



Pawpaw



- Iowa Native
- Understory tree

Pawpaw

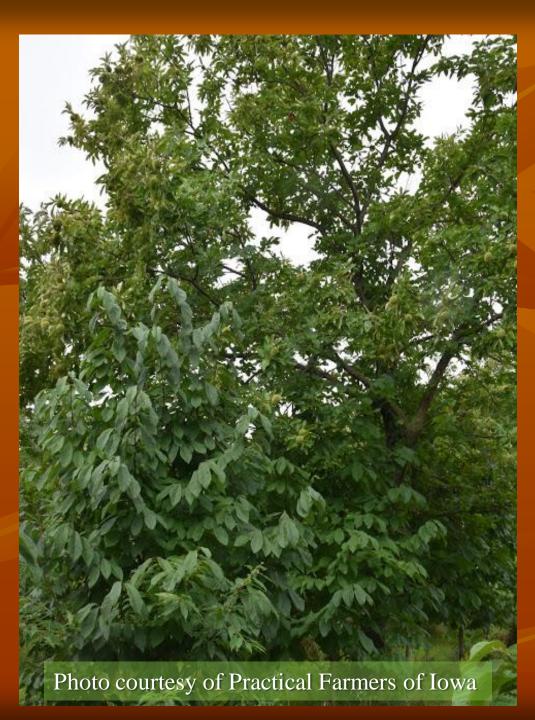


- Virtually pest free
- No Spray
- No Pruning

Popular for You Pick



- Tropical flavors
- Easy toHarvest
- Delicious



Can double revenue

- Plant under chestnuts
- Plant under Apples



Helpful Organizations and Links:

- Chestnut Primer available online for free from www.redfernfarm.com,
- Chestnut Growers of America www.wcga.net
- The Paw Paw Foundation
- Iowa Nut Growers Association
- Northern Nut Growers Association www.nutgrowing.org
- Nebraska Nut Growers Association
- North American Fruit Explorers www.nafex.org
- Badgersett Research Farm <u>www.badgersett.com</u>
- University of Missouri Center for Agroforestry www.centerforagroforestry.org
- National Agroforestry Center <u>www.unl.edu/nac/</u>
- ATTRA www.attra.ncat.org

Contact Information

Tom Wahl & Kathy Dice Red Fern Farm 13882 I Ave Wapello, Iowa 52653 tom@redfernfarm.com www.redfernfarm.com



And look for us on Facebook