Middletown Orchard – Middletown, CT (2010)

Considerations for Chestnut Orchards

Please use the following considerations, in conjunction with the planting manual, to help make some of the important decisions that will guide the management of your chestnut orchard. If you have alternative ideas or any questions, look to the Regional Science Coordinator and experienced chapter orchard managers for input. There is certainly more to growing chestnut than is on these two pages, but thinking about these issues is a good place to start!

Growing chestnuts can be a very rewarding experience, but there is a lot of work involved too. Resolving these consideration will help make your orchard successful!

Site Selection

Soil Type: Wethersfield loam
Predominantly: __Sandy X Loam __Clay
Soil pH: 4.8
Any amendments needed to lower pH to 4.5 - 6.5? X
Amendments: composted leaves (organic matter)
Sun Exposure: X Full __Partial __Shade
Site Preparation: ___Brush-cutting and/or removal
X Mowing ___Tilling ___Herbicide

A good site map and planting plan are the best ways to visualize your planting. But recording some site characters, determining spacing and planting method may help to identify any possible issues or special considerations up front.

Spacing

Orchard Size: 3 acres
Number of trees possible (average ~350/acre): 540
Spacing:
Between rows: 15 feet
Between trees: 7 feet

** Recommendation is 15 feet between rows, 7 feet between trees.**

If no maintenance equipment needs access to the orchard, 8' x 8' spacing can be used. Please discuss special circumstances or alternative plans with the local chapter and/or the Regional Science Coordinator.

Planting Method

X ***Direct Seeding*** * will pre-auger planting holes + add compost to backfill
X ***Seedlings***
Grower: Middletown Orchard – test trees
~~Potting Mix~~ Orchard grown – 1 year
Ready Date: to be transplanted at planting

Recommended soil mixes include:

- 1/3 each peat, perlite and vermiculite
- Scott's Moisture Control

If potting seeds in early spring, use of small "Cone-tainer" type pots produces a decent root plug for transplanting. Remember, seedlings will require more water and early care than direct seeded material.

THE AMERICAN CHESTNUT FOUNDATION®

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Maintenance

These are important considerations and decisions should be made based on the characteristics of the site and philosophy of the orchard manager.
A variety of approaches will accomplish the same goal: keeping the chestnut trees alive and growing!

Deer Control

X ***Deer fencing***
Type Plastic mesh deer fence
Height 8 feet

__ ***Tree shelters***
Make/Material _____
Height _____ feet Diameter _____ inches

Rodent/Varmint Control

Shelter Type Tree-Pro Miracle Tube - vented
Height 18" Diameter 3 1/2" - 4 1/4"
Sink shelters to a depth of ~2" at planting time to prevent access to roots by tunneling rodents

Weed Control

X ***Herbicide***
Type/Brand: Round-up
Application frequency: 2x year - spring + fall

X ***Landscape Fabric***
Type: woven fabric (Home Depot)
X Rows OR ___ Squares (3' x 3' recommended)

Fertilization

Type: Osmocote (or alt. slow-release)
Application frequency: 1 x per year

Watering

Water source: 250 gal tank (2)
Transportation method: gravity drip w/ hose
Additional equipment needed? water-hauling capability until tank set-up in place

Labels

Type: write on tubes
Attachment method: paint marker

Tube shelters, such as Tree-Pro, Tube-X and Blu-X, have all been used for TACF orchards. Some growers choose to make their own out of wire. Check with your local chapter for recommendations.

Sinking tube shelters a few inches into the ground can be an effective method of vole protection. Cylinders made of aluminum flashing or hardware cloth are also options.

Further Recommendations

Herbicide: Round-Up Pro or Round-Up Ultra work well. Both have a surfactant included for easy mixing.
Landscape fabric: Shaw Fabric's Lumite Weed Barrier has been highly recommended!
Fertilizer: Mir-Acid or a similar fast or slow-release acid-loving fertilizer.
Watering: A large portable tank and a pump can be a good fix for sites without a direct water source.
Labels: Writing with a paint marker directly on a tube shelter is a great way to mark trees. Tags attached to branches often cause damage.

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Middletown Orchard -- Draft Budget for 2010

Item #	Supplies - Item	Unit/Pkg	Supplier	Estimated Unit Price ($)	Qty	Extended Cost ($)
1	Tree Pro Protector Vented 18" Tubes	each	TreePro	$ 1.55	182	$ 282.10
2	WeedBlock Landscape Fabric 3 ft wide x 100 ft.	roll	Home Depot	$ 23.97	15	$ 359.55
3	Steel Ground Staples box	1000	Griffin Greenhouse Supply	$ 103.12	1	103.12
4	Hardwood Stakes	1	Agway - Enfield	$ 1.09	182	$ 198.38
5	Miracid (Water Soluble Azalea Food) 30-10-10 5 lb.	box	Agway - Enfield	$ 8.99	5	$ 44.95
6	Vermiculite 6 Cubic Foot Bale	1	Griffin Greenhouse Supply	$ 18.11	2	$ 36.22
7	Perlite 6 Cubic Foot Bale	1	Griffin Greenhouse Supply	$ 18.28	2	$ 36.56
8	Milled Peat Moss 3.8 Cubic Foot Bale	1	Griffin Greenhouse Supply	$ 10.39	1	$ 10.39
9	Sharpie Industrial Markers Black (Pollbag#s)	10	Staples	$ 10.49	1	$ 10.49
10	563 Speedry Paint Markers - Black	each	Forestry Suppliers	$ 2.60	1	$ 2.60
11	3' 3/8" Bamboo Stakes for BlueXTubes (bale 1000)	bale	Griffin Greenhouse Supply	$ 46.20	1	$ 46.20
12	Osmocote Time Release Fertilizer	1	Agway - Enfield	$ 10.99	4	$ 43.96
13	RoundUp Super Concentrate Herbicide Half Gallon	1	Home Depot	$ 68.94	3	$ 206.82
	Sub-Total					$ 1,381.34
	10% Contingency					$ 138.13
	Requested Budget					$ 1,519.47