

GROWING NUTS IN THE NORTH-EAST

Sandra L. Anagnostakis

The Connecticut Agricultural Experiment Station

New Haven, CT





Timber Trees and Orchard Trees



- **Timber trees put all their energy into growing tall, and usually delay nut production and then produce small nuts**
- **Orchard trees stay short and spreading and put their energy into producing large nuts, usually sooner than timber trees**



Definitions

Seedling grown from seed, pedigree unknown

Variety timber or orchard, white flowers or red flowers, early bearing or late bearing

Cultivar graft of a scion (twig) from a tree with known pedigree and characteristics onto a suitable rootstock tree, given a registered name



Orchard Trees Need:

- **Sunlight: to the full canopy**
- **Water: at least one inch per week throughout the summer**
- **Weed control around the trunk: 3 or 4 feet out from the trunk in a circle**
- **Protection from deer and bear**



Choose The Crop

- Time of flowering
- Time of harvest
- Possibility of inter-planting



Cultivars or Seedlings?

Grafted trees, known pedigree

Unknown parents

Predictable quality

Unpredictable quality

Early flowering, production

Late flowering, production

Expensive

Much cheaper

Quality pays for itself in the long run.

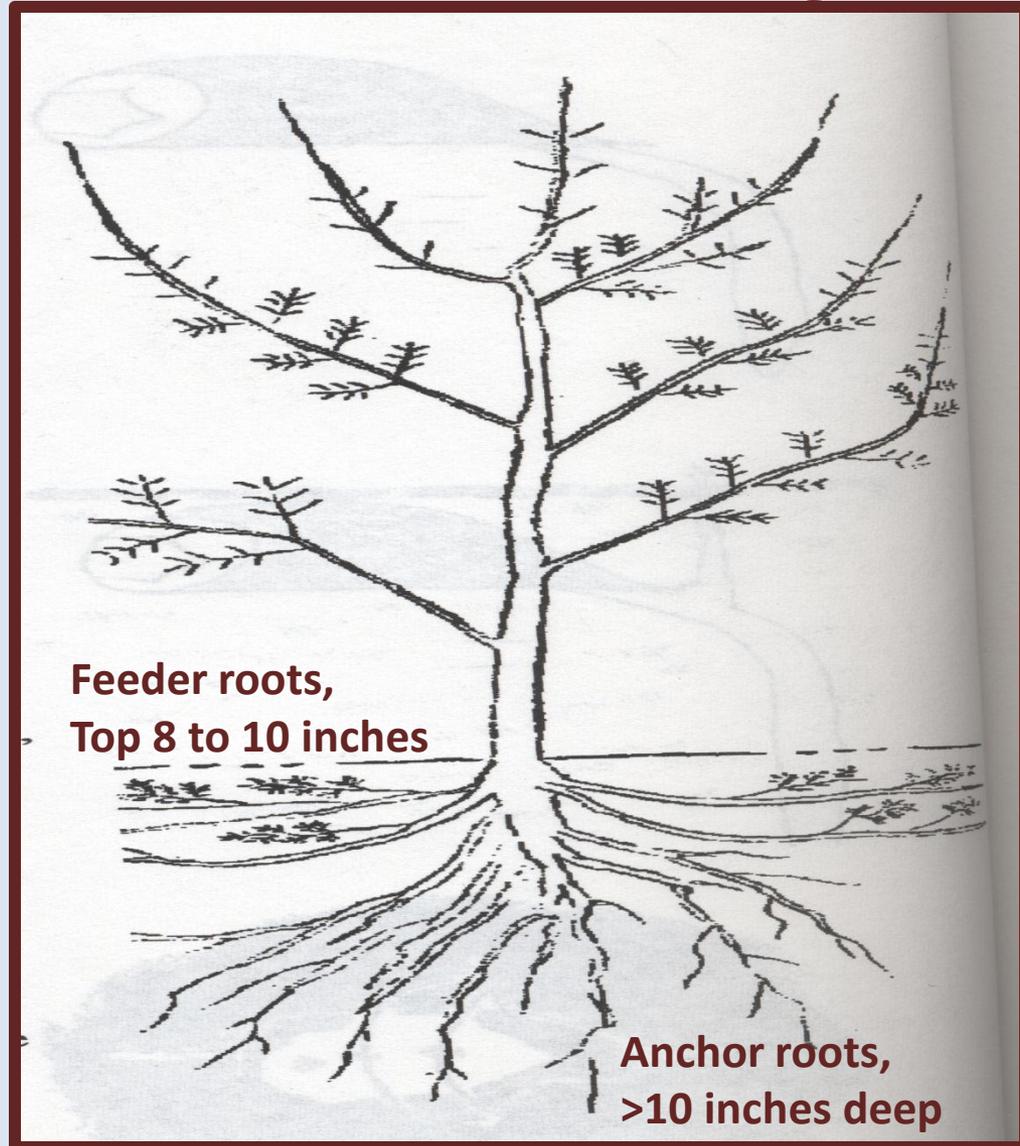


Choose The Cultivars

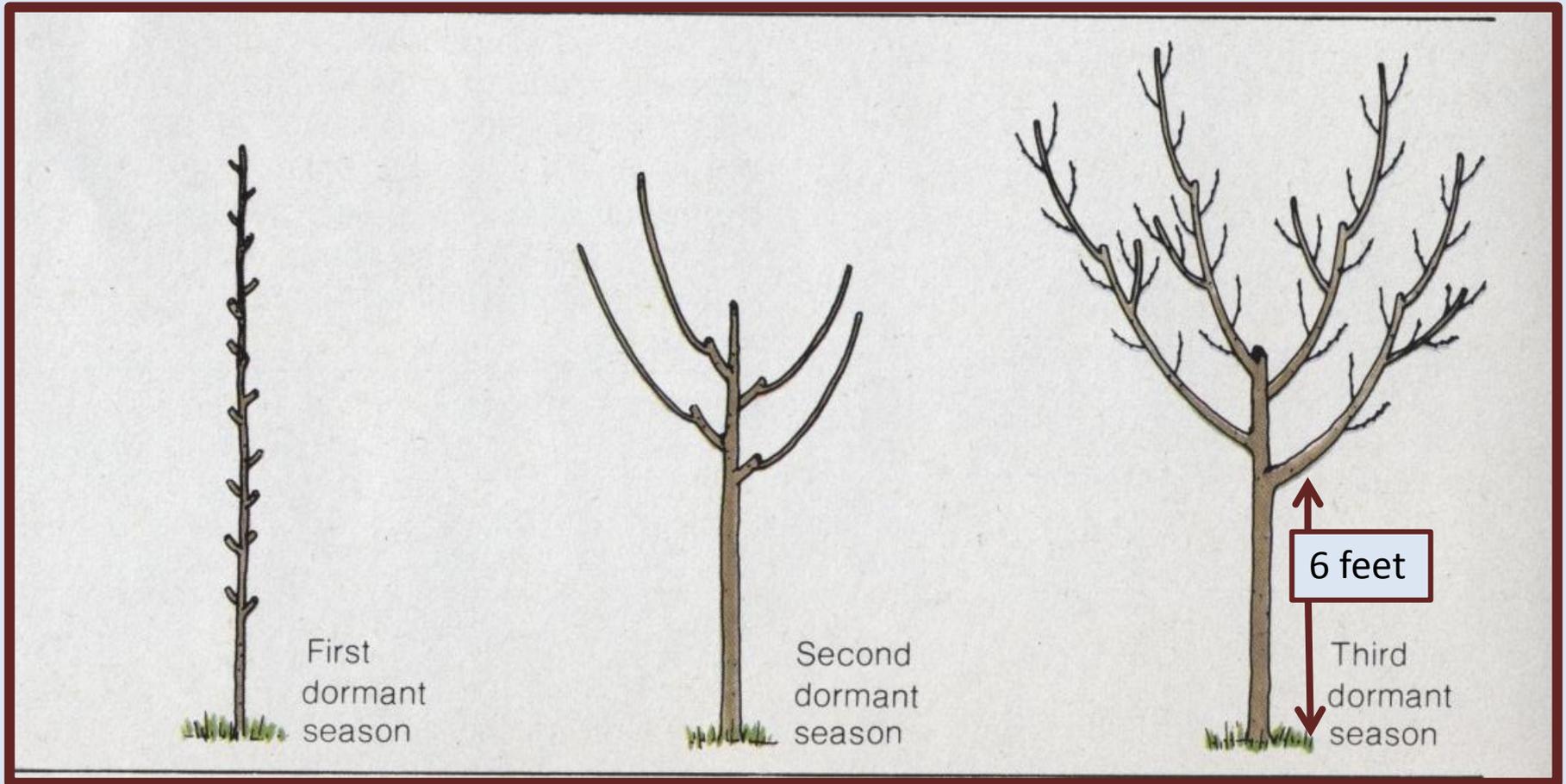
- **Will they flower at the same time?**
- **Will the trees pollinize each other?**



Know How They Grow



PRUNE THEM YOUNG



Remember that you will have to work UNDER the branches



POSSIBILITIES





Heartnut *Juglans ailantifolia var cordiformis*



- **A variety of Japanese walnut**
- **Many cultivars available**
- **Reliably winter-hardy**
- **Hulls easily removed when dry**
- **Nuts easy to crack**
- **Mild flavor, rather “buttery”**



Inter-cropping is possible:

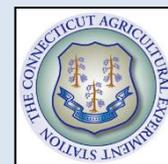
**with fast growing, low profile
annuals such as
Pumpkins, Squash
Bush beans**





Black Walnuts

Juglans nigra



- **Hulls difficult to remove, and must be removed “fresh” (and will stain everything black!)**
- **Nuts very hard to crack**
- **Strong, earthy flavor**
- **Shells worth more than the kernels**



**INTER-CROPPING FAILS
DUE TO JUGLONE
PRODUCED BY THE ROOTS**

HAY SUCCEEDS





White birch trees

Black walnut





Shagbark Hickory

Carya ovata



- **Hardest of the hickories**
- **Inter-cropping is possible**
- **Hull splits off in sections**
- **Nuts easy to crack**
- **Mild, walnutsy flavor**





Shellbark Hickory

Carya laciniosa



- **Grows on wetter sites than Shagbark**
- **Inter-cropping is possible**
- **Hull splits off in sections**
- **Shells harder than those of Shagbark**
- **Mild, walnutsy flavor**





Persian walnut
Juglans regia

- **Carpathian variety hardier than those grown in California (the typical “grocery store” walnuts)**
- **Usually grafted on black walnut root stocks (which will produce juglone)**
- **Hulls split and release the nuts**
- **Nuts very easy to crack**
- **Very mild flavor**





Chestnuts

genus *Castanea*



- **American chestnuts and chinquapins (three or one nut per bur)**
 - **Very small nuts, sweet flavor, susceptible to several diseases**
- **European chestnuts and “marrons”**
 - **Medium to large nuts, mild flavor, susceptible to several diseases**



- **Chinese chestnuts**
 - **Medium sized nuts, mild flavor, resistant to many diseases**

- **Japanese chestnuts**
 - **Very large nuts, pell (thick fibrous layer under the shell) hard to remove and bitter, resistant to most diseases**



- **Many excellent hybrids available**
- **Best grown as grafted cultivars of know quality**
- **Inter-cropping is possible**
- **Burs of most cultivars open to release nuts when ripe**
- **Highly perishable, and must be kept refrigerated and not allowed to dry out**



HARVESTING NUTS





Hand harvesting

Photo: A. Gibb



Nut Wizard



Bag-a-Nut



Machine harvesting

Photo: A. Gibb



Facma harvester

Cooking with Nuts

www.NorthernNutGrowers.org

The Centennial Cookbook



Plan the size of your orchard





Joe Cavaliere
½ acre with 5 trees

**Luginbuhl chestnut orchard
Ellington, CT
Produced 400 pounds of nuts in 2011**



07.03.



Owl Creek Ranch, California

84 acres with 9000 hybrid chestnuts



Even though 9,000 trees may be a little ambitious for Connecticut, growers can diversify their crops by adding nut trees, and just a few acres of trees can provide additional income or an interesting hobby.

