

Hazelnut A Growers Perspective



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A Growers Perspective

- Why Hazel Nuts?
- North East Climate and Land
- Agroforestry^{1,2}
- Trials and Tribulations
- To Do's – from lessons learned

Why Hazelnuts

- Nuts are a part of the recommended daily diet³
- Hazels are nearly identical to olive oil in composition
- Hazels should be able to produce 2 times the oil of soybeans per acre⁴
- Take only a few years to be established⁵
- Should be a match for vast empty fields and climate of the north east
- Marketing –Hazels are a known product for eating, flavorings and confections
- Eat local
- Low environmental impact

North East Climate and Land



- Much of Upstate New York and the north east are generally soft rolling hill side.

North East Climate and Land



- Blessed with four seasons the climate allows for one crop per year. On the other hand, other regions can have longer seasons or even two crops per year areas in the western US, Brazil etc. Putting the north east at a disadvantage.

North East Climate and Land



- Majority of farms in the region are dairy or related. Dairy farms have been decimated over the years and many fields are allowed to go fallow.

North East Climate and Land



- Hazels can be the crop to utilize the massive amounts of under or unutilized fields throughout most of the north east.
- Fields shown have been allowed to go fallow and are unutilized

North East Climate and Land



Picture taken June 11, 2010' showing fall like colors due to late hard frost that damaged native trees.

Hazel heartiness is critical!

Hazel genetics allow for this.

Agroforestry

- Potential for alley cropping to reduce fertilizer and weed control
- Truffles on Hazel roots⁶
- Other shade loving forest growth like ginseng, herbs, etc.
- Wood pellets
- Environmentally conscious



Black Truffles⁸

Trails and Tribulations

- Early plantings and the “Blight”
- Hybrid genetic variability
- Typical rodent issues like Deer, mice, crows and rabbits prey on the young hazel trees
- Nuts are loved by squirrels, deer and birds
- Japanese beetle like some of the hazels
- Heartiness variability – USDA zones 6-4 even 3!
- Some early success
- Very bright future with some caveats

Trails and Tribulations



Remaining dead or near dead blighted hazels on the left and healthy hazel bushes on the right.

Trails and Tribulations



Young plantings of bush form

Trails and Tribulations



Hazel branches being weighted down by nuts.
These bushes are heartier than some of the native trees!

Trails and Tribulations



Loads of hazels

To Do's

- Blight resistance⁷ – number one!
- Hearty plants – Zone 4 even zone 3 needed for the north east US
- Big bud mite and Japanese Beetle
- Single stem versus bush for:
 - Mechanical picking,
 - Coppicing (wood pellets)
 - Productivity of nuts versus labor

References & Links

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