

AGROFORESTRY



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SUSTAINABLE IOWA LAND TRUST

SILT

PROTECTING LAND TO GROW HEALTHY FOOD



AGROFORESTRY ADOPTION

Benefits

- For Farmers
 - Diversified Income & Profitable Options
 - Reduced Soil Erosion
 - Increased Infiltration
 - Better Soil Health & Biodiversity
 - Lower Animal Stress
 - Enhanced Wildlife & Pollinator Habitat
 - Climate-Resiliency
- For Iowa & Environment
 - Regenerative Properties
 - Improving Water Quality & Reducing Pollution
 - Combating Climate Change
 - Job Creation & Rural Wealth Increase



BARRIERS TO ADOPTION

- Access to Affordable Land
- Species Knowledge
- Land Evaluation & Preparation
- Marketing & Sales
- Short-Term Land Leases
- Significant Initial Investment
- ROI Time-Frame
- Cultural Change
- Labor Intensity



TECHNICAL & FINANCIAL ASSISTANCE



SAVANNA INSTITUTE



Private

- Sustainable Iowa Land Trust
- The Savanna Institute
- Practical Farmers of Iowa
- Association for Temperate Agroforestry
- Green Lands Blue Waters


PRACTICAL FARMERS
of Iowa



ECONOMICS CASE STUDY

Assessing the Economic Feasibility of Growing Specialized Apple Cultivars for Sale to Commercial Hard Cider Producers, Virginia Cooperative Extension.

BASIC ASSUMPTIONS: 5-foot by 15-foot row spacing, which equates to 581 trees per acre; price per bushel is \$15; and non-organic chemical application.

ESTABLISHMENT COSTS

FIRST YEAR ESTABLISHMENT COST: \$14,421/acre.

MAINTENANCE COSTS

ANNUAL VARIABLE COSTS: \$3,270/acre at maturity.

YIELD AND PROFITS

YIELD PER ACRE: second through sixth year crop yields estimated at 25, 100, 250, 550, and 600 bushels per acre, respectively.

PRICE PER BUSHEL: \$12 to \$18 for difficult-to-find hard cider apple cultivars and \$8 to \$13 for multipurpose cultivars.

REVENUE

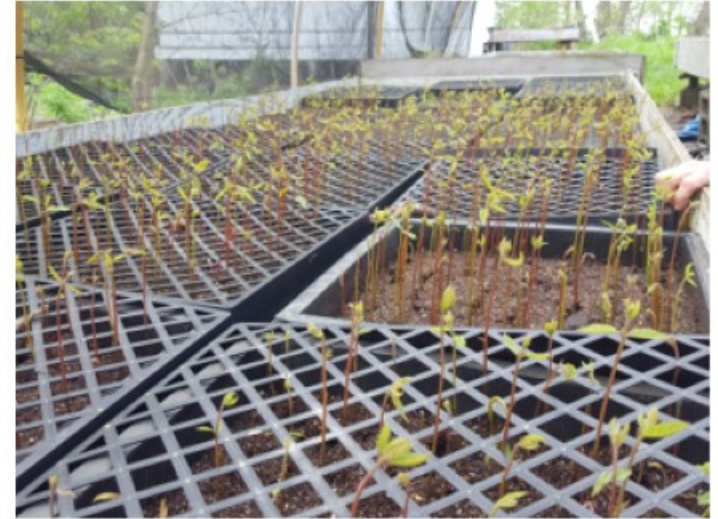
ANNUAL REVENUE: \$11,625/acre at maturity.

TOTAL REVENUE: \$243,750/acre over 25 years.

NOTES: Planting year costs include trees, tree guards, stakes, labor to plant and train trees, fertilizer and pesticides (if non-organic). Before trees come into production, costs include labor for pruning, training, mowing, and pest control. When trees get larger and come into full production, some costs for pest management pruning and thinning will increase, while yields and income are also increasing. Consider cost of the labor it will take to harvest all that fruit.



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ECONOMICS CASE STUDY

Commercial Chestnut Cost of Production, Michigan State University

BASIC ASSUMPTIONS: Grafted, European x Asian chestnuts at commercial scale greater than 10 acres

ESTABLISHMENT COSTS

FIRST YEAR ESTABLISHMENT COST: 0-5 years: \$7,783.72 per acre

MAINTENANCE COSTS

> 5 years: \$2,819.92 per acre

YIELD AND PROFITS

YIELD PER ACRE: 3,500 pounds

PRICE: \$0.81 per pound (break even price)

REVENUE

ANNUAL REVENUE: \$2,935 per acre

TECHNICAL & FINANCIAL ASSISTANCE

Public Resources

USDA

- National Agroforestry Center
- Natural Resources Conservation Service
- Iowa Department of Agriculture & Land Stewardship
- Farm Service Agency

Forms of Assistance

- Cost Sharing
- Incentives
- Conservation Planning
- Farm Loans & Operational Loans



EQUIP Iowa Payment Schedule 2021

381	Silvopasture	Bareroot Trees and Shrubs	\$2.12
381	Silvopasture	HU-Bareroot Trees and Shrubs	\$2.54
381	Silvopasture	Bareroot Trees and Shrubs with Tree Protection	\$25.48
381	Silvopasture	HU-Bareroot Trees and Shrubs with Tree Protection	\$30.57
381	Silvopasture	Bareroot Trees and Shrubs, with Tree Shelters	\$5.62



National Agroforestry Center
U.S. DEPARTMENT OF AGRICULTURE

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Interactive Practice Standards Map

Conservation Practice Standards are a key component in Natural Resource Conservation Service (NRCS) Conservation Plans and the delivery of Technical Assistance by NRCS to its cooperators. Use this interactive map to see if your state offers standards for the following practices: Alley Cropping, Multistory Cropping (Forest Farming), Riparian Forest Buffers, Silvopasture, Windbreak Establishment, and Windbreak Renovation.

[View Map](#)



Common Practices



Alley Cropping

Agricultural crops grown simultaneously with long-term tree crops.



Forest Farming

Cultivation of high-value crops under the protection of a managed forest canopy.



Riparian Forest Buffers

Natural or re-established streamside forests made up of tree, shrub, and grass plantings.



Silvopasture

Combines trees with forage and livestock production.



Windbreaks

Linear plantings of trees and shrubs to enhance, protect, and benefit people, livestock, and soil and water conservation.



Additional Applications

New twists to familiar agroforestry practices.

Additional Resources

- SILT Farm Specialist Joseph Klingelhutz offers free land-walks and consultations.



- Savanna Institute offers consultations from agroforesters
 - NRCS Incentives & Programs

