

Agroforestry Crops for the Northeast

Regenerative Design Group
January 2020



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Agroforestry is a land management strategy that integrates trees and shrubs with annual and perennial crops and/or pasture land. Agroforestry systems contribute to farm resiliency by diversifying a farm's ecology, market opportunities, and income streams.

High Potential crops are reliable growers and have established or emerging markets for fresh and value-added products. Moderate Potential crops are more variable in cultivation and market reliability, but show good promise.

High-Potential Crops

Crop	Commercial Viability	Market Price	Years to Yield	Value-Added Products	
American Persimmon (Diospyros virginiana)	Ongoing efforts to commercial- ize. Pulp is probably the most commercially viable product after value-added items.	\$2-\$3/lb retail	Seedlings: 4-9 years; grafted trees: 3-4 years	Preserves, cider, vinegar, dried (hoshigaki)	
Aronia (Aronia melanocarpa)	Popular "superfood" in Europe. Suitable for juice, jam, or other value-added products.	\$21/lb fresh frozen; \$12/32 oz juice; \$13/lb powder	2-3 years, with maximum starting at 5 years	Preserves, juice, cider, vinegar	
Chestnut, Chinese/Hybrid (C. mollissima/ C. x)	Demand generally exceeds supply; strong opportunity for growing regional markets.	\$2-7/lb wholesale	4-6 to bear; 10 for heavy yields.	Flour, baked goods, spreads, specialty holiday	
Cider Apples + Pears (Malus var./Pyrus var.)	Hard cider industry continually growing. Fruit can be sold to cidermakers whole or as juice.	\$12-\$18/bushel wholesale	Depends on rootstock + varieties; 2-7 years	Juice, cider, vinegar, wine	
Elderberry (S. nigra, S. americana)	Value-added markets, particularly in the health industry. Wholesale growers should arrange for market contract prior to production.	Berries, w/ stems: \$0.50/ lb; w/out stems: \$3-\$5/ lb; PYO: \$1.25/lb; \$11/ lb to dietary supplement manufacturers	3-4 years from cuttings, 2-3 from potted stock	Preserves, juice, cider, wine, vinegar, tonic, syrup	
Currant/Gooseberry (Ribes var.)	Minor crops in U.S., but market is growing. Fresh sales and value-added products.	\$4-\$8/lb retail	2-3 to bear; full production at 4 years	Preserves, juice, cider, vinegar	
Hardy Kiwi (Actinidia arguta)	Market for NZ kiwi; potential for growing regional markets of <i>A. arguta</i> . Some challenges due to perception as invasive.	N/A; NH study found market-goers willing to pay around \$4/6 oz (\$10.66/lb)	Can set fruit as early as Year 3; 6-7 years for appreciable harvests	Cider, vinegar, wine, preserves	
Hazelnut hybrids (Corylus avellana x am)	Established domestic + int. markets; demand exceeds supply. Profitable crop.	Wholesale: \$2.50-\$3.50/ lb Retail: \$6/lb in-shell; \$14/ lb shelled	4-5 to bear; 6-7 for heavy yields.	Flour, oil, spreads	
Pawpaw (Asimina triloba)	Market research, public + private breeding programs expanding. Markets for pulp are critical for success.	\$3-\$5/lb retail	Seedlings: 5-8 years, Grafted: 3-4 years or less	Preserves, cider, vinegar, pulp	
Schisandra berry (Schisandra chinensis)	Imported from China, used in health tonics. Niche market potential with herb wholesalers/herbalists/restaurants/value added products.	\$44-52/lb for Chi- na-grown, dried, OG berries	3-4 years	Juice, cider, vinegar, syrup, extract, tonic	

Moderate Potential Crops

Crop	Overview	Site Requirements	Market Price	Commercial Potential
Beach plum (Prunus maritima)	Wild to sandy coastal regions; commercial cultivation similar to other plum. Demand exceeds supply, due in part to dwindling natural stands.	Well drained, moderate fertility. Full-sun.	\$4-\$6/pint fresh	Niche crop for local markets, value added, + nursery stock.
Black locust (Robinia pseudoacacia)	Easy to grow, numerous benefits: N-fixing, nutritious leaves for ruminants, source of food for bees, wood has high BTU + is rot resistant.	Tolerant of wide range of soils + conditions; will form groves if not managed.	\$1 – \$3 per linear foot for whole posts; \$1.50 – \$3.50/board foot for milled lumber	Lumber, post, + fire wood; part of a larger diversified operation.
Black walnut (Juglans nigra)	Allelopathic. Supplemental watering or irrigation may be necessary during establishment, especially dry years, as walnuts do not do well in drought conditions.	Deep, well-drained soil with medium to good fertility + soil pH of around 6.5. Full sun.	\$10 - \$14 per 100 pounds hulled (wholesale)	Nut crop + lumber; part of a larger diversified opera- tion; nuts more popular in midwest.
Goji berry (Lycium barbarum)	Relatively disease/pest-free. Fresh goji not available in U.S.; berries are viewed as a potential niche crop. Variable in growth require- ments, habit, yields, + quality.	Well-drained sand, loam, and clay soils with mod- erate fertility. Full sun.	\$14/lb for dried berries (retail)	No proven regional markets for fresh berries; niche crop - part of a larg- er diversified operation.
Heartnut, Buartnut (J. ailantifolia, J. xbixbyi)	Heartnut's hardiness zone is 6-7, while Buartnut can be grown in regions as cold as zone 4. Poten- tial for contributing to regional sources of walnut, which is widely known and consumed.	Fertile, well-drained, moist sand + clay loam. Full sun.	\$15/lb for organic wal- nuts (retail)	Niche crop - part of a larg- er diversified operation.
Juneberry, Serviceberry (Amelanchier spp)	Challenges with planting material, consumer acceptance, pests/disease pressure and crop reliability. A number of varieties have been developed in Canada but regional reliability needs to be tested.	Adaptable. Likes well- drained soils with a pH between 5.5-7.5. Full sun to part shade.	\$6/pint PYO	Potential markets for fresh and value-added. Virtually no commercial cultivation in the Northeast.
Korean nut pine (Pinus koraiensis)	Similar to white pine. Flourishes in a semi-shaded area, benefits from mycorrhizal fungi. 10-20 years to produce nuts.	Well-drained, sandy, acidic. Shade is essential during first 2 years.	\$18/lb. (retail)	Niche crop for cones + nuts; part of a larger diver- sified operation.
Mulberry (Morus spp.)	Easily grown, very adaptable. Requires labor intensive picking + heavy pruning to maintain a suitable tree size for harvesting.	Wide range of well- drained soils. Full sun to part shade.	\$10/lb dried (retail)	Fresh berries have a short shelf life, good for local sales. Frozen + dried ber- ries have larger markets.
Nanking cherry (Prunus tomentosa)	A companion crop with beneficial ecological characteristics. Economic sustainability yet to be determined. Fruit is small with short shelf life.	Adaptable, likes well- drained soils. Full sun.	No developed commercial market.	Niche crop for local markets; part of a larger diversified operation.
Seaberry (Hippophae rhamnoides)	Easy to grow, productive. Berry is a nutrient-dense superfood. Could be a problematic spreader. Spines make some varieties hard to harvest.	Widely adaptable. Toler- ant of low fertility; moist to very dry; well-drained; pH of 5.5-7.0 to fix N.	\$1.50- \$4.50/lb	Popular in Europe + cos- metic industry; not widely used in US. Essential oil from seeds and berry pulp are the most valuable.

The following sources were used in the creation of this document:

Agricultural Marketing Resource Center (AgMRC)
Cornell Cooperative Extension
New Hampshire Agricultural Experiment Station
PennState Extension
Society of Ontario Nut Growers
Sustainable Agriculture Research & Education (SARE)
University of Kentucky Cooperative Extension Service
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For an expanded list of Agroforestry Crops, please contact Jono Neiger: jono@rdgland.com.



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Draft Revised: February 5, 2020 9:07 AM