

Nut Production, Marketing Handout

Why grow nuts in Iowa???

Nuts can produce the equivalent of a white-collar salary from a part-time job. They are up to 12 times more profitable per acre than corn was, even back when corn was \$8/bushel.

Nuts can accomplish the above with just a fraction of the investment in capital, land, and labor.

Nuts can be grown in a biologically diverse perennial polyculture system with the following benefits:

- Builds soil instead of losing it to erosion
- Little or no chemical inputs needed
- Sequesters CO₂ and builds soil organic matter
- Increases precipitation infiltration and storage, reduces runoff, building resilience against drought
- Produces high-quality habitat for wildlife, pollinating insects, and beneficial soil microbes
- Can build rural communities by providing a good living and a high quality of life for a whole farm family, on a relatively few acres

If it's so great, why doesn't everybody do it?

"Time Preference" economic principle: the tendency of people to prefer a smaller reward immediately over having to wait for a larger reward. Example: if an average person was to be given the choice between the following....

1. \$10,000 cash right now, tax-free, no strings, or

#2. Work part-time for 10 years with **no pay**, but after 10 years receive \$100,000 per year, every year, for the rest of his/her life, and then for his/her heirs, in perpetuity...

Most would choose #1, the immediate, smaller payoff.

This is a near-perfect analogy for nut growing. Nut growing requires a substantial up-front investment with **no return** for the first five years, break-even not until eight to ten years, then up to \$10,000 per acre or more at maturity, 12-15 years. This up-front investment with no immediate return will keep most people from ever considering this type of enterprise.

So, what does it take to grow nuts in Iowa?

It takes less capital, labor, equipment, and technical expertise to grow 10 acres of nuts than it does to grow 100 acres of corn, but it does require some specialized knowledge not often found in the general population. This knowledge is not difficult to acquire, and there are many people willing to share it. The following is a list of the basics:

1. Careful planning and preparation
 - Select a suitable site, considering climate, soil, slope, aspect, and other topographical features
 - Install and manage a groundcover compatible with tree survival and growth
 - Choose a proper layout and spacing
 - Select species and types with good commercial potential in your area
2. Acquire high-quality nursery stock
 - Superior genetics
 - Healthy, strong, well-grown in the nursery
3. Do a good job planting
 - Dig proper holes—an \$8 tree needs an \$80 hole
 - Plant trees at proper depth
 - Backfill and firm the soil correctly
 - Water in, then monitor soil moisture, irrigate as needed
4. Provide **effective** protection from deer, rabbits, mice, etc. (5' tall, ventilated tree shelters)
5. Provide **effective** protection against weed competition, especially from grasses
 - Landscape fabric plus mulch (about \$300 per acre cost, not including labor), or
 - Herbicide (Oust, 30 cents/acre cost, not including labor)
 - Do not** use glyphosate ("Roundup") for weed control
6. Keep vegetation mowed short year-round, until trees are well-established
7. Mow vegetation short before nuts start falling (this is the only on-going absolute requirement after trees become well-established)

Marketing—how do you sell nuts in Iowa?

Several options are available:

- Farmers' market or farm stand—may be viable in/near university towns, big cities
- Local groceries, restaurants—requires a lot of driving and footwork to deliver usually small quantities
- Online, mail order—very common nowadays, can be profitable, but a lot of work
- Sell to wholesaler—I have no experience doing this, but I would think this would be the least profitable way to market
- Sell to co-operative—easy, convenient, and good prices from Prairie Grove Chestnut Growers at Columbus Junction, IA
- PYO—can work if you have a large enough customer base, near enough, and willing to pick. PYO is easily the most profitable way to market, as it eliminates multiple costs: harvesting,

handling, sanitation, packaging, refrigeration, shipping, and shrinkage. All those cost savings are pure profit.

What kind of nuts can/should I be growing?

Nuts that **can** be grown in Iowa include black walnuts, Persian (so-called “English”) walnuts, heartnuts, pecans and other hickory nuts, hazels, almonds, chestnuts, and perhaps a few other minor species.

Which ones should I grow, or should I grow them all?

Black walnuts—low price and very limited market for in-shell nuts, equipment for harvesting, husking, cracking, and separating is quite sophisticated and expensive.

Persian (“English”) walnuts—Not well adapted to Midwest climate, trees don’t grow or survive well, and are very susceptible to numerous pests/diseases.

Pecans—very intensive in terms of labor, equipment, and pesticides in order to be successful. It would be very difficult to compete successfully against southern growers. Also, China may soon become a major low-cost supplier

Other hickories—tasty, but tend to be difficult to crack and extract. Also shy and irregular bearers (as in, one good crop every five years).

Almonds—Unreliable in bearing due to susceptibility to late frosts and numerous diseases

Hazels—grow and bear well in Iowa, but one significant hurdle to profitability: you can buy large quantities of high quality hazel nuts on the world market for less than 20% of the cost of growing them here.

Heartnuts—have good commercial potential, but unproven in Iowa (so far). Recommended for experimental planting

Chestnuts—best commercial potential by a wide margin:

--Can be grown on suitable sites throughout Iowa

--Very high value crop—up to \$10,000 per acre or more at maturity (12-15 years)

--Very high demand statewide, nationwide, worldwide

--Easy to grow on suitable sites, long-lived, no serious pest or disease problems in Iowa (so far)

--Probably nowhere in Iowa is too far for a PYO market

--Easily stackable with other enterprises to increase per-acre profitability—Example: chestnuts, pawpaws, berry bushes, perennial vegetables (asparagus, rhubarb), medicinal roots (ginseng, goldenseal) can be grown on the same acres at the same time.