

DOLLARS & CENTS

Yields

Our 6-year-old plantation in Escanaba is growing 3.6 dry tons per acre each year. That's roughly **3 cords per acre each year** – or 2 to 3 times the yield of natural stands.

Costs

Cost estimates for site preparation, planting, and maintenance range from **\$330 to \$580 per acre**, but vary depending on the site and treatments used.

Revenue

If this fiber sold for \$30 per cord, the harvest in year 12 would be worth about \$1,100 per acre. Thus, net revenue might range from \$770 to \$520 per acre after 12 years (without land costs or interest on investment).

A 40-acre fiber farm might produce a net return ranging from **\$31,000 to \$21,000 every 12 years**.



RESOURCES

USDA: Guidelines for establishing poplar plantations in the north-central U.S.

Minnesota Extension Service: Hybrid poplars as an alternative crop.

University of Wisconsin: Establishing a short rotation intensive culture poplar plantation.

Michigan State University: Fiber farming using Populus hybrids, aspen, and European larch in Michigan's Upper Peninsula.

USDA: A guide to insect, disease, and animal pests of poplars.

See our web site for links



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FIBER FARMING

Alternative Crops For Michigan



WHAT IS IT?

Grow Trees Fast

Pulpwood can be grown in one-quarter of the usual time in intensively managed plantations on agricultural land. Because these plantations are treated like agricultural crops, they are more like farms than forests.

Supply An Existing Market

The paper and oriented-strand board industries in Michigan consume a large quantity of aspen fiber each year. Prices for aspen pulpwood have hit record highs in recent years as a result of increased demand and diminished supply.

Put Surplus Land To Work

Michigan has many acres of abandoned farmland, discontinued Christmas tree operations, and fields coming out of the Conservation Reserve Program that are suitable for fiber farming. Minnesota and Wisconsin already have active fiber farming programs – Michigan is just getting started.

Ease Pressure On Natural Forests

Competition for fiber produced in natural stands has increased at the same time as the public has pushed for less timber production in many of these same areas. Fiber farms can produce a product that will easily substitute for native aspen in some situations.

STEPS TO SUCCESS



Select The Right Site

- ✔ Only deep, fertile, loamy soils are suitable.
- ✔ Soils should hold moisture but drain well.
- ✔ You must provide access for management equipment.
- ✔ Sites should be within a reasonable distance of mills.

Plant The Right Crop

- ✔ You will need assistance selecting clones that are suitable for your site.
- ✔ Use only pest resistant clones.
- ✔ Clones should produce fiber that is marketable.
- ✔ Clones should grow rapidly enough to meet your rotation goal.



Use Proven Cultural Methods

- ✔ Sites must be weed-free prior to planting.
- ✔ Cuttings can be planted by hand in friable soil.
- ✔ Control weeds for at least 3 years after planting.
- ✔ Fertilization & irrigation may be required to maximize growth.
- ✔ Pruning of lower branches may be needed after several years.

Control Pests

- ✔ Many insects attack poplar. Some can be controlled by spraying but crop resistance is the best option.
- ✔ The only way to control loss to diseases is through planting resistant clones.
- ✔ Fencing during the first 2 to 4 years is the only reliable defense against deer browsing in some areas.

Promising Clones For Michigan:

DN-5, DN-17, DN-34, DN-182, NE-222, and NM-6.

Test unproven clones in small plots before using.

Obtain availability & pricing from your local tree nursery.