

MARKET MUSHROOM FARMING

CULTIVATING OUTDOOR WOODLOT MUSHROOMS;
SMALL-SCALE ORGANIC REGENERATIVE
TECHNIQUES

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LIFE CYCLE OF FUNGUS

SPORE-SPAWN-HYPHA-MYCELIUM-FRUITINGBODY-SPORE

Inoculation - introducing mushroom genetics to a prepared substrate

Incubation - maintaining optimal “vegetative” growth environment

Colonization - full mycelium colonization of the substrate

Fruiting - triggering the fruiting body of the fungus to flush

Resting - mycelium restoration

Retirement - post-production lifecycle of mushroom substrates

SPAWN

SAWDUST

GRAIN

DOWEL

LIQUID CULTURE

GENETICS

SOURCING SPAWN

PRODUCING SPAWN



SUBSTRATE

“Use what you have”

Know your mushrooms

Know your substrate

Pasteurization vs Sterilization vs Curing

Moisture

Weeds and pests

Availability



THE WOODLOT

ENVIRONMENT

LOCATION

SCALE

UTILITY

ACCESS

INFRASTRUCTURE

PESTS

SEASONALITY



Why we choose WOODLOT growing!
**ZERO WASTE CULTIVATION
TECH**

Low-impact regenerative techniques

Sustainable forestry management

Agricultural production waste

reusable, sterilizable, recyclable, nonreactive



WOODLOT MARKET MUSHROOM

MANUAL PRODUCTION - AUTOMATION
HIGH INFRASTRUCTURE - LOW TECH
CONTRACT LABOR - FARMER LABOR
STARTUP COSTS - SUSTAINED PRODUCTION



SHIITAKE

HARDWOOD

42" BOLT

12 MONTH INCUBATION

5 YEAR AVERAGE LIFE

100-400 BOLTS FORCED / WEEK

.25 - .50 LBS / YEAR / BOLT

SMALL 100-500

MEDIUM 1000-5000

LARGE 5000+



MUSHROOM MATH

Based on an average size (2000-5000 bolt) woodlot mushroom operation, producing and inoculating seasonally, selling direct to consumer.

ENTERPRISE VIABILITY



	Y1	Y2	Y3	Y4	Y5
bolts/harvested	180	688	1052	1288	1572
\$/bolt (stock)	\$0.35	\$2.00	\$1.88	\$2.00	\$2.20
\$/bolt (materials)	\$2.13	\$1.73	\$1.80	\$1.81	\$1.81
COST	\$ 446.4	\$ 1187	\$ 1890	\$ 2328	\$ 2841

	Y1	Y2	Y3	Y4	Y5
bolts/harvested	180	688	1052	1288	1572
bolts/fruited	180	868	1740	2340	2860
Inoculation (5b/hr)	36.0	137.6	210.4	257.6	314.4
Fruiting/Harvesting (15b/hr)	12.0	57.9	116.0	156.0	190.7
Value Add (5#/hr)	4.0	31.2	87.0	152.1	185.9
LABOR (\$15)	\$ 779	\$ 3401	\$ 6201	\$ 8486	\$ 10365

	Y1	Y2	Y3	Y4	Y5
SCALE	200	1000	2000	2500	3000
COST	\$ 446.4	\$ 1187	\$ 1890	\$ 2328	\$ 2841
LABOR	\$ 779	\$ 3401	\$ 6201	\$ 8486	\$ 10365
SALES	\$ 583	\$ 4600	\$ 12806	\$ 22389	\$ 27364
P/L	\$ (643)	\$ 12	\$ 4715	\$ 11576	\$ 14159

	Y1	Y2	Y3	Y4	Y5
bolts	180	880	1860	2600	3200
culls	0	12	120	260	340
#/bolt	0.22	0.36	0.50	0.65	0.65
fruits (#)	39.60	312.48	870.00	1521.00	1859.00
loss	3.17	25.00	69.60	121.68	148.72
SALES	\$ 583	\$ 4600	\$ 12806	\$ 22389	\$ 27364

OYSTER

PASTEURIZED STRAW

“Artificial log”

Reusable fruiting containers

Fast turnaround “spawn to harvest”

Pests - slugs, beetles, gnats

Infrastructure

Strong Fungus





WINE CAP

STRAPHORIA

Deserves a spot of its own

Perennial Fungi

Soil Builder

Post Harvest Handling



WHATS NEXT FOR MUSHROOM FARMING

The Northeast Sustainable Research and Education (SARE) Program

Curating Affordable Access to a Sustainable Woodlot Mushroom Farming Industry and Enterprise; with a Focus on Educational Mediums Through Improvements in Physical, Financial, and Sustainable Investments in Mycology, Agriculture, & Sustainable Forestry.

“GOT WOOD?”

Establishing a cross discipline resource sharing program focusing on agricultural waste streams allowing easy access to sustainable organic log stock.

“PEGASUS”

Bolster the mushroom bolt inoculation process by creating a low cost entry pathway for beginning farmers/homesteaders to invest in a *viable* mushroom woodlot enterprise with a drastic decrease in the initial overhead burden.

“FUNGUS AMONG US”

Report and record the possible effects on the northeast regions growth in access and production of woodlot log grown mushrooms.

***THANK
YOU***

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