

# Indy Urban Mushrooms:

## Growing revenue through collaborative exploration of mushroom production

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### Goal

Foster collaborative exploration and marketing of mushroom production at urban farms in Indianapolis.

### Workshop

#### Day 1

- Fungal ecology & biology
- Tissue culture
- Spawn production
- Mushroom production
- Post-harvest handling
- Mycelium Revenue
- Marketing



#### Day 2

- Farm site visits
- Hands-on training



### Synergies

- Slack® software
- Quarterly meetings
- Shared equipment
- Spawn runs
- Grouped supply orders
- Shared learning

	Fitness Farm	Growing Places Indy	CUE Farm	Mother Love's Garden
<b>Farm Size</b>	20 acres	4 locations totaling 1.5 acres	1 acre	<1 acre
<b>Season</b>	Year-round, indoor	Year-round, indoor	Early spring, late fall, outdoor	Year-round, indoor
<b>Substrate</b>	Straw, blocks, logs	Straw, blocks, spent grain, coffee grounds	Logs, wood chips, compost	Coffee grounds and straw in buckets
<b>Varieties</b>	Blue Grey Oyster, Shiitake, Lion's Mane	Pearl Oyster, PoHu Oyster, Golden Oyster	Shiitake, Oyster, Wine Cap, Almond Agaricus	Oyster, Lion's Mane
<b>Techniques</b>	Blocks in fruiting chamber and shaded hoop house, Straw bags in shaded hoop house	Straw bags under greenhouse tables, Blocks in fruiting chamber	Outdoor – riparian forest, under crop trees & shrubs, intercropping	Straw and coffee ground buckets in shaded greenhouse.
<b>Yield to Date</b>	16-20 lbs. shiitake monthly, 3 lbs. lions mane	~1 lb. pearl oyster from trial	8.6 oz. oyster, 3.5 lbs. shiitake	None
<b>Sales</b>	Farmers market	Restaurant, farmer's market, farm stand	Farm stand, CSA, restaurants and grocers	Community Controlled Food Initiative

#### Trials:

- Oyster in fermented straw bags in shaded hoop house. Nice first flush, too hot in summer.
- Blue grey oyster in fermented straw bags in shaded hoop house. Didn't fare well over winter.
- Lion's mane: *Ailanthus* logs outside and blocks in fruiting chamber.



#### Stable Operations:

- 20 shiitake blocks monthly. 10 blocks placed in fruiting chamber, allowed to fruit, rested, resoaked, and placed in shaded hoop house for 2<sup>nd</sup> flush.
- Fruiting chamber is a clean IBC tote with shelves, water, and pond foggers.



#### Next Steps:

- Add 2 more fruiting chambers.
- Build a climate controlled room for fruiting.

#### Trials:

- Pearl oyster in fermented straw buckets, placed under greenhouse table.
- Built fruiting chamber from 6' x 6' metal shelf wrapped in plastic topped with a 40 gal. plastic tote filled with water and a pond fogger and fan to push moist air into chamber.



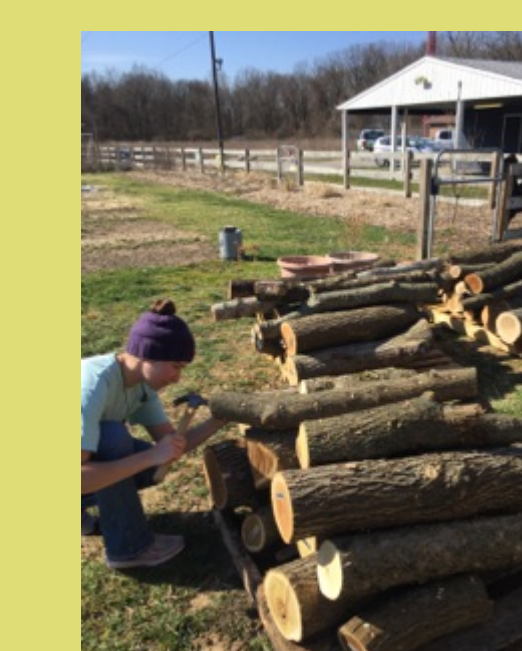
#### Next Steps:

- Hang heat-treated straw bags inoculated with PoHu oyster (3 bags) and golden oyster (2 bags) under tables every 2 weeks.
- Test chamber for shiitake and lion's mane blocks, then more difficult enoki and bear tooth.
- Explore use of spent brewery grain and coffee grounds.



#### Trials:

- Shiitake on 12-15 oak logs placed in riparian forest.
- Yellow oyster on 10-15 invasive *Ailanthus* logs placed in riparian forest.
- Wine cap in wood chips under shrubs.
- Inoculated 100+ logs with shiitake and oyster varieties. Placed in riparian area.



#### Next Steps:

- Inoculate compost with almond agaricus.
- Inoculate more wood chips with wine cap.
- Test inoculation of invasive honeysuckle branches with oyster.

#### Next Steps:

- Propane turkey fryer to sanitize straw. Will expand capacity with a 35-55 gallon drum.
- Collect and sterilize coffee grounds.
- Test to see if basement is good location for fruiting then transferring to greenhouse.
- Hire 2 neighborhood youth to track production.



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