



Ivan Vincent -Owner/farmer at The Ugly Barn Farm  
Mushroom Farm

# Overview

- Why mushrooms
- About the Farm
- How to grow mushrooms
- Low tech options





# Amazing mushrooms!

- More closely related to animals
- Diverse in function and appearance
  - Very important ecosystem functions
  - 1 in<sup>3</sup> can contain 8 mi of mycellium



# Food!



• **Why mushrooms** • About the Farm • How to grow mushrooms • Low tech options



# Medicine



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# Mycoremediation



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# Construction

- Began in 2015
- Year-round, indoor
- Certified kitchen
- Heated with wood



# Our products



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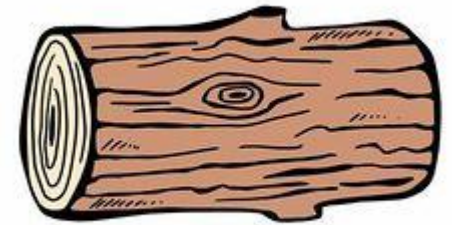
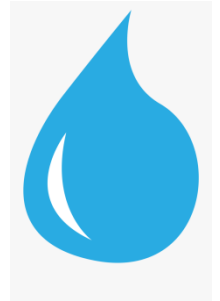
# Wild-crafting



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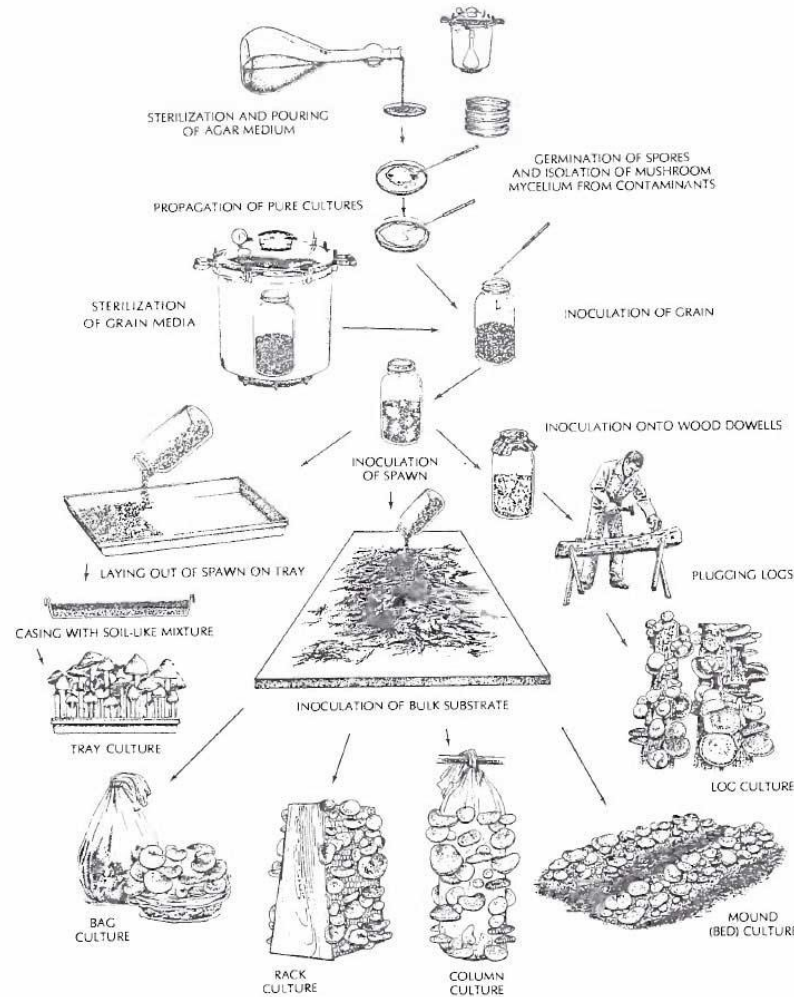
# How do I grow

- Mushrooms need:
  - Light
  - Humidity
  - Energy (wood, bran) or other carbon waste
  - Warm temperature to colonize
  - Cool temperatures to fruit





# Growing options



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# How do I grow



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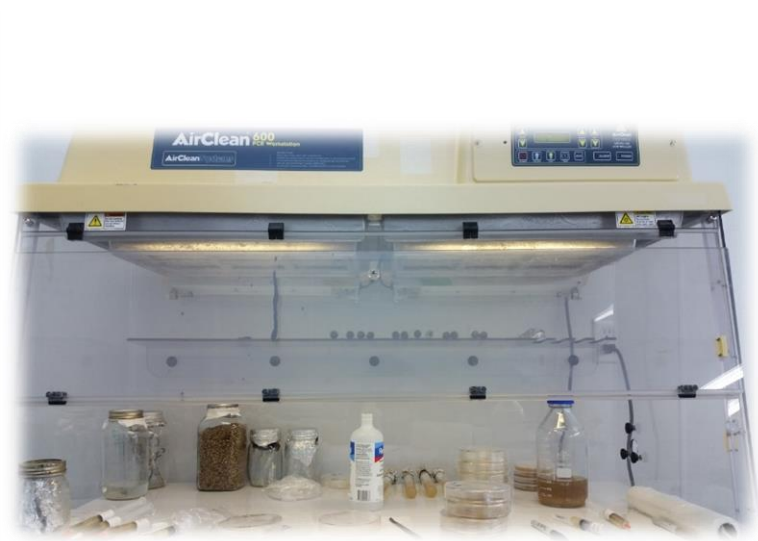
# How do I grow

- Oyster mushrooms on straw
- Cold pasteurization



# How do I grow

- All species grow on wood
- Need to sterilize







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# Low tech options

- Ready to fruit blocks
- Outdoor cultivation



# Ready to fruit blocks

- Skip all those other steps
- Just need fruiting rooms



# Outdoor cultivation



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# Outdoor garden beds



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# Advantages to outdoor

- Low start-up cost
  - No expensive equipment
  - Can be done in backyard
- Low maintenance cost
  - No hydro bills
    - Cooling/heating
  - No cleaning
- Less labour....maybe





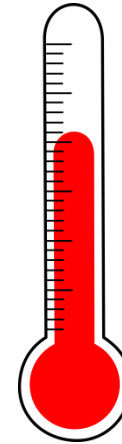
# Disadvantages

- No control on temperature
- Large initial labour cost
- Seasonal
- Pests
- Limited on species (climate)
- Need access to hardwood logs



# Advantages to indoor

- Temperature control
- Wider variety of species
- Pest control
- All year





# Not all mushrooms can be grown

...but we can try





Questions?





High Co<sub>2</sub>  
environment



# Biological efficiency





# Garden oysters

