



Transition Farming & Biodiversity

***Mycelium
Running -
How
Mushrooms
Can Save Our
Farms***



Mycelium Running - How Mushrooms Can Save Our Farms



Climate Proofing Our Farms and Communities:

In order to build more resilient, sustainable and climate-proofed farms we need to drastically reduce our chemical and oil-based inputs. One common sense approach is by replacing these external inputs with nutrients and minerals released from our existing bedrocks and soils, using the expertise of a hundred million years of evolution. This is done by re-establishing the fungal networks on our farms, fields and in the environment as they are the catalyst that stabilises biological systems. In these environments biological communities can thrive, not just in the short term but generation after generation.

This workshop examines:

This workshop examines the potential that mushrooms can offer in improving biological activity, bioremediation, pollution reduction and cycling minerals/nutrients on farm.

Mushrooms are the conductors of our biological systems because they:

- ✓ Digest the bed rock and provide the base minerals that are currently being imported at large and increasing costs.
- ✓ Reduce erosion and nutrient run-off as the fungal networks hold our soil together.
- ✓ Fix carbon in a more stable form deep into our soils and biological systems.
- ✓ Create an environment where our Nitrogen is held in its most biologically stable form (NH₄ Ammonium).
- ✓ Remediate polluted soils and filtrate farm run-off/effluent and help to reduce weed growth.
- ✓ Lower the pH below the level at which nitrifying bacteria can operate.
- ✓ Create a physical communication network of nature - they are the Wood Wide Web that existed long before the World Wide Web.

Group Activity:

What is your first or strongest memory of mushrooms?

Many diverse experiences and memories were shared by participants about mushrooms. A video by Paul Stamets helped to set out the larger perspective of mushrooms and 6 ways mushrooms can save our world allowed participants to explore the benefits of Myco-Farming.

In small groups participants discussed the benefits of mushrooms and explored the different places and systems that could incorporate fungi on their farm. Practical examples were presented of how to run mycelium in variety of ways. Participants were given some Garden Giant Mycelium to take home and run on their own farms and gardens.

Participants learned that Myco-Farming is not only about rediscovering the wonders of mushrooms for our farms and environment; they also learned how improving our understanding of their role in the natural world and building a new relationship with them in our farming and food systems is vital to healthy ecosystems.



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*“It is hard to imagine how we can Farm for Nature without working with our Fungal Friends”
Thomas O Connor, Manna Organic Farm*

We have only started to really understand the role that the mycelial networks play and our dependence on them. This is exciting and hopeful as we get to know our fungal allies. Myco-Farming is not simply about growing mushrooms for commercial sale. Mushrooms enable all of us to enjoy the economic and ecological benefits of reintroducing a healthy myco-system into our gardens, community and farms.

The Do's & Don'ts of Myco-Farming.

Do's

- ✓ Build and add Carbon to your system. Grow biomass / woodchip for pathways or use RWC (Ramel wood chip) in your meadows and pastures
- ✓ Grow hay and higher lignin biomass to compost or cut and drop to feed infield fungal biomass
- ✓ Implement mob grazing, trampling plenty of fungal food on to the pasture
- ✓ Use more static composting piles to create more fungal dominated compost
- ✓ Make compost teas from your own compost, leaf mould or soil or gather some from a nearby woodland to inoculate your soil
- ✓ Find a mushroom you like and learn how to cultivate it - this can be done with logs or in beds
- ✓ Keep learning about and experimenting with our fungal friends

Dont's

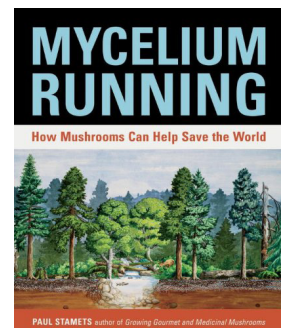
- ✗ Do not eat a mushroom until you are sure you know what it is – some can be toxic if not identified correctly
- ✗ Reduce or stop regular ploughing - tillage is detrimental to the mycelial networks and structure of our soil
- ✗ Do not use any fungicides or any other “cides” as they will kill or inhibit the establishment and growth of our fungal allies. (Herbicides and pesticides are other ‘cides’, which literally means death)
- ✗ Do not use seed treatments, which prevent early development of the symbiotic relationships of seed, mycelium, and biology
- ✗ Do not apply chemical fertilisers, which dramatically affect fungal population and density.

Resources:

“Mycelium Running - How mushrooms can save the world” by Paul Stamets is an excellent resource about the amazing potential of Mushrooms, both seen and unseen for our farm including from both an economic and environmental perspective. Mycelium Running clearly outlines the use of mycelial membranes for ecological health. The author expertly shows the links between mushroom cultivation, permaculture, agro-forestry, myco-remediation and soil enhancement.

Ways Mushrooms Can Save the World

<https://www.youtube.com/watch?v=XI5frPV58tY&list=PLfWjHKPg4K-Wt6R5WftpQQHJTzAITpZX-&index=1&t=47s>



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