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GroCycle

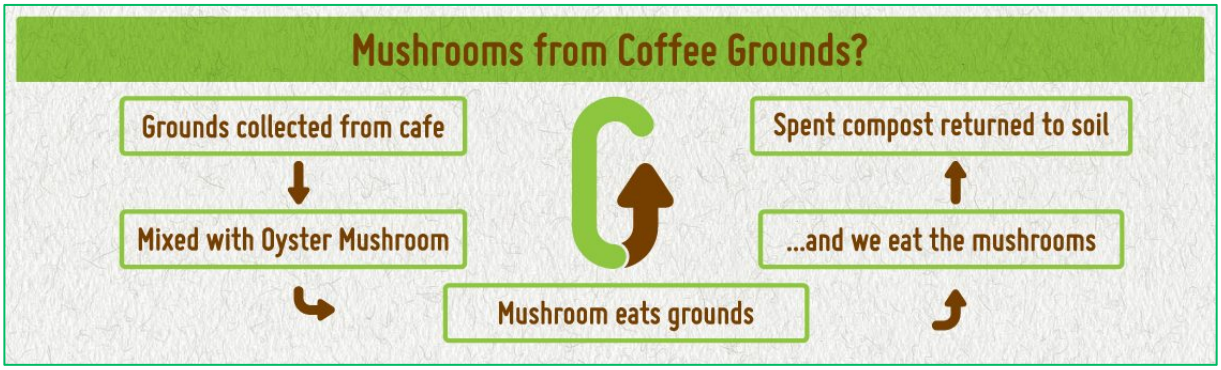
GroCycle is a project launched by Fungi Futures CIC based in Devon. UK. They collect waste coffee grounds from local businesses such as cafés and restaurants. Coffee grounds are still hugely rich in nutrient content and make a perfect medium for the growth of gourmet oyster mushrooms.

The UK has around 15,000 coffee shops, with more being built as we speak. Worldwide more than 1.6 billion cups of coffee are drunk each day, with around 80 million cups of coffee consumed each day in the UK alone. This means there is a huge amount of coffee waste. Less than 1% of the biomass goes into each cup of coffee and the rest is usually chucked in the bin and sent as waste to landfill.

They have been growing oyster mushrooms using waste coffee ground since 2011 and have aspirations of extending this on a much larger scale by helping people grow their own mushroom crops at home using Mushroom Grow Kits and by training people in their mushroom growing technique so that it can be replicated in cities all over the world.

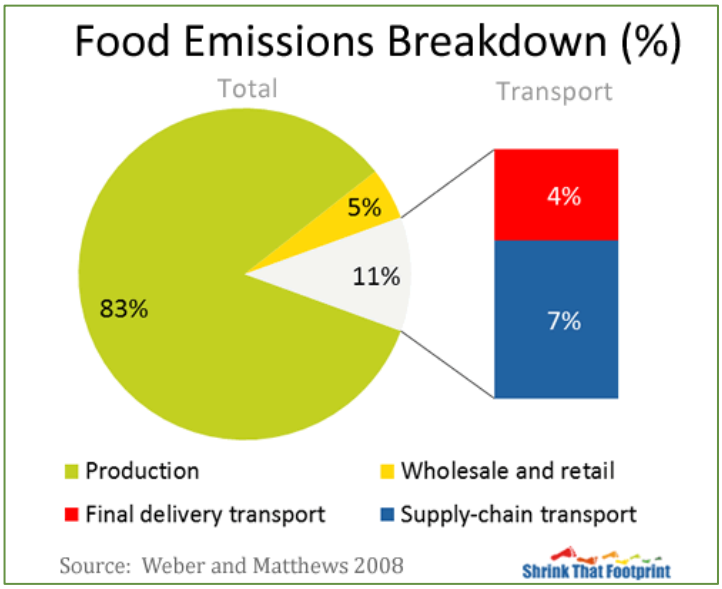
They aim to keep coffee waste out of landfill by using it to grow gourmet mushrooms, produce fertile compost, and biofuel. GroCycle is part of the growing movement of Social Enterprise, where the focus is on business as a positive force for social or environmental good, rather than for profit.

GroCycle promote the fact coffee farms can be setup anywhere, with no need for vast amounts of land for production, these farms can even be setup in urban areas, utilising old and unused building for a good purpose. Mushroom farming in this way is an ideal form of urban agriculture and literally any space can be convert to start farming on a scale that suits the space available.



What makes GroCycle Services and Products Green/Circular

- Reuse of energy: because GroCycle are reusing coffee grounds they are utilising energy from a waste product that would normally be lost unlike traditional mushroom cultivation which requires an energy intensive process to sterilise the substrate. GroCycle uses low tech and more sustainable methods which require less energy but still provide a rich valuable product. Since 2011, Grocycle have: recycled 62337 kg Coffee, helped 29932 people grow mushrooms at home and trained 862 people in mushroom cultivation
- Reuse of waste: by diverting tonnes of grounds from landfill, they take waste and turn it into a resource. Around 500,000 tonnes of used coffee grounds is created every year in the UK (WRAP 2018). Coffee grounds that end up in landfill emit methane, a greenhouse gas that's twenty eight times more potent than carbon dioxide.
- Local food: most of the UK's food is delivered through an increasingly complex and energy intensive system. In 2008, 21.9 megatonnes of greenhouse gases were linked to UK food supply. GroCycle encourage people to eat locally grown produce which was made within a few miles from their plate.
- Urban agriculture: most of the food consumed in the UK isn't actually grown or produced on UK soils. The UK now imports about half its food and feed from abroad. Between 1986 and 2009, the amount of land used to grow the country's food increased by 23 per cent, with 70 per cent of it located overseas. GroCycle's urban agriculture is a step in the right direction to help sustain our own food supply.
- Sustainable protein: Mushrooms are a great source of protein meaning we can consume less meat which demands land, energy and water for production.



The Importance of Urban Agriculture

Worldwide, around three million hectares of agricultural land are lost each year because the soil degrades and becomes unusable due to erosion, which is when soil components move from one location to another by wind or water. An additional four million hectares are lost each year when agricultural land is converted and used for roads, housing, factories, and other urban needs.

The importance of urban agriculture is increasingly being recognised by international organisations like UN-Habitat and FAO (World Food and Agriculture Organisation). Although we all currently rely on industrial agriculture to produce the majority of the food we eat, this type of agriculture is facing problems that may threaten its future. Urban farming is thought of as playing an increasingly important role in the future of agriculture and sustainability.

Urban agriculture can help to solve such problems by turning urban wastes into a productive resource. In many cities, local or municipal initiatives exist to collect household waste and organic refuse from vegetable markets and agro-industries in order to produce compost or animal feed. Quality compost is an important input that can fetch a good price. Compost allows an urban farmer to use less chemical fertilisers and by doing so preventing problems related to the contamination of groundwater.

Learning from Nature Principles supported by GroCycle

- Nature is adaptive – just like in nature we must adapt to a changing world in order to survive. GroCycle's use of unutilised space for urban agriculture is one step forward to addressing the threat of food security in the UK.
- In nature diversity gives multiple benefits – the growth of mushrooms using waste material provides a number of benefits for both the environment and us as humans. By helping both retailers and the people think differently about what they consume and where it ends up everyone benefits.
- Waste = Food – just as in nature when waste is broken down by decomposers, these coffee grounds are helping make a food product which can be used again.

Mushrooms as recyclers

Mushroom are a fungi which help recycle natural waste from dead plants and animals. In nature they play a vital role in breaking down organic matter and returning it back to the soil. This makes nutrients available for new plants and animals to grow. They are natures recycling factories and a key part of all ecosystems.

For more information on GroCycle and useful links visit;

https://grocycle.com/

http://focusingfuture.com/reader/urban-farming-solves-lack-of-agriculture-space.html

http://www.ruaf.org/urban-agriculture-what-and-why

https://www.newscientist.com/article/dn28727-uks-carbon-footprint-from-imported-food-revealed-for-first-time/

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RAINMAKER FOUNDATION

The Observer Ethical Awards 2012 Runner up in association with ECOVER

Winner CIWM AWARDS 2014 The UK Sustainability & Resource Industry Awards

DEBI category winner 2012

GroCycle have achieved much recognition for their work

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