

## Permaculture in Chester, Week 10: with Steve

Reading matter:

The Living Soil, by Lady Eve Balfour

James Lovelock, The Vanishing Face of Gaia, a Final Warning

Stephen Harding – Animate Earth

Mycelium Running – Paul Stamets

Growing Gourmet and Medicinal Mushrooms – Paul Stamets

Doughnut Economics, Kate Raworth

Fungal Intelligence, Paul Stamets talks to Paul Rogan. <https://www.youtube.com/watch?v=QrFSAbnhKYI>

More on the improvement of brains from fungi -

<https://www.thesun.co.uk/living/2701999/regularly-eating-mushrooms-can-prevent-alzheimers-but-youll-need-more-than-your-average-button-portobello-or-oyster/>

### Use and Value Diversity

Or, don't put all your eggs in one basket.

Us humans get most of our calories from just 5 main crops.

Chickenshack was Steve's first venture after returning from Africa, in 1994.

The average Welsh farm takes £55k in subsidies, and has an income of £30k; the deficit is made up from the EU. (check George Monbiot's Feral) [See data on Welsh Government's website, <http://gov.wales/docs/statistics/adhocrequests/2017/170418-average-output-income-farm-2009-10-to-2015-16-en.ods> - cattle and sheep (LFA) farms, income from agriculture in 2015-16 -£3800 (ie a loss), grants £25,700, turnover £108,200]

[Chickenshack](#) is an old farmhouse with outbuildings in Brynllwyn, between Snowdonia and the Irish Sea inland from Tywyn, some evergreen woodland to the north-west, wet meadow to the south and meadow to the south-east.



(2018)

Steve was one of the founding 3 members. They went on the first permaculture course run by CAT, and picked up another 5 members.

The design process:

Observation – should be long and thoughtful. Wait for one year, observing.

We're surrounded by insurmountable opportunities.

Hold water and fertility as high (in elevation) in the landscape as possible.

Design from patterns to details.

It's all harvest, including maintenance.

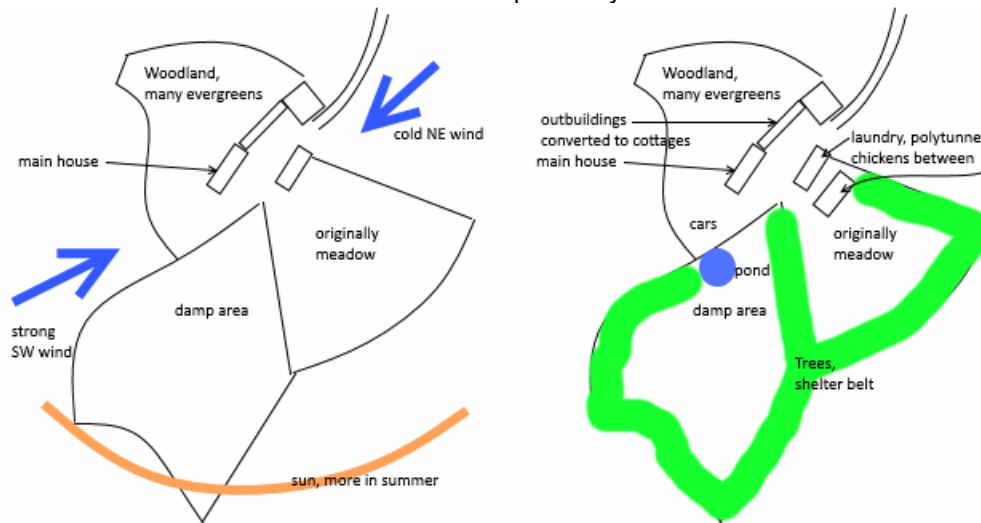
Minimum input, maximum output.

Involve local farms and the community.

Things should have many functions. Every function should be supported by many elements.

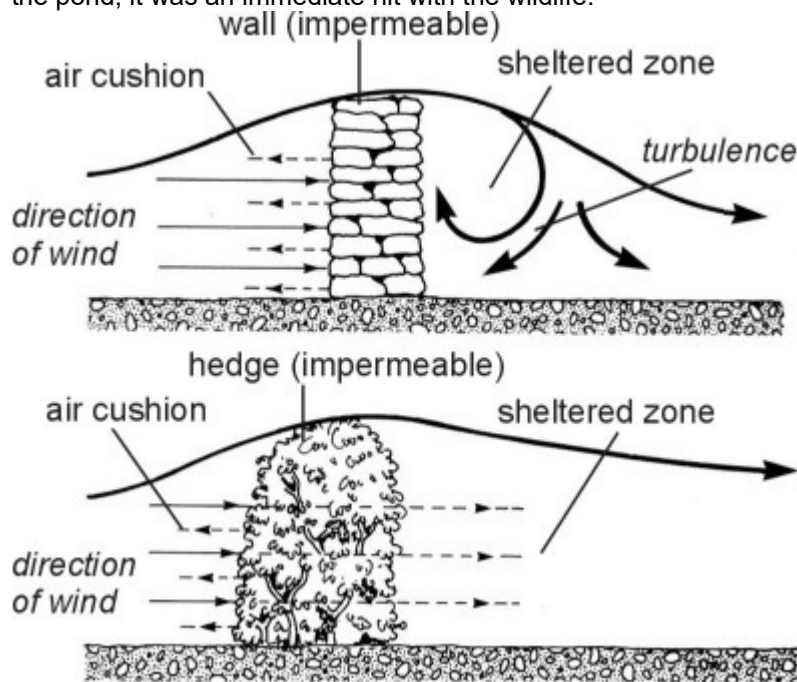
Every element should support many functions.

Ensure the essentials are paid off: the loans, bills, essential purchases etc.  
 94% of UK wetland has been drained in the past 60 years

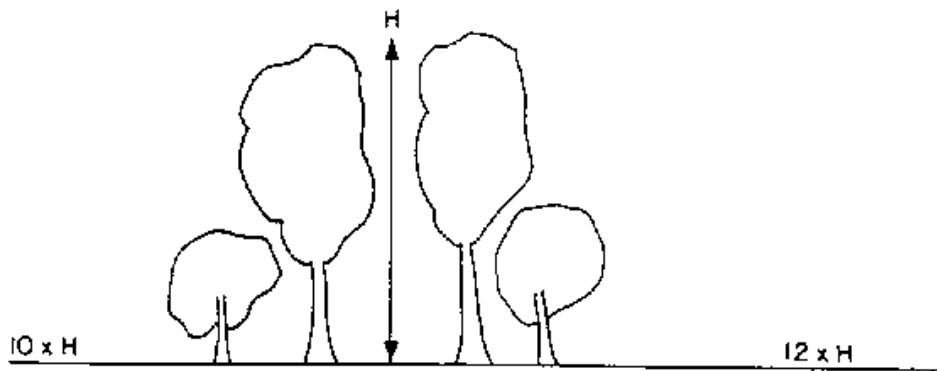
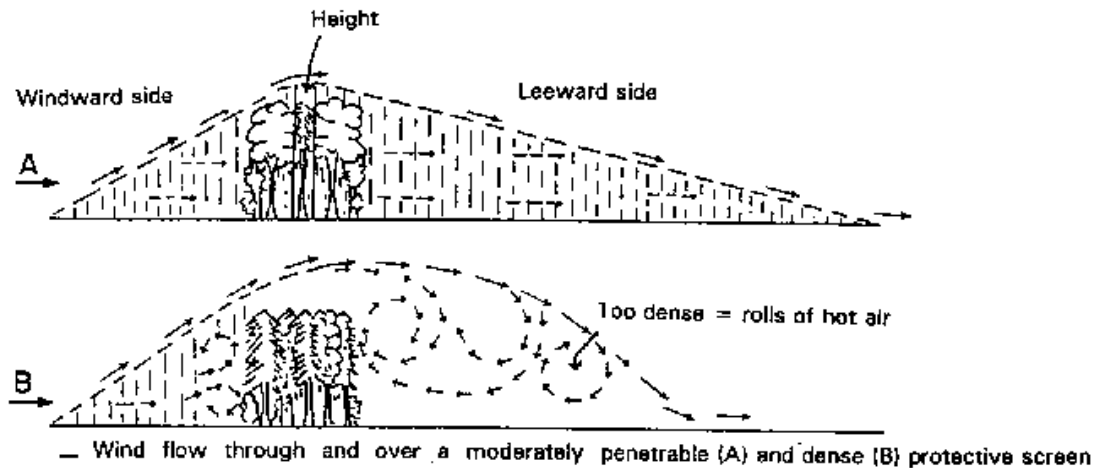


The wanted the court in front of the houses to be shared space, so cars were parked out of the way.

The damp area is 0.554ha, the meadow 0.443ha. They planted thick hedges around both, 2000 trees over time, with willow and alder around the damp. They hired a digger to excavate the pond, it was an immediate hit with the wildlife.



(<http://resources.schoolscience.co.uk/CEH/hedges/hedgerows2.html>)



<http://www.fao.org/docrep/T1765E/t1765e0t.htm>

Occupancy – the more people, the cheaper it is per person. They also offer different skills. They refurbished one farm building as a laundry, so they could have a proper washing machine and keep damp laundry out of the houses.

The polytunnel needed frequent reskinning, until the windbreak had grown sufficiently. Food waste is composted initially by the chickens.

They mulched the trees to control grass competition. Grass favours bacteria, trees fungi. The woodchip mulch encouraged the fungi.

They worked with the cattle farmer next door. They wanted to reduce the fertility of the meadow to encourage wild flowers, so they cut that, passed it to the farmer who fed his cattle with it and returned the manure to them for compost on the veg plot.

Steve was 2 years setting it up, 13 years living there. He worked for 7 years at CAT.

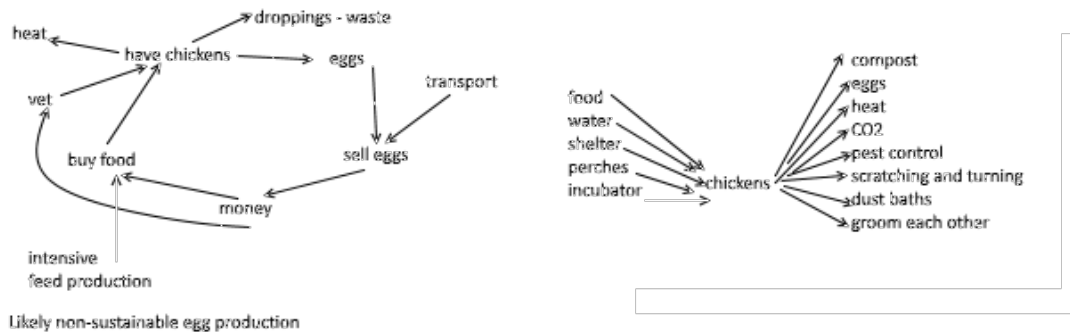
They deliberately saved up suitable jobs for their volunteer days. All the most productive times were when they involved others.

The wind breaks were willow, raspberries then fruit trees, sheltering a mixed planting, including flowers to attract beneficial insects. Even carrots should be the product of an ecosystem.

In the first 3 years they did nothing on the land, they were getting the house repaired. The original owners evidently felt the pressure and divorced; the permaculture team are still going.

They have a single woodburning heating system serving the four houses.

Many tenants reduces rent, so they can afford it on housing benefit.



Work is a symptom of bad design. Unwanted output is pollution, a burden.

In Chester...

Hannah (on this course), her husband runs the cathedral Light project, he's an ecologist. The Light garden is not permaculture.

The redundant garden project can be extended into the house, which will be vacant for 2 years.

Wilted comfrey is loved by slugs.

The charcoal stove Steve showed us last week is not marketed as such – instead, try 'top lit updraft stove'. It's sold as 2-stage combustion, not char. To produce char you have to arrest it.

Their history - <http://mparam.s3-website-us-east-1.amazonaws.com/WoodStove.html>

DIY from a steel thermos - <http://www.instructables.com/id/Backpacking-Gasifier-Stove/>

From a paint tin - <https://permies.com/t/8367/top-lit-updraft-TLUD-wood>

It's still hard to find ready-made!

Watch "The Lost World of Eldorado" video about the Amazon.

When doing a design, check for resources – including in skips. Watch for leaks.

Analysis – what are the functions? Form follows function.

Design – can we arrange elements into a system? Integrate functions.

Chickenshack's annual parties create new members, income, and jobs get done. They reckon workparties are their most productive times.

Weekends – 13-15 April, 22-24 June