"Investigating the potential of applying permaculture principles to UK arable farming".

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Brief Bio

I have a background in ancient/Indian religion and philosophy, I am an independent researcher and part-time farmer whose research interests include permaculture, agro-ecology, organic farming and traditional farming systems from around the world. I manage a charity urban gardening project in London and farm with oxen at New Gokul. Hertfordshire. I am currently preparing to undertake postgraduate research at the Centre for Agroecology, Water and Resilience at Coventry University located at Ryton Organic Gardens in Warwickshire.



Centre for Agroecology, Water and Resilience

The <u>Centre for Agroecology, Water and Resilience</u> (CAWR) is driving innovative, transdisciplinary research on the understanding and development of resilient food and water systems internationally.

Through its focus on food and water, the Centre's research develops and integrates new knowledge in social, agroecological, hydrological and environmental processes, as well as the pivotal role that communities play in developing resilience.











NEW GOKUL FARM

I have been farming at New Gokul, Hertfordshire, since April 2012. This is a mixed farm, with arable land and cattle, belonging to the Hare Krishna Movement. I am currently in charge of a 4 acre arable field, where I work, with a team of WWOOFers and volunteers, every Sunday. I have successfully introduced cultivated grasses/forages, a wide range of brassicas/Winter crops and have brought the entire field, previously underused, into production. My crops feed the animals and supply the farm shop and temple kitchen on a weekly basis.

The field methodology used at New Gokul is guided by broad permaculture principles and design methods:

- Complete dependence and integration with livestock, from the reliance on manure to the use of draught animals.
- Reliance on human manual labour for all basic field work.
- Complete exclusion of any conventional industrial method, such as the use of chemical fertilizers and pesticides to the use of hybrids.
- Polyculture, crop rotation and ecological intensification.
- Cultivation of crops designed to provide a complete diet to the local community.
- The on-farm processing and manufacturing of raw materials (e.g. the production of flour and baked goods from grain).
- The inclusion of perennials in a system dominated by annuals.
- Selective, purposeful and minimal tillage and cultivation.



Farm Stall, November 2014













Autumn Harvest





Buckwheat, Summer 2014



Winter Wheat, November 2014

Research Goals:

- 1. To identify and critically assess the existing permaculture arable/field scale projects currently in operation across the UK.
- 2. To assess the validity of the concept of "arable permaculture" as implemented at the New Gokul Farm project.
- 3. To engage with the other permaculture projects over the course of the research period, with a view to establishing long-term co-operation, engage in joint experiments and offer mutual assistance.
- 4. Draw conclusions on the implications and wider potential of arable permaculture for UK food production and security.

Challenges of doing research in permaculture:

- Permaculture is generally absent in academic environments. It has not established itself as a subject in agricultural studies/agricultural science.
- Permaculture practitioners have tended not to engage with the academic community/have not often subjected their systems to rigorous testing/experimentation/academic scrutiny.
- Permaculture's approach to science is generally at odds with mainstream science. Permaculture tends to take a holistic, rather than reductionist, approach to its practices and to agro-ecosystems.
- Finding a suitable institution that would be truly interested in an alternative, radically different approach to agriculture.

Research in Permaculture: some suggestions

- Teach yourself: read/learn as much as you can about the subject matter by reading/researching on your own.
- Engage with local/national/international permaculture and alternative agriculture community.
- Engage in the "battle of ideas".
- Find suitable research institutions/individual academics.
- Engage in scientific research/experiments/field trials and provide evidence for your claims.
- Contribute to the subject at an academic level.
- Never become too academic/just academic: permaculture is mostly a way of living, of managing the landscape and an alternative approach to agriculture.

Thank you for your attention

ANY QUESTIONS?