The Farm as an Ecosystem

Helen Browning

Farming and food production are some of the vital issues of our time. I want to consider briefly the idea of the farm as an ecosystem, or as a sort of self-contained living organism, which has been one of the fundamental tenets of organic husbandry. Indeed, this was one of the concepts I encountered thirty years ago when I started my farming life. I'm a farmer myself in Wiltshire, as well as Chief Executive of the Soil Association.[1] And I've spent the last thirty years in some ways trying to live up to this expectation of us as organic farmers. I'm going to raise three issues in the hope that we can stimulate some conversation around them. Firstly I want to give a brief sense of the trials and tribulation of being a practical farmer and, secondly, I will ask whether organic farms really are self-contained islands in the way we sometimes think and thirdly, I want to raise a question which is an increasingly big one for me, which is that of the relationship between the farm as an ecosystem and the wider environment.

So, my own farm: briefly, I farm about 1,500 acres, a thin strip of land from the top of the Marlborough Downs into the Vale of The White Horse in southern England. We have lots of different soils and lots of different geographies through that five-mile strip of land. And we have all the things one would expect of any self-respecting organic farm. We have a balance of fertility generating and fertility using crops, along with a balance of livestock of different types, sheep, dairy cows, beef, pigs and a few chickens, so that we have a clean grazing system and largely-disease free herds. We have a balance of people and skills to run all these enterprises, crops and livestock, and we've got pretty much all the machines and the resources to do all the things that we need to do from repairing machines to cutting our hedges within our own farming business. So, we are largely, though not entirely, self-contained.

And over time we've tried to balance things up a bit more by creating some of the habitats that were lacking on the farm. We've planted woodlands and we've recreated the chalk downland pastures that were so appallingly destroyed after the war; something like 97% of our chalk down land biodiverse grasslands have gone.[2] We've got a little bit of it back again. And we've tried over time to feed our local community as far as possible. The way today's business economics works meant that our enterprises didn't develop in the way we'd initially hoped;

we ended up feeding people all over the place including in other countries rather than in our local community. But, over the last ten years we have managed to re-localise some of our food business, feeding people through our own pub, for example. And now we are even working with some Italians making mozzarella on the farm so the whey from the mozzarella which comes from our own milk can go back to feed our pigs, one of those age-old cycles.

This has all been helpful, especially in pushing back against over-specialisation which is a scourge of our time, and thinking more and more about the resources we have already got on our own farm rather than constantly buying them in. But at the same time, the wider system within which we operate is deeply flawed. As one example, it is impossible today to return the waste from the people who are eating our food back to that land, certainly within the organic system. It's also very hard to feed our local community directly when we don't even have the infrastructure such as abattoirs and processing opportunities, without us all having to capitalise our farms beyond sensible levels. And most of us are not yet tackling the energy issue on our farms, either. It's impossibly difficult because as farmers we are not very good at managing the degree of complexity that this kind of system requires. And we still struggle to find people who both have the values and are practically competent to run these kinds of complex systems. But it's also complicated because no farm is an island, and nor should it be. And, then, what is a farm anyway apart from an arbitrary unit of ownership or stewardship? We know that to secure our biodiversity we need to connect up habitats across the wider environment, not divide it into little ecosystems. We must start to think beyond the unit of the farm in a way that is going to allow species to spread and thrive and allow genetic flow through our landscapes, and to manage our water on a catchment scale rather than just thinking about it at the farm level.

And so I hope that in the future some of our new policy incentives will incentivise management of the wider landscape rather than just focusing on the unit of the farm. And, furthermore, I think one of the only ways that our farmers are going to survive in the longer term is for them to start to share and collaborate and work across their boundaries, whether sharing machinery or labour or marketing collaboratively, as well as improving the ecosystem through engaging beyond the farm gate.

But my final question today is whether our obsession with farming in a narrow sense needs to end. What I mean is that we need to start thinking about how we work with and harvest nature rather than constantly intervening, subjecting nature to our idea of how we want it to be. This leads me to an interest in practices such as permaculture where, instead of constantly ploughing and sowing

Helen Browning at Home on her Farm

and reaping, which we do even within organic and rotational farming, we can develop more permanent systems of farming. Recently, I have become very involved in agroforestry, trying to develop an approach which is more productive per acre while supporting wildlife, protecting soils, providing shade and shelter for farm animals, and sequestering carbon. We are using trees like nuts and fruits, integrating them with our pasture land and cropping. What really interests me is how none of this is ever static, and that harmony is not a point we get to and then preserve, but always a dynamic process.

Notes

[1] The Soil Association, https://www.soilassociation.org

[2] Lucy E. Ridding, John W. Redhead, Richard F. Pywell, 'Fate of semi-natural grassland in England between 1960 and 2013: A test of national conservation policy', Global Ecology and Conservation, Volume 4, July 2015, pp. 516-525, https://www.sciencedirect.com/science/article/pii/S2351989415300184