

atoms and use surplus energy returned to the soil by their droppings and urine, which encouraged visits from thousands of birds: they too left a bonus.

This meant that if I worked all this into the top four inches with a rotovator I should get good results, and I did. Five years of improving this technique began to bring very good crops back to my farm and I began to feel very much a part of it all. I was beginning to learn how to live off nature's surplus, and to understand that nature's cultivating machinery—the soil animals—was far superior to anything man could devise. Organic farming, to me, means using an area of land to grow plants, to be used as food for other human beings, and availing myself of all the tricks of the trade which nature has developed during the billions of years it has taken her to create soil. Above all, organic farming is the art of learning how to avoid a massive wastage of nature's energy. Modern farming technology encourages this waste.

To survive during this initial period, my wife May and I ran a Country Club, changed the herd to Jerseys and started marketing clotted cream. We sold on the markets in Wolverhampton, Wellington, Chester and Stockport, travelling by tractor with our products to the station, then from the train by taxi to our stall, coming home late to milk the cows and look after our holiday guests, though sometimes I think they looked after us. We were working 14 hours a day and seven days a week. Our visitors and stall customers gave us many new ideas and eventually the shops became interested. I bought a second-hand Grocer's tricycle, and we packed clotted cream in tomato boxes which I stacked all round the cycle and on my back. I must have looked a very funny sight to the station-master and to local farmers. I arrived at the station for every train, loaded like this. Before long we were also sending goods by Midland Red Bus from the top of the drive. It reached the point in the summer when the early bus at 7.30 a.m. had more space taken up with our clotted cream and mushroom boxes than with passengers. We had no sales representatives: our customers were found by hitch-hiking all over the country, starting at the top of the

visitors. And we've bought another lovely old house to receive more of our customers and friends and to live in ourselves.

Our farming has now moved through to an all-pasture system, with the herd outdoors all the year round grazing well-developed pastures that are really a very large family of plants, 28 in all, growing together, managed in rotation, and assisting and feeding each other in turn according to their position in the rotation and to the time of year. Groups of deep-rooting plants like dandelions, yarrow, lucerne, cocksfoot and burnet are bringing back the trace elements including calcium (I have not timed for five years and may never need lime again) from deep down in my soil—from where the years of application by my father and grandfather had been leached by bad systems and bare soil throughout autumn and winter. It is also becoming increasingly obvious that fertilisers are never likely to be used on my farm again. I see no reason why the increasing rise in fertility shouldn't continue, given an increasing balanced stocking with cattle and sheep. We asked Keele University to do five years' research to show scientifically what is happening, and a student starts his PhD this autumn using Fordhall as his laboratory and studying fertility.

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Next week

Eric Bentley on Brecht. Mary Warnock on chance and necessity. More Christmas books: Bridgid Brophy on Cicero.

many. We are about an acre and a half to the cow, and we've always got a surplus of silage, so we are never short of keep in mid-winter. Most winters are mild, which means we have silage left over, with the storage building up for the odd severe winter.

The amount of basic material on my farm is literally inexhaustible. In other words, if you took a yard in depth of soil off my farm, you would be taking millions of tons of it. But it's the plants that make whatever they need available from that rock structure. It's the plants that assist the micro-life to create soil: they trap the solar energy and it returns to the surface inches via the leaves. So the two vital factors to use for increasing soil fertility are the Sun and the soil micro-life: the plants are the wedding ring and the farmer the parson. Nature's technology is born of millions of years' experience: man's is only a century or two old. My teacher must be nature.

The one little-understood thing in most farming is the eco-structure of the soil itself on each individual farm, and they're all different. Some areas will grow one kind of crop well and others will grow another. Therefore the atmosphere or environment of the soil—the eco-structure of the whole area—is something that is either developed through plants and through good management or reduced through bad management. At the present moment we're working with different grasses and plants all growing together: deep-rooting plants which take trace elements from the basic rock, bringing them up into the leaf structure, feeding back to the surface soil with dying leaf in the autumn. So it's necessary for me to follow nature's cycles as near as is humanly possible, and those cycles mean that every acre of land, if man didn't interfere, would have a dense cover of vegetation on it every autumn. And it's during the autumn and winter, when dying vegetation is taken back into the top inch, that we re-supply the raw materials of soil energy to push the plants to perfect maturity the following summer.

We have the opportunity by farming in this way to create a very large soil-animal family. The biggest and most important of