

were brought into play, and slowly, over the next five years, fertility came back.

This method provided cover for all the cold-blooded animals of the soil: they, in turn, cultivated that soil in the root areas of the plants. It provided darkness and humidity for the vigorous growth of fungi, producing large quantities of nitrogen, and kept the eelworm and wireworm down to balanced numbers by trapping them. It gave nature a chance to create an ecological balance of insects and soil-animal life, their only way of evolution, through a survival of the fittest, with all of them depending on each other for food. The plants returned vast quantities of living cells created through photosynthesis from above the soil, to add to the soil micro-billions. Amino acids were fed back into the root area by the plants all winter: every sunny day gave a bonus. Feeding animals on such fields meant that the remainder of the crop was being composted by the animals' stomachs and the 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

drive very early in the morning. My farm workers soon told me in no uncertain terms, 'For God's sake stay at home,' when the total reached 4,000 a week.

The day we could afford a small van was a great day in our lives. My wife May learned to drive, then my two farm workers. They all went out to the markets and met instant success with the ladies. The two workers with their unsure and slow way of speaking appealed to the customers: they were truly men of the soil, were Alf and Stan. After 12 months I also learned to drive and we were on the market to stay: it's a wonderful school in which to learn how to sell. We trained the girls who came to the dairy to go out and sell in the stores, and built up a demonstrator force which is still operating all over the country today. As a natural consequence of this, a customers' visiting club developed. The farmhouse is now full of offices and of facilities for feeding our 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 limed 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

Right, a romantic view of Fordhall's

soil ecology and the mineral chemical flow through soil and plants.

We use only organic fish manure because it is very easily digested in the soil micro-mass. There are fish manures on the market that are virtually half chemicals and half fish. The company doing this for us now are holding the fish in a state in which we can handle it with bone manure, and it's bone manure and fish we are adding to the soil, purely for the purpose of introducing new micro-organisms into the soil, and not as a fertiliser.

Milk was meant for a baby calf and not as a fertiliser. Like the seeds of grain, it is one of nature's surpluses, and does not need to be 'put back'. Our land is in balance, with the animals and the plants. We are never without animals and we never have too many. The fatal thing in most farming is too few animals or too 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 an