Centre for Agricultural Strategy

Smallfarmers' Association

Strategies for family-worked farms in the UK

Edited by R B Tranter

CAS Paper 15 December 1983

Tranter, R B (Ed) (1983) *Strategies for family-worked farms in the UK.* CAS Paper 15. Reading: Centre for Agricultural Strategy.

18 Farming with conservation on family farms

W K Turner

INTRODUCTION

The findings of Westmacott & Worthington (1974) suggested that the deteriorating quality of the lowland farmed landscape occurred on all types of farms and over a wide range of landscape types. Two projects were set up to find ways of countering the effects of the modern farm practices largely held responsible for the problem – Demonstration Farms, and the more extensive New Agricultural Landscapes (NAL) projects. In each initiative great importance was placed on applying the project approach to a wide range of landowning and farming situations – including the smaller family-worked farm.

The Demonstration Farms project began in 1975. Based on 10 highly commercially run farms it was designed to test whether the widely held view that modern farming methods are not necessarily incompatible with the conservation of landscape, wildlife and historical features is valid; and whether the prevailing attitude and practices of landowners, farmers and public agencies could be influenced by demonstrating good examples of landscape conservation and how to achieve them.

Parallel to this project, discussions began with the planning departments of a number of local authorities to establish NAL projects using the well tried 'project officer' approach which had proved so successful in such starkly different circumstances as National Parks (as the Upland Management Experiment) and urban fringes (such as the Bollin Valley Urban Fringe Experiment). Five NAL projects were launched between 1978 and 1980 – in Suffolk, Hereford and Worcester, Cambridgeshire, Leicestershire and Bedfordshire. These projects were

funded jointly by the Countryside Commission and Local Authorities, the Commission contributing 75% from its research and experimental budget. In 1980 the NAL projects were joined by two related initiatives under the auspices of the Farming and Wildlife Advisory Group (FWAG) in Gloucestershire and Somerset.

THE CHANGING AGRICULTURAL LANDSCAPE

The problems tackled by these projects were both widespread and deep seated: the traditional landscape, in which farming had for so long been a benign and formative influence was now undergoing rapid and, to many, distressing change. The disappearance of a wide range of landscape features coupled with little or no management of many of those that remained was almost universal: trees, hedgerows and woodlands, ponds, streams and many kinds of wildlife habitat were all affected. There was also a substantial loss of archaeological and historical features. Such changes were caused mainly by the virtual revolution in farming methods which had taken place since the war, and the economic circumstances affecting agriculture which had combined to make the industry one of the most efficient in the country. One of the characteristics of the 'new agriculture' was sustained economic and technical pressure for constant improvements to efficiency and productivity.

The family farm, large and small, found itself at the centre of these changes with mounting pressure to adapt and modernise its approach. The typical family, mixed-farm business — with perhaps several livestock enterprises and at least as many crops — was rapidly replaced by one greatly simplified into one or two stock enterprises and a cropping pattern to match. Land improvement, by drainage and reclamation, frequently accompanied the revamped system which now had a whole armoury of highly effective fertilisers and chemical crop protection products to boost production and render older husbandry practices redundant. The impact of all this on the traditional, functional landscape — where hedges, stonewalls, woodlands, green lanes, ponds and other characteristic features were all useful to farming and rural communities, by supplying materials, providing a service or acting as a habitat for game — was enormous. Today the purpose of such features is far less clear and they are often regarded as more of a hindrance than a help to farming. But without them the character and diversity of the English and Welsh landscape would be inestimably less.

THE DEMONSTRATION FARMS PROJECT

Tynllan Farm is one of the 10 Demonstration Farms lying at the centre of the

small village of Castle Caerenion near Welshpool, and it is the epitome of a family farm. It has been owned and run by the same family for over 100 years, with Newton Davies and his family the present owners. Formerly a good deal smaller than its present 104 ha, it is now predominantly a dairy farm with a herd of over 70 cows. There is also a sizeable sheep enterprise.
The farm is long and narrow in shape, running from the floor of the upper Severn Valley in the east up a slope to over 300 m on the hill top in the west.. Rainfall in the area is higher than average for England and Wales at over 1100 mm and the growing season is shortened by lower than average temperatures. Most of the soils on the farm are brown earths derived from underlying sandstones and mudstones, mainly comparatively light and easy to work. The soils are classified as predominantly MAFF Grade 3 or 4 and there are at least moderate limitations to the choice of crops which can be grown. Two-thirds of the farm is high ground or on a slope – much of it rough grazing with gorse, bracken and rushes until 25 years ago. An attempt was made during the last war to reclaim the area without success. However, during the period 1963 to 1969, backed by grant aid and advice from MAFF, 130 000 drainage tiles were laid, pioneer crops grown and subsequently new pasture established. This enabled the cows and young stock to be doubled and greatly relieved the pressure on the lowland area of the farm. The lowland part of the farm extends to nearly 40 ha and supports a rotation of cereals and leys providing pasture and silage for the dairy herd. The farm participated in the FHDS in 1979 with a management plan aimed at increasing the dairy herd to nearly 100 cows, maintaining 200 breeding ewes and fattening 250 lambs each year. In 1917 there were 40 cattle, 60 sheep, 30 ponies and 50 tack lambs. The farming revolution has overtaken Tynllan as completely as anywhere.

Given this background how has conservation fared? In many ways Tynllan represents a traditional landscape: hedges, trees, small woodlands, a rocky dingle, ponds, an interesting topography and wide views. The reclamation of the hill land has changed the appearance and character of the landscape, and there have been other changes to hedgerows, field boundaries and parts of its woodlands. But in preparing the long term plan for Tynllan, the FHDS proposals have been married with a series of conservation measures – the aim being to achieve comprehensive development of the farm. In essence this meant combining a variety of interests – commercial farming, woodland management, sporting and the conservation of other landscape, wildlife and historic features.

Under the project a fully integrated land management plan was drawn up and is now being implemented. The sheet anchor is the development of the farm system to increase its productivity and ensure its success in the economics of the 1980s and 1990s. More than one family may need to derive a living from Tynllan

in the foreseeable future. On the farming side there are increases in dairy cows and sheep, with related capital expenditure on a new milking parlour, slurry facilities, farm machinery, gates and fencing. New productive woodlands are being planted; existing copses protected and rejuvenated; hedgerows managed for both landscape and wildlife, and farming purposes: new ponds created and stocked for game, wildlife and stock husbandry objectives; and several interesting historical features, including an ancient hill track, protected from damage. The net result is a farm which will now retain a very high degree of diversity and character in its landscape, remain attractive to a wide range of wildlife of all kinds and provide security for those interesting fragments of a past landscape.

The whole package of proposals in the land management plan required (at 1980 prices) a gross capital expenditure of nearly £80 000. The net cost, after grant aid, will be nearly £41 000. A significant increase in NFI will accrue once all the works have been implemented – including a sizeable sum, perhaps £8 000 or £9 000 from timber. It is clearly difficult to distinguish between works carried out primarily for conservation purposes and those primarily for commercial farming. Nevertheless, careful allocation of costs suggests that the net cost of conservation works at Tynllan will be around £2 000, or less than 5% of the total net expenditure. The plan calls for a phasing of this expenditure over 10 or 15 years, with some woodland works over a longer period. This will mean that the average annual outlay will be no greater than between £100 and £200, or between £1 and £2 per hectare. The programme is also flexible so that more can be spent in the most profitable years. No high quality land will be absorbed by the conservation plan nor will there be any significant increase in management or maintenance costs.

Similar results have been achieved on other family-owned and run farms in the Demonstration Farms Project. The precise circumstances may be quite different to Tynllan: 650 ha Bovingdon Hall Farm in Essex on an all arable system and 200 ha at Hopewell House in North Yorkshire devoted to mixed arable and stock rearing could hardly be more contrasting. Yet on both these family farms there has been an equally successful blend of efficient modern farming practices and care and concern for the farm environment. Hedgerows and hedgerow trees have been conserved; woodlands planted or brought into active management, wetlands and other valuable wildlife habitats protected and historical features preserved.

The key has been an attitude of mind amongst those participating which was receptive to the need for adopting sensible conservation measures on their farms. Advice was sought and, despite a variety of financial pressures, the families concerned were prepared to implement a conservation plan. Other, tenanted,

farms in the project, with landowners ranging from private individuals to new institutions, can demonstrate much the same outcome.

THE NEW AGRICULTURAL LANDSCAPES PROJECT

The Demonstration Farms Project whilst realistic and practical in its approach is nevertheless to a degree idealistic. The 'whole farm' development plan, incorporating farming and conservation objectives, is what could, and should, be considered on every farm. But in practice relatively few farms, family or otherwise, adopt such an all embracing approach. Nevertheless, there is enormous scope for promoting sound conservation practices on most farms. The Countryside Commission's NAL projects were set up to test whether farmers, landowners and other land managers, both public and private, would respond to the provision of easily accessible and practical conservation advice by carrying out the work advocated. The projects also incorporated facilities to assist in the implementation of the conservation measures suggested.

July 1983 saw the completion of the first two experimental projects in the counties of Suffolk and Hereford and Worcester (Appleby, 1983; Jackson, 1983). Despite the obvious differences between mid-Suffolk and mid-Worcestershire both projects have achieved an impressive record of completed or progressing conservation work on farms, both in the project areas and wider afield.

Apart from the more obvious (and widespread elsewhere) new tree planting for amenity purposes, a wide variety of schemes were implemented. Neglected, overgrown small woodlands were brought under new management often reviving ancient methods such as coppicing to both conservation and farming advantage; farm ponds and reservoirs desilted and turned into valuable wildlife and game habitats as well as doubling as a source of fire-fighting water; ancient floristically rich meadows saved from 'improvement'; early enclosure hedgerows and green lanes similarly protected; farm water courses retained with pollarded willows and herb rich banksides.

The implementation of the majority of such schemes requires: an awareness of their need and importance; a degree of planning to undertake the work generally during slack times in the farming year; and some understanding of their eligibility for grant aid. Often minor changes in the way normal routine farm and estate management methods are carried out are all that is required to produce positive conservation gains at little or no extra cost. Cutting hedgerows to a higher A-shape is one example; leaving streamside vegetation cutting until late-winter is another. Farm staff can be usefully employed during quiet periods planting or tending trees, pollarding willows, coppicing spinneys rather than grubbing hedgerows, clearing scrub or bulldozing hedgebanks or old trackways.

More costly projects, especially planting up larger areas with trees and shrubs, managing woodlands, creating large ponds or small lakes can be undertaken when finance is available with or without outside help. The project was able to put many farmers in touch with their local British Trust for Conservation Volunteers to help realise agreed schemes for only a nominal sum.

The experience of the NAL project officers suggests that owner-occupied family farms, both large or small, were often the first to respond to their approaches to undertake conservation work. Although such farms, and particularly the smaller farm, often had difficulties in finding time and money to undertake schemes, they were amongst the most progressive in adopting a sympathetic approach to conservation management. It is recognised however, that very small farms, heavily dependent on family labour working long hours, and under severe financial constraints, may find positive conservation works difficult to do. Nevertheless there were many examples from both NAL projects and local FWAGs which can be regarded as models of conservation farming.

DISCUSSION

Despite the largely successful record of conservation practice in both the Demonstration Farms and NAL project, there are two difficult areas of conflict between agriculture and conservation in which neither project has fully succeeded. The first concerns large areas of landscape, wildlife or historical interest — ancient woodland, unimproved chalk downland, extensive wetlands, where there is often a fundamental land use conflict. Such areas can now easily be improved and precipitate the 'butterflies or barley' problem. Fortunately, the smaller family farm may be less susceptible to this difficulty, although even on Tynllan and in several locations in the NAL projects, some difficulty has been experienced in agreeing the long term land use of areas of high conservation value. Second, and perhaps of equal importance, is the fact that, for many farms in the National Parks and other designated areas, and for those that have substantial landscape, wildlife or archaeological features of national importance, the Demonstration Farms approach will not necessarily work. Nevertheless, sympathetic landscape conservation management, which is the keynote of both Demonstration Farms and New Agricultural Landscapes can have a very great impact on maintaining an attractive, diverse landscape in a time of unparalleled change in farming methods. But it should be seen only as one tool to be used in conjunction with others such as, for example, management agreements, CTT exemptions, and land acquisition by conservation organisations.

SUMMARY

Both the Demonstration Farms and NAL projects have shown successfully that using today's farming technology need not cause a degradation in landscape quality, widespread losses in wildlife diversity or populations or a decrease in the historical and archaeological heritage of the countryside. Once awareness of the need to incorporate sensible conservation practices in the management of the farm system is established and proper advice obtained to put in train cost effective and sound conservation practices, much of the conflict currently a feature of the farming scene could be eliminated. The Countryside Commission's experience obtained in mounting the above projects suggests the costs involved are marginal and interference with day-to-day farm management negligible.

Despite limitations of physical and economic size, small family farms can undertake a wide range of conservation measures of comparable value and impact to those possible on large farms and estates. In all cases the key requirement is the right attitude and understanding of the farmer or landowner (and family) for such measures and the need for them to be part and parcel of the farm management system.

REFERENCES

Appleby, M (1983) *Suffolk New Agricultural Landscapes Project.* Ipswich: Suffolk County Council.

Jackson, R (1983) *Hereford and Worcester New Agricultural Landscapes Project.* Hereford: Hereford and Worcester County Council.

Westmacott, R & Worthington T R (1974) *New Agricultural Landscapes.* CCP 76. Cheltenham: Countryside Commission.