

## HEDGES - A FARMER'S VIEW

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### ABSTRACT

A variety of hedge functions and their different management systems are discussed. The diversity of management systems appropriate to these different hedges highlights the difficulty of achieving the active preservation (as opposed to passive retention, with inevitable deterioration) of hedges through legislative regulation. While some farmers consider hedges as potential sources of problems, such as rabbits and an increased proportion of low yielding headlands, most apple growers value their windbreak hedges, which provide valuable shelter and are an important part of their integrated pest management strategies. This suggests that when farmers are well informed of the benefits that may be derived from a hedge they appreciate them more. However, the considerable costs associated with hedgerow management pose problems for farmers which must be addressed by society if more hedgerows are to be positively managed and thereby saved from deterioration..

Over time farmland hedges have acquired an extensive range of values, often different to those for which they were originally created. In this paper we will consider the variety of functions that hedges can fulfil and use these functions or purposes to define appropriate management of these hedges. Possibly the most common agricultural function of a hedge has been as a stock-proof barrier, to enclose sheep and cattle. Indeed, the density of hedges in the UK still reflects this use, with a strong bias of hedges found in dairy farming regions (Bunce *et al.*, 1993). Such hedges normally consists of a high proportion of species with thorns, such as hawthorn (*Crataegus monogyna*) blackthorn (*Prunus spinosa*) dog rose (*Rosa canina*) sweet briar (*Rosa rubiginosa*) and holly (*Ilex aquifolium*). These hedges also provide valuable shelter to livestock. In the past, when labour costs were, in real terms, cheaper than they are now, the planting and maintenance of these hedges was an efficient use of a farm's resources.

Similarly, the shelterbelts around apple and pear orchards also have a definite value to a fruit growers. They can provide shelter and thereby warm orchards, improving pollination and reducing water losses from the fruit trees. Shelter from hedges gives useful protection against the damaging effects of wind, which would otherwise cause marking of fruit by rubbing. Indeed, high winds can cause significant losses of mature fruit due to wind drop. In addition, pesticide application is easier in sheltered conditions. Ideally an orchard windbreak should

have early leaf cover, in order best to provide protection during the blossom period of the fruit tree, when insect pollination is critical.

Hedges may act as possible sources of disease inoculum, pests or beneficial predators. Understanding these relationships is likely to significantly influence a farmer's appreciation of his hedges. For example, hawthorn (*Crataegus monogyna*) is a bad orchard shelter species since it is often subject to infection by *Erwinia amylovora* (Billing, 1981), the bacterium which causes Fireblight, an important disease (Northover, 1987) to which pears are particularly susceptible. The entomology of fruit orchards appears to be more clearly understood than that of many arable crops. This may be because stable perennial orchards, with largely resident populations of insects, are easier to study than annually cropped land which is often subject to dramatic changes, such as ploughing and rotations. It may also reflect the fact that many insect pests are of critical importance to fruit growers, since the damage they cause can destroy the value of a crop, which must be of the highest quality if it is to satisfy the demands of the market (Doubleday, 1992; Doubleday and Wise, 1993). For these reasons, the characteristics of a hedge as a potential refuge for either pests or helpful predators are of considerable interest to fruit growers. A brief review of some of these characteristics for orchard hedges will be given here, since we believe that they illustrate some general principles, which may have a significance for general agriculture.

Oak (*Quercus robur*) might be considered an inappropriate orchard shelter species, since it acts as a host for *Blastobasis decolorella* (Easterbrook, 1985) and winter moth (*Operophtera brumata*) (Solomon, 1987). In contrast, various hedge species can act as a refuge for certain beneficial insects, for example alders (*Alnus* spp.) often harbour significant populations of anthocorids, such as *Anthrocoris nemoralis* and *A. nemorum* and mirids such as *Blepharidopterus angulatus* (Solomon, 1981). These are significant predators of aphids (*Dysaphis plantaginea*, *Rhopalosiphum insertum*), fruit tree red spider mite (*Panonychus ulmi*) and other apple and pear pests. Sallow (*Salix caprea*) is also a useful component of an orchard windbreak, since it attracts large numbers of anthocorids (*Anthrocoris nemoralis* and *A. nemorum*) during its flowering period, which is very early. When the anthocorids leave the willow they may be useful in controlling pear psylla (*Psylla pyricola*) (Solomon, 1981; Solomon *et al.*, 1989). The husbandry of these sorts of predators, and of the predatory phytoseiid mite *Typhlodromus pyri*, has become an important part of the integrated pest management of fruit orchards (Solomon, 1987; Doubleday, 1992). In response to problems associated with pesticide resistance (Solomon, 1987; Doubleday, 1992), and problems of registration of certain pesticides (Doubleday and Wise 1993), the majority of fruit growers in the UK have adopted an integrated pest management approach. Alder has emerged as the favoured windbreak tree, since it combines a useful early leaf habit with excellent properties as a refuge for beneficial insects but not for pests. It also suffers relatively little from rabbit damage. *Alnus cordata* and *A. incana* are somewhat preferred to the native English alder (*A. glutinosa*), in view of their increased resistance to drought (Baxter, 1979; Solomon, 1981). Good orchard management also extends to control of non tree species. Eliminating plantains (*Plantago* spp.), docks (*Rumex* spp.) and knotgrass (*Polygonum* spp.) from orchards and their vicinity denies food to rosy apple aphid (*Dysaphis plantaginae*) and dock sawfly (*Ametostegia glabrata*). The removal of docks and knotgrass is likely to have the greatest effect, since the dock sawfly largely attacks apples close to where it has been feeding (Solomon, 1981).

We believe that an understanding of the relationship between field margin plants and arable crops will be of increasing interest and importance to farmers. It is known, for example, that black bean aphid (*Aphis fabae*) overwinters in the spindle tree (*Euonymus europaeus*) and lettuce root aphid (*Pemphigus bursarius*) overwinter in poplars (*Populus* spp.). However, if farmers knew of the specific refugia properties of their field margins and hedges it is likely that they would appreciate and manage them accordingly. The Game Conservancy Trust and University of Southampton (Harwood *et al.*, 1994) have done pioneering work in this area, but more needs to be done to demonstrate the links between hedge, margin and crop in contemporary crop management.

Hedges may also have a recreational or sporting function. For example, a hedge may be valued as a means of showing and driving game species, such as grey partridges (*Perdix perdix*) and red-legged partridges (*Alectoris rufa*). Height would clearly be an advantage for such a hedge. In addition, it may be managed to optimise its value for the breeding of partridges and pheasants (*Phasianus colchicus*). Ideal nesting habitat consists of grassy field boundaries, either side of a hedgerow, fence or boundary structure, preferably at least one metre wide, in order to reduce the risk of predation by foxes (*Vulpes vulpes*) patrolling the crop edge. It is helpful if the nesting site is higher than the surrounding field, as this improves drainage and reduces the risk of incubating hens becoming waterlogged and consequently deserting the nest. Grassy banks are therefore ideal for this. The best grasses for this nesting habitat have a tussocky habit, such as cock's-foot (*Dactylis glomerata*), Timothy (*Phleum pratense*), Yorkshire fog (*Holcus lanatus*). The residual material from these grasses provides both cover and nest construction material in the early spring. These perennial grassy swards also inhibit growth of some important arable weeds, such as cleavers (*Galium aparine*) and barren brome (*Bromus sterilis*). One metre wide strips of ground kept free of vegetation between the grass bank and the field are useful cordons sanitaires inhibiting emigration of weeds into the cropped area. They also offer useful possibilities for the control of predators such as foxes and useful areas where chicks can dust or, after wet weather, dry. Actually, the presence of a hedge next to this grassy bank is not of great significance for nesting purposes. However, if there is a hedge it should be kept reasonably low (about 2 metres) in order to avoid impoverishing the ground flora by shading out. The presence of isolated large trees is not very helpful, since these may act as predator perches. The appropriate management of field margins and field headlands for optimising their value as game habitat has been described elsewhere (e.g. Sotherton and Rands, 1987; Aebischer and Blake, this volume). The sporting interest in hedges may reside in their value as jumps for horses. Again, such hedges require specific management - it would be highly inappropriate to allow them to grow to the height that might be desired for showing partridges!

Some hedges have historic value. Often they may mark a Parish boundary, or a farm boundary. In many cases understanding of a hedge's historic character increases a landowner's or farmer's appreciation of the hedge, and causes him to value it more highly than he might otherwise have done. Hedgerows and field boundaries provide a valuable link with our past and the centuries of agricultural development that has shaped our countryside. Landscape historians are able to 'read' the landscape and determine not only the previous use of farmed land but also identify the phases of this use. The countryside has been referred to as a 'palimpsest' (a manuscript on which two or more texts have been written, the former one being

erased to make way for the next). To the trained eye the countryside may be distinguished as 'planned' (post 1750) or 'ancient' (pre 1750) (Rackham, 1986). The geometric patterns of regular, species-poor hedgerows clearly differentiates the Georgian enclosures from the winding, blowzy, species-rich hedgerows of Saxon or Medieval origin. For the farmer these differences may have little significance, yet to society such differences may be of greater importance.

Hedges may also be planted, or retained, because of their wildlife interest. In general the older a hedge is the greater degree of biodiversity it contains (Pollard *et al.*, 1974). Indeed, it is gratifying to note that this test is now being used by 'The Archers', of Radio fame. A comprehensive recent survey (Bunce *et al.*, 1993) has shown that boundary habitats - hedges, streamsidings, road verges etc - are valuable refugia for plant and animal biodiversity. In some landscapes up to 85% of total biodiversity is found in these linear features. A considerable body of research (e.g. Pollard *et al.*, 1979; Carr and Bell, 1991) has shown that the management of this wildlife is not a simple process. For example, when planting hedges care must be taken to match species to soil and regional conditions, to locate the new boundary features with reference to both agronomic and ecological considerations, and to ensure that the farmer has the appropriate technical advice to ensure the survival of the hedge. Similarly, hedgerow management research has shown that hedges which a farmer might consider to be overgrown, with a broad scrubby base, are often better bird habitats than neat, annually trimmed hedges. The retention and management of hedges has attracted much attention, and bodies such as the Farming and Wildlife Advisory Group (Anon, 1991), the Game Conservancy Trust (Anon, 1994) and MAFF (Manning, 1986) have issued guidance on the appropriate management systems, such as biennial trimming, coppicing, laying and selective herbicide use. In general, this advice stresses that the key to successful management for wildlife conservation is a diversity of management styles, to ensure a wide range of different habitat reflecting the varying breeding, feeding and shelter requirements of different wildlife species.

Some hedges are planted, or retained, for their amenity value. For new development, planning permission is often granted subject to the provision of an earth bund, hedge, spinney or other similar sight and or sound screen. Where the intention is to screen development a hedge is likely to be designed with a significant quantity of evergreen species, or species such as beech (*Fagus sylvatica*) which retains its leaf in the winter. It is also likely that such a hedge will be allowed to grow to a significant height.

Given these interesting and useful functions of hedges, why are they not more esteemed by farmers? This is an important question, since the answer may provide clues as to what may encourage farmers to value their hedges more, and give them appropriate management. Firstly, it should be acknowledged that, with the exception of stockproof hedges and orchard windbreaks, none of the functions that we have discussed are strictly agricultural. Moreover, regrettably hedges can act as breeding habitat for rabbits (*Oryctolagus cuniculus*) which are agricultural pests. Rabbit meat is now worth very little. In contrast, between the World Wars rabbits were worth about 1 shilling, which was more than an hour's wage for an agricultural labourer (G.L. Doubleday, pers comm). This means that although controlling rabbits was economically attractive it no longer is. Although *Myxomatosis* dramatically reduced rabbit populations when it first emerged, it no longer appears to be as effective in population control as it was. The actual amount of damage caused by rabbits depends both upon the level of

infestation and the specific location. Rabbit damage to rough grazing and cereal fields is less economically damaging than their damage to intensive vegetable or fruit production. Rabbits (and hares, *Lepus capensis*) are particularly damaging in recently planted woodland and in fruit orchards, when they bark unprotected trees, often causing their death. Thus apple growers are forced to resort to expensive rabbit proof perimeter fencing, or protecting trees with individual guards or painting them with repellent paints. However, as we have seen, in spite of this complication most growers plant and manage shelterbelt hedges around their orchards.

Hedges, particularly badly managed hedges, can act as a reservoir of weeds which can cause problems to arable crops. This often happens as a result of accidental or intentional spraying of hedge bottoms with herbicides. This disrupts the equilibrium of the flora, as does accidental application of fertilizers, particularly nitrogenous fertilizer. The recovery of such 'disturbed' habitats is a costly and skilled exercise (see other papers in this volume). Another potential disadvantage from hedges arises from the fact that, by making fields smaller, they increase the proportion of headland within a field. Headlands normally have lower yields than the rest of the field, possibly as the result of increased soil compaction, resulting from the inevitable turning that occurs on headlands. Indeed, the reduced work rate caused by the increased turning in smaller fields was a common justification for the removal of hedges in the 1970s and even 1980s. However, analysis in 1980 revealed that this argument was not very strong for fields greater 10-20 ha in size (Sturrock and Cathie, 1980).

However, the most serious obstacle to the better management of hedges is expense. For example, in order to maintain a hedge's stockproof qualities it needs rotational management over 10-20 years. Trimming alone cannot maintain such hedges. Gaps appear in the base of these hedges, a process aggravated by livestock browsing. Traditionally hedges are then 'sided up' and allowed to grow 2.5-3.0 metres before laying to re-establish a thick stockproof base. This process can take up to 5 years to regenerate the hedge, and in some circumstances the hedge has to be double fenced during this period to avoid further livestock damage! Laying a hedge, at £8-12 per metre, is prohibitively expensive for many farmers when compared to the alternative cost of £2-3 for replacement fencing. Some of the costs of hedgerow planting and management are given in Table 1.

Table 1. Costs of Hedgerow Management (per metre)

Operation	Cost	Frequency
Trimming	£0.10	biennial
Laying *	£8-12	every 15 years
Coppicing *	£2.50	every 10 years
Planting *	£3-5	
Fencing	£2-4	every 15 years

\* these may all require additional double fencing to prevent livestock browsing  
Source: Nix and Hill (1993)

The consequences of these costs are shown in the recent survey of UK land (Barr *et al.* 1993), which demonstrated that the majority of hedgerow losses were in fact due to change of hedgerows to different boundary types, such as "relict hedge". These "losses" of hedges, particularly stockproof hedges, have caused considerable public anguish, since the general public consider hedges as the central feature of the "English Countryside". The resulting pressure to retain hedges fails to address, or even understand, their different functional values, the dynamics of their management or the cost of their management. A response to this has been pressure for a regulatory framework to prevent the removal of hedges.

Clearly the loss of hedges over the period 1984-1990 cannot be explained entirely by their reclassification as relict hedges. Hedges have been removed, but it is important to recognise that not all of these losses have resulted from agricultural change. Development, especially road construction and improvement, is a common cause of hedge removal. In the agricultural context, however, it is clear that more hedges are being "lost" as a result of their reclassification than as the outcome of a concerted programme of removal associated with agricultural improvement. We would also suggest that in the vast majority of cases, reclassification of hedges reflects the increasing costs of their management rather than any deliberate strategy of neglect by farmers. In that context therefore we seriously question the value of legislative control as a means of ensuring the appropriate management of hedges. It is clear that the management of an orchard windbreak hedge consisting of alders (*Alnus* spp) and no hawthorn (*Crataegus monogyna*) will be very different from the management of a stockproof hedge in which hawthorn may well predominate. Similarly, the management of a tall hedge used to show partridges will differ from that of a hedge managed in order to maximise its nesting potential for partridges, or managed with a view to fox hunting. There are also substantial regional differences in the methods of hedge management - for example, hedges are not usually laid in Kent, but are subject to regular trimming and coppicing. Just as legislation cannot deliver appropriate management of hedges, legislation cannot prevent natural processes, such as growth and eventual decline.

Farmers will be less inclined to remove hedges, or other boundary features, if they appreciate that they are performing a useful function, such as giving shelter or acting as refugia for beneficial insects. Good research and vigorous work by extension services could help to promote such benefits. However, the passive retention of hedges is not enough to protect them from deterioration, since hedges need positive management, which we have shown is expensive. What is needed is recognition of the value of hedges for agricultural reasons, as well as for their cultural and wildlife reasons. How are these non-market values of hedges to be taken into account? The most efficient way would appear to be through attractive incentives for appropriate management. Regrettably the schemes that might offer appropriate incentives, the MAFF funded Environmentally Sensitive Areas (ESA) management agreements and the DoE funded Countryside Commission's Countryside Stewardship Schemes, are only available to a very small proportion of UK farmers. The Countryside Commission administers a Hedgerow Incentive Scheme, but unfortunately this has limited funding and has attracted less than 500 Km of hedgerow. The recent halving of MAFF grant aid for hedgerow management is therefore very unfortunate. If the publicly expressed desire to retain hedgerows is to be achieved there is a need for more research to demonstrate the potential benefits of hedges, promulgation of appropriate management advice through extension services and other agencies, and financial incentives.

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FIELD MARGINS: A MICROCOSM OF THE WIDER POLITICAL DEBATE

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ABSTRACT

Some years ago CPRE published a report asking for conservation elements of rural policy to come "out of the field corners". To focus conservation benefits on field margins follows much excellent landscape ecological work on corridors to link wildlife 'islands'. This is a practical, sensible and well advised approach. Inevitably, however, it can be attacked as having only 'marginal' impact when all countryside is said to be 'environmentally sensitive'. This paper reviews the context of EC agro-policy post GATT. It is naive to see conservation outside of the need for output - restriction. Factors of production must be reduced but it is politically inexpedient to create wasteland or be seen to destroy jobs. The range of technological, regulatory, advisory, voluntary and contracted options for field margins echoes the wider EEC, and particularly British, debate. Useful gains are made but the impact is necessarily limited.

INTRODUCTION

This is a practitioner's view from the field. What were the organisers doing wasting a space for a learned academic on a day to day pragmatic rural planner you may ask? A planner based in a northern solicitors' office at that. I have often asked it myself. It seems that somewhere in the quotidian dealings with farm planning, taxes, estate inheritance, neighbour disputes, prosecutions, easements, quotas, buying and selling land, which are the lot of a specialist practice, we may gain a feel for how policy impacts on those who actually own and farm the margins. Only you can judge.

THE END OF THE GREAT SCOTT AND ABERCROMBIE CONSENSUS

You are hardly likely to know where you are going if you forget where you came from. There seems something near consensus amongst the best social science commentators on countryside affairs that one has to begin analysis with the breakdown of the enormously potent post-war belief that protecting agriculture equals protecting the countryside. I characterise that view as embodied in the approach arising for example from the Scott Report's seminal views on land use after World War Two; and alongside it the type of "town" planning which saw countryside effectively as that which was not town. This I see in dominant planners such as Abercrombie contrasting cities with the countryside as a 'Ceres', a bountiful, farmed land. In Britain we look to field margins because our low land is fields. What we do with non-developed

land is farm it.

I acknowledge immediately debts to people such as Howard Newby, Philip Lowe and Mark Felton for helping confirm my feelings. The collapse of that ideology remains arguably the most potent force in the rural political debate. There is a void to fill.

I would like to make three points about that breakdown in terms of this specific audience:

i) Was it ever correct?

It was always a more potent force than it should have been because of a lack of competing ideas with any base of political strength. There is no pure Hegelian idealism here; it was only in part "the right idea at the right time". It was at least equally important that it suited so many of the key parties. If you remain naive enough to think it was only to do with farming and food production go and talk to some poor devil trapped in an inner city tower block built supposedly to save farm land. (I say 'supposedly' because good, empirical work showed quite early that (a) tower blocks probably used no less land than giving people decent houses, and (b) if you really wanted home food production the best thing to do was to give people big gardens. These remain true but we still force people to live in boxes without enough space).

ii) Is there a new dominant ideology amongst farmers?

Thus, whilst I have followed the popular approach in heading this section so as to suggest the era was led by ideas I am not really such a Platonist. But nor is it a crudely Thatcherite matter of everyone simply pursuing their own interest. Put in academic terms one would say a number of political actors seem to have accepted the hegemony of perceived superiors to act to their own detriment. In English, I mean that most days I hear clients say things which are the "accepted thing to say" in clear disregard of the facts in front of them. Significant sections of the rural working class, farm females, family farmers' children (particularly younger siblings) have done this in the past. I perceive that a considerable number of the more "production-minded" farmers are doing it now. From the time of Durkheim social scientists have noted that suicide is one of the most dramatic indicators of social conditions. As I now observe a number of farmers I like and respect help sharpen the knife for their own execution I find that even more intriguing. Again, I am conscious this is an audience including horny handed practical folk so let me put it for disbelievers in less florid language. In my early years at National Farmers' Union (NFU) HQ the standard answer to the question "why is the farm going broke?" was "because I believed the Agricultural White Papers". That is, people carried on investing whilst quotas and price reductions were being negotiated. Now, the Milk Marketing Board (MMB) is on its way to the block and the

Potato Marketing Board being prepared to follow. Recently my senior partner, the North's leading agricultural solicitor, was given a torrid time by milk producers for daring to suggest that, purely as a lawyer, he would not advise people to rush out and sign the Milk Marque contracts. This was seen as disloyal to a good friend of farming. Yet, there was no social uprising about MMB abolition in the first place which was what really mattered. There were no anti-GATT riots in Britain. In the broad choice between highly supported conservation-farming and keeping such support as you can in what is otherwise free trade British farmers largely support the latter. In that context field margin gains are a sop by the hard men and a cop out option for the softies.

iii) Is farming the enemy of conservation?

As dialectical arguments tend to, things swung too far in the early and mid-1980s toward the argument that farming was a positive enemy of conservation. The most sure-footed political work over the last decade has been in re-balancing that debate. Field headlands have been a key part of it. In reality many habitats and treasured landscapes in the UK and Europe are farm-made and require people on the land.

I will return to these three themes as the essence of my title but first I should explore how far the wider debate goes.

FIELD HEADLANDS AS A MICROCOSM OF SOCIAL DISLOCATION IN MODERN BRITAIN

How is that for the best overstated heading you have seen in quite a long time? At least it is a counterbalance to the frightfully specific ecological ones. However, I am going to try and make the argument stick, so here goes.

That era of farming certainty I dealt with above was also an era of social certainty for the elite. A farmer knew what he was (and he almost certainly was "he"). Farmers were an elite with corporate access for the NFU into government. It was a different certainty for farm workers; most were going to be replaced by a machine. But let us concentrate on those who mattered.

When invited to close this illustrious conference it was suggested I had some repute (or notoriety) for rebutting unsupportable nostrums. So I will say for the most heretical thing of the day: rural sociology is wonderful, useful and important.

Out of the superb work supported by the Economic and Social Research Council over recent years I want to emphasise certain factors.

Being a rural dweller is now part of the pattern of consumption. It is a lifestyle choice for those able (usually

rich enough) to escape the city or suburbia. A large part of my workload derives from the jarring of new countryside dwellers with those making a living in the area or trying also to live there. Within a generation farmers have become strangers in their own villages. Consuming the countryside involves demands for more space. Incomers have a £150,000 house but not the land. The epitome of the new villagers' desire is an unsprayed, uncropped corridor to walk with weekend visitors, act like they own and allow the dogs to defecate on. They like headland set aside.

Across much of developed lowland UK farmers have moved to a wider view of their role. The Country Landowners Association (CLA) and National Farmers Union astutely promote this as the wider rural business involving stewardship. Equally, it is seeing land as a means more than an end. Laying out golf courses and looking for development opportunities land owners are more "instrumentalist" in being willing to view field margin management as one part of their choice of lifestyle. Food production is only one element.

The defining fact of much traditional rural sociology had been that the simple Marxists and other 19th and early 20th Century commentators had been wrong in seeing food production moving from family to big farm control. Food manufacture and distribution were dominated by large companies but the farm family survived as a disciplined production unit. Compare this heresy from the CLA Journal at the end of 1993:

"What determines the future of the farm should be its own viability and integrity as a business and not our ability to brainwash or emotionally blackmail our offspring. This is an unpopular view, because it hits hard at an old and well-tested assumption that the young will provide for the old, rather than the old provide a realistic pension for themselves in their own working life."

The brave writer of that described herself threefold in the article "First as a farmer's wife ... As landowners .... as a CLA committee member ...". This is the very stuff of dislocated Britain. People have to self-ascribe because it is not obvious who you are.

Simply producing food is no longer next to godliness. A well fed, consumerist, lifestyle - choosing West (ie forgetting a few million "poor" who do not exercise choice) wants perfect vegetables without sprays, organic production without muck and a grazed countryside filled by vegetarians. This is not mass society as we knew it in the 50s and 60s.

In sum, the old certainties based on birthplace, class, job and gender have gone. Britain is socially dislocated. The field margin certainties have gone likewise (rip it out, keep it sheep-proof or shoot it). Now one chooses the field margin to suit the lifestyle.

## MULTI-SPEED AGRICULTURE, THE AGENDA APPROACH AND NEW OWNERSHIP

Thus if farming and style of farming/ownership is nowadays a social choice it is important for policy to reflect that new world. So let us start with the world agenda.

Internationally we have GATT.

The pressures for a world trade deal reinforced concerns at the EEC about over production which would exist anyway. When the "Protect Agriculture = Protect the Rural Environment" nexus broke down the Shoard-Bowers - Cheshire attack found its public strength from the argument "why are we destroying so much to produce food we do not need?". All the field margin elements, length of hedgerows lost, destruction of macro and micro habitats, use of chemicals in its broadest sense became judged in that context.

So, we have a fundamental EEC need to reduce the productiveness of agriculture. This debate focuses on what to do with the 1 - 2 million hectares of land we do not need. Gillian Shepherd's policy of "reaping the green dividend" from set aside and related instruments starts there. If we needed the food this conference agenda would be very different.

Classical economists, of course, remind one that the factors of production are not just land but labour and capital also. In post war agriculture I find it helpful to take technology as a separate resource factor. In the high tide of the past the same land with less labour and some capital investment produced a great deal more not just because it could be ploughed by tractor rather than horse but because of the application of nitrogen, improved seeds and increasingly effective sprays. Now the tide has turned. Arable farmers have superbly productive land which may have its capacity vastly diminished because it is in a Nitrate Sensitive Area. Livestock farmers have stock with top class genetics but can no longer maximise growth by the use of hormones. I choose deliberately two examples of political restraints which I understand from my reading as an interested layman are scientifically irrational decisions. Politically I note, however, that they both serve to reduce productive capacity and one would be pretty naive to think that may not have been in the Council of Ministers' Minds.

Moving down to the National Policy Level

So, we find it having to pull two ways at once (and probably more). There is to be a reduced EC cake and Britain wants its best share. Agriculture Ministers therefore announce specific forms of capital aid and especially support marketing initiatives. Marketing is the vogue word in agriculture not just because it is a Thatcherite vogue word anyway but because it carries the implication that we can ignore the problematic production element and simply concentrate on selling more. To call this a half truth would be giving it too much weight. Perhaps a sixteenth or a thirty

second of a truth is closer.

I am focusing all the time on the particular field margin as a microcosm of this wider debate. The individual field margin exists in the specific field on the particular farm. To any such specific business struggling to survive then "margin" in its other sense is vital. If there is no greater demand for wheat than last year (or indeed less) then my farm has to capture more of the marginal market than my neighbour's. At a regional level we rejoiced in 1992 because the North East had better harvests than elsewhere in England so it helped our clients settle their accounts (always welcome) but it was on the basis of beggaring their neighbours in the south. Nationally, the Government must push British producers to get their proper share of goat cheese/sheep cheese/garlic production; or whatever is the identified area for reducing imports. But that must be at the cost of impoverishing some part of rural France, Spain, Greece or "at best" somewhere outside the EEC entirely.

Few cases are as extreme as sugar. The continued prosperity of beet growers on Nottinghamshire sands (and their call for crop protection products) may be at the price of economically dislocating a Caribbean island. Nonetheless, you do not have to talk long to sheep producers in France or Spain to see that Britain's continued success in sheep breeding and export is destroying their livelihoods.

It may be possible to persuade people to consume more computer games but one cannot readily persuade fat Europeans to consume more food.

Thus, I submit the field margin debate is a particularly potent sub set of the environment/agriculture balance which itself exists within the context of EC surplus reduction set against the framework of the World Trade talks. In the British context this expresses itself as being seen to do our bit for Europe-wide production restraint whilst gaining the maximum from the home electorate by politically sexy environmental schemes which tend to keep people on the land, or at least the land tended. Some aspects of field margins, particularly miles of hedgerow and stone wall, are politically salient; others, such as Carabid Beetle populations, appeal to a more specialist audience.

#### PIC'N'MIX POLICY

At the broadest level the political culture of British countryside politics is individualist and voluntarist.

It hardly needs saying that some of the "voluntary" schemes have an iron fist inside the velvet glove. SSSI management, nitrate sensitive areas and pollution control on livestock farms for example all work within the context of the idea that all the interests solve the problem together or something worse is around the corner. I am not knocking the way it is

presented. Presentation is a great part of politics and I am unstinting in my praise for how far, fast and sensitively MAFF, DoE and the other national agencies have come.

The present policy approach which I characterise as tailoring particular solutions to particular problems, introducing a regional or habitat type dimension and offering the opportunity for those farmers who want to get off the treadmill so to do is quite simply correct. I had the honour of working for some years to Sir Richard Butler as President of the NFU. His old dad had some very sensible words about "politics being the art of the possible". Present policy achieves a great deal of what is possible and probably more than might have been thought only a few years ago. The question in countryside management, including such things as stewardship and the Hedgerow Incentive Scheme is how far, how fast and how much more of the same can we achieve or afford.

This broad success in the area of countryside management is all the more striking when contrasted with the same Government's failure in statutory land use planning. There, the last decade and a quarter has been characterised by lurches of policy, unclear statements on the diversification of the rural economy and in more recent times has come down, in my view, to Ministers misleading people by saying one thing to farming audiences and quite another in policy pronouncements and the actual decisions of their regional offices and inspectorate. Above all there has been a failure to bring countryside management and statutory land use planning into a common framework.

As things stand, however, we can, and frequently do, sit down with clients and plan their withdrawal from mainstream productive farming.

Depending on where they are one would consider:-

- Environmentally Sensitive Area scheme
- Countryside Stewardship
- SSSI management
- Nitrate Sensitive Area scheme
- Hedgerow Incentive scheme
- Heather restoration or other upland management
- Farm Woodland Premium scheme/Woodland Grant Scheme
- Woodland but with specific community forest or National Forest objectives
- the former Countryside Premium Scheme
- Various local or regional initiatives

These things do not exist in a vacuum, of course. Such approaches are predicated upon the leasing away or sale of the milk quota, disposal of other dairy capital assets, sale or leasing away of sheep quota, or the cow quota. The scheme will usually involve some form of non-permanent tenancy on parts of the land to allow a more productive minded neighbour to use them. The so-called "Gladstone v Bower" arrangements remain favoured; under which land is let without security for

between one and two years. Land which looks as if it can be "got away" for minerals, opencasting, town or village edge development, barn conversions or whatever is kept.

What remains so good about this broad policy approach is that those selecting it do so because they are committed. You can always plane far more wood with the grain than against it. There remain a large number of farmers and other landowners who wish to do something other than produce the maximum rape output each year. There seems little point in trying to force universal policies on young men committed to being the best arable farmers in South Yorkshire (or wherever) when there is a willing population to work on instead.

Almost all the schemes above have field margin elements. Either explicitly or implicitly they reduce or eliminate spraying, they often involve specific wildlife friendly management of marginal habitats.

In this broad area we need technical and particular improvements and I identify the key ones (at the time of writing) as being:-

i A simple option within all types of set aside or agri-environmental packages to allow woodland planting to "count" as a farm's contribution to the set aside requirement.

ii Acceptance sooner rather than later that the complete removal of forestry from taxation was not correct. At least in targeted areas there need to be tax based incentives to woodland planting.

iii The "bring us your own ideas" paragraph in Countryside Stewardship to be brought up front and made the dominant theme. Even "Jack and Jill do Welfare Economics" would tell you that you will get far more for your money if landholders put in bids to win the Stewardship funds rather than read down the menu to see what is the best deal they can get away with.

iv Each and every countryside scheme which can do it should give attention to or have special discretionary elements for the most important habitat links. A mixed broad leaved woodland planted to replace an open, hard-sprayed, arable field and linking two areas of ancient semi-natural woodland counts for more than the same acreage somewhere else.

v Continue to cut down the paperwork.

#### CHANGE BY AGE, STAGE OR LAW

Field margin management also falls into the wider debate where it involves or requires some type of change in management style. Over recent years a number of socio-economic researchers have identified stages, normal in the family farming cycle, when environmental damage was most likely to occur. Typically, these have been such times as a

son taking over with new aims and ideas.

In a rural solicitors' practice one sees that the family cycle is a far more complicated animal involving partnerships, calculations of taxation efficiency and attempts to balance equitable distribution of the property with the maintenance of the core business.

Some basic changes in land holding are usually bad for field margins. A farmer buying next door's fields thus rendering the hedge between them functionless is the most obvious. For the maximum public good field margins generally benefit not only from sympathetic management but from consistent management.

Practical experience over recent years, and particularly the directions of change in the last few months, lead me to conclude land use change is, on balance, malevolent. Principally I see:

i In milk, uncertainty over the world post-MMB is continuing to concentrate milk on those farms which seriously want to produce it. Such farms tend, anyway, to be carefully costed and keen managers of reseeded grass land. Buying or leasing quota puts them further on the treadmill and means they crop their grass tightly hedgerow to hedgerow. (Indeed, I wrote this section of the paper whilst working on the Staffordshire/Cheshire borders and one might better describe it as post and wire fence to post and wire fence).

ii I suspect many land agents or fellow specialist practices would echo those to whom I have spoken in the preparation of this paper; they have more instructions to acquire land than to sell it. I say "acquire" not "buy" specifically because many of those predatory, expansion minded farmers will take tenancies, share farming or the "Gladstone v Bower" arrangements described above. None of these are designed to encourage caring, long term farming.

iii In livestock again the more specialist farmers are concentrating production. They too may have to buy in sheep or beef quota rights. They have an eye on the increasing extensification requirements in EC livestock regimes. Along with reduced labour availability this means there is less reason to keep up internal hedgerows. Hedgerows can be lost as a feature by simply growing out into scrubby trees as well as by actual removal.

Against these trends in the main commodity areas one sets people opting for environmental schemes and a counter balancing weight of planting/management from new smaller occupiers of land. These purchasers, often near town or village edges, take land less wanted by farming. Whether for their own small scale agricultural business, equestrian enterprise or simply recreational use such new occupiers sub-divide land and should create a greater ratio of boundary per hectare.

In my experience such enterprises tend to run into development control problems (not least since changes in the General Development Order on units of less than 5 hectares). Thus they often live in a limbo world of low investment and limited environmental care. In most Planning Authorities benefits to wildlife, the semi-natural landscape of hedgerows, sympathetic rural land management and tree planting will count for very little if the new farm or holding needs a stable, shed or lock-up. If there is to be planting then screening leylandii still seem to outweigh slower growing indigenous species. It is to that statutory planning framework that I turn finally.

#### STATUTORY TOWN AND COUNTRY PLANNING IN ITS OWN VACUUM PACK

It has been unfortunate, sad but essential that the boom in countryside management from around 1981 has existed outside the statutory Town and Country Planning framework. We could certainly not have moved so far, so fast and with such understanding between the actors within a model based upon the statutory system. I would take a good deal of persuading that ESAs would be a success if the early ones had been made a National Park function.

To the extent then that field margin initiatives have stood almost entirely outside statutory planning they have not been part of the wider debate.

I emphasise "system" because the individuals comprising it have more sense than the system as an institution. I am involved in successful examples where officers or members have taken the wider view. I cannot say where they are because they have normally involved gaining a lot of good at the cost of the rules.

I have referred before to an example astonishing even in terms of some of the unthinking applications of supposed green belt policy that are my bread and butter.

This was a Lancashire mossland Authority who would not let a young couple born and bred out on the moss to rebuild, after fire, one of the typical wooden structures of the area. They told them they would have to justify an agricultural dwelling and therefore they should drain and improve their bit of moss land (neither of them being farmers) and make a viable holding with carrots, celery etc.

It was only upon visiting the Authority to check their files before enquiry that I saw proudly for sale on the front desk, the Mossland Strategy identifying my clients' holding as one of the last pieces of natural moss land undamaged by agricultural activity. Sponsored and supported and adopted by the self same Authority this called for the protection of the cultural heritage of the mosslands, the maintenance of the traditional structures and the non-improvement of the remaining most precious parts.

We won the enquiry but primarily on technical legal grounds as to whether the use had been abandoned following the fire. The inspector gave no obvious weight to the ecological aspects.

I can contrast that however with a much pressured South Eastern Authority where the Planning Officer, looking to the greater good, accepted from a Local Agent an agricultural appraisal showing potential viability from a farm system that retained around 50 acres as organic, completely unsprayed hay meadow with superb old hedgerows.

Broadly, however, one starts from a position wherein the statutory framework has not yet found an approach to replace the early consensus. The unhappier side of the new emphasis from Section 54(a) of the Town and Country Planning Act is the reinforcement of a view that everything can be achieved via the Statutory Plan. I suspect and fear this will reinforce a prevalent mode of thought that there are "right" and "wrong" places for particular uses to occur. In this world view it is some kind of prostitution of the planning process to allow something which can be made acceptable. Indeed, it is a regular part of my work to try to walk a tightrope whereby if we offered too much at the outset it would be argued that it must have been a fundamentally bad site because of all the landscaping work which we are offering to do.

The reciprocal is a fear by Authorities of asking for too much by way of landscape or environmental gain which may be open to attack on appeal or in the Courts.

All that needs to be done in that broad area is a paper for another time and venue but one welcomes the Countryside Commission's increasing espousal of "green planning" deals.

The bottom line remains that you are still more likely to get consent on a farm for a holiday caravan park to be located in a wood (where it must inevitably mean the loss or destruction of some of that wood) rather than in mediocre arable land as part of a scheme for replenishing, reinvigorating and replanting its margins and copses. Whilst that remains the case thousands of planning decisions take place with little contribution to the gains which could be made and conservation remains too often in the margins.