6. The current policy context and nature conservation

6.1 Introduction

- 6.1.1 This chapter seeks to provide a brief appraisal of the findings of the report so far drawing out the linkages, benefits and disbenefits of the relationship between the current policy context and nature conservation. By so doing it seeks to set the scene for the next chapter which provides a critical examination of future policy options.
- 6.1.2 By first considering *current* policy, we are suggesting that *future* reform must learn from the lessons of the past and, in particular, the experience of the period since 1992. This requires some consideration not only of the agricultural policy context but also market trends and, in the special context of nature conservation, conservation policy. Thus, in seeking to establish a framework for the discussion we start by drawing on Tilzey's characterisation of the principles underlying the Natural Areas approach adopted by English Nature with its intrinsic acceptance of the need to move away from an over-emphasis on site-specific conservation policies (Tilzey 1997a). Thus, Section 2 of this chapter examines the natural areas approach. This is followed by a section which summarises current beef policy impacts on nature conservation in the context of current agricultural and conservation policies. A concluding section examines the implications of the Natural Areas approach for an appropriate policy framework.

6.2 The Natural Areas approach

- 6.2.1 Examining the management of conservation sites in lowland England, Adams et al recently concluded that decades of agricultural intensification had left wildlife in the lowland countryside existing as "fragments of habitat in the cracks between commercial uses" (Adams et al 1994: 247). It is these fragments, such as remnants of species-rich grassland on wet or inaccessible sites or on chalk or limestone escarpments, that are of particular significance to the environmental value of many lowland farmed landscapes. As Tilzey puts it "the currently prevailing model for biodiversity conservation is one in which nature is 'sequestered' on special sites/areas and accorded a minimal role 'outside' and in opposition to mainstream economic activity" (Tilzey 1997a: 3). It is a policy model which figured highly in the post-war rural land use consensus which can be traced back to the principles established in the 1942 Scott Report (Blunden and Curry 1990). This is not to say that the policy remained unchanged or unchallenged during the post-war period. The assumption of the Scott report that agriculture and nature conservation were fundamentally compatible was dealt a severe blow in the 1960s with widespread evidence both of the landscape impact of agriculture and, more especially, of pesticides on wildlife (Moore 1987). The pesticide issue provides the first example of an emerging realisation in conservation policy circles of the limitations of site policy, for it was apparent that pesticide residues once established within food chains had little respect for nature conservation site boundaries. Prohibition of certain categories of pesticides was an early response to the need to bring wider countryside issues into conservation policy, although it was clearly also prompted by a range of other concerns, not least regard for human health.
- 6.2.2 A much more significant policy departure from the assumptions of the Scott Report has been the shift towards including environmental sites within mainstream support policy, through the extension of rights to payment from agriculture to conservation sites. This took place first through the compensatory principle of the Wildlife and Countryside Act 1981 and then through the voluntary schemes within the reform agenda of the CAP (Cox et al 1988, Marsden et al 1993, Winter 1996). Tilzey describes this approach as the "environmental managerialist" model and concludes:

To the extent that environmental conservation has been secured at all, it has been achieved only through the preservation of the 'rights' of farmers to a degree of state support through the extension of their property rights to cover environmental goods. (Tilzey 1997a: 3)

- 6.2.3 The environmental managerialist model is now under threat as a result of a range of factors:
 - evidence of widespread habitat and species loss in the wider countryside and the implications this has for 'island' sites;
 - the problems besetting the CAP;
 - the unsustainablity of modern agricultural practices;
 - changing consumer demands and concerns.
- The Natural Areas¹⁹ approach is one response to these concerns and provides an attempt not only 6.2.4 to place site policy in a more appropriate broader context but also fundamentally to shift the focus of English Nature's activity towards a whole countryside approach:

This approach not only challenges the view that nature can be conserved effectively on an isolated and fragmented basis, whether spatially or in terms of individual species, but also in so doing problematises, implicitly or explicitly, the sustainability of mainstream agricultural activity itself. Thus, if biodiversity loss and decline are the result of generic causes .. deriving from mainstream economic activity, it follows that biodiversity conservation cannot be satisfied simply or in the longer term by enhanced management of a residual resource subsisting at the margins of, and juxtaposed to, those continuing generic sources of decline. (Tilzey 1997a: 3)

6.3 The impact of current policy

- 6.3.1 Livestock are essential to the maintenance and management of grassland habitats. Moreover, particular categories, and even breeds, of livestock are especially well suited to particular assemblages of vegetation. As indicated earlier in the report, post-war agricultural policy has prompted three inter-locking trends in the livestock sector which have had a severe impact on the management and maintenance of conservation sites:
 - regional and on-farm specialisation leading to a decline in livestock numbers in some places and a dramatic increase elsewhere;
 - increased intensification of production whether on grassland or arable land;
 - fewer and more specialist breeds of livestock adapted to modern intensive conditions.

Specialisation

None of these trends have yet been fundamentally altered or shifted by either the 1992 reforms or 6.3.2 the impact of the BSE crisis. Specialisation has led to the twin problems of under-use and over-use of key grassland sites. Too few animals on particular farms has led to under-grazing of key sites such as remnant pastures on arable farms, with resultant loss of biodiversity due to growth of rank vegetation and scrub development. This problem on limestone and chalk grasslands and lowland heaths has been of significance for many decades (Green 1996), a problem exacerbated, not infrequently, when these remnant sites are unfenced lowland commons²⁰.

¹⁹Natural areas, developed by English Nature since 1993, are "biogeographical zones which reflect the geological foundation, the natural systems and processes and the wildlife in different parts of England, and provide a framework for setting objectives for nature conservation." (Filzey 1997a: p1).

20 The commons literature is reviewed in Short et al 1996.

6.3.3 By contrast in the uplands, the main focus of concern has shifted from the loss of rough grazing due to ploughing and re-seeding (NCC 1984, Parry et al 1981, Sinclair 1992) to concern over the decline in the conservation value of remaining upland habitat due to changing management linked to stocking sheep at high densities and consequent overgrazing in the context of regional specialisation of sheep in the uplands (Bardgett et al 1995; Thompson et al 1995). However, the categorisation of the upland problem purely as overgrazing is potentially misleading for it fails to highlight sufficiently the paradox that overgrazing by sheep often occurs alongside undergrazing by cattle, whose numbers have declined in the uplands. Upland habitats of ecological value have been maintained over the years by a combination of three key management tools: sheep grazing, cattle grazing and trampling, and burning. If any one of these is neglected or used inappropriately, there is likely to be problems with habitat maintenance, especially on grass moors²¹. The common sheep breeds kept in the uplands (such as Swaledales) graze more selectively than cattle leading to an increase in unpalatable species of low conservation value (Molinia spp., Nardus stricta, for example) if cattle are excluded from the system or are present in insufficient number. Cattle are crucial because they are less selective grazers than sheep. They will eat coarser grasses preventing their spread and play a crucial role in trampling, particularly important in limiting the spread of bracken. Molinia, Nardus and bracken are all significant upland species (as shown in Figure 6.1), and although some Molinia and bracken communities have wildlife value, their control in most situations is vital.

Wavy hair-grass (Deschampsia Sheep's fescue (Festuca ovina) (Anthoxanthum odoratum) Deer-grass (Trichophorum cesnitosum) Bilberry (Vaccinium myrtillus) Bent-grass (Agrostis tenuis) Bracken (Ptendium aquilinum) Mat-grass (Nardus stricta) Heather (Calluna vulgaris) Purple moor-grass (Molinia

Figure 6.1 Major Upland Species: GB Land Cover

Source: Bunce 1987, p20.²²

Intensification

The intensification of land use around sites of conservation importance has long been recognised as 6.3.4 having a potentially grave impact on the conservation value of the sites themselves (Adams et al. 1994). The removal of linear features, the agricultural improvement of permanent grassland through drainage and the application of fertilizers, the shift from spring sown to winter sown cereals, if undertaken on surrounding land all may have an impact on the wildlife value of SSSIs. Sometimes

²¹Heather moors can be maintained without the direct use of cattle although even here, use of cattle at the heather grass interface can be helpful and wherever there is a potential for bracken infestation. Heather moors are particularly vulnerable to overgrazing by sheep. Over a 10-year period (1979-1989) Rushton and Bryne (1990), found that an increase in ewe numbers of about 40% was associated with a similar reduction in the area of heather, where heather cover was originally greater than 50%. See also Johnson and Merrell (1994). ²²For further information on key vegetation types in the uplands see Ball *et al* 1982.

this may be direct damage through spray drift or the lowering of water tables, but more often it is a process of gradual erosion of value.

Specialist breeds

6.3.5 A rarely commented on feature of intensification has been the shift towards new breeds and strains of cattle (and sheep). It is not only that farmers in much of lowland England run purely arable enterprises. This is the case in some instances, but in many other cases where there are subsidiary livestock enterprises remnant grassland sites are also neglected. The highly mixed assemblages of species which characterise such grasslands do not lend themselves to the kind of highly detailed calibration of feedings systems for livestock in modern farming systems. Few dairy farmers in today's circumstances of high yields would consider grazing milking Holstein-Friesian cows on grassland of this nature. Increasingly, even the diets of beef cattle, dairy followers and lowland sheep are carefully and intensively managed²³. It would be a mistake to make too much of this trend for dairy followers and beef stores from Continental breeds can do well enough on summer grazings of most sites, but the trends are clear and, on some sites, have had an impact. Moreover, the loss of traditional breeds can be seen as negative in its own right both in terms of a loss to the cultural landscape and genetic loss (Evans and Yarwood, 1995).

The policy impact of BSE

- 6.3.6 In one particular instance, a policy initiative has serious actual and potential implications for grazing sites of low grassland productivity. The 30 month ruling introduced in the wake of the BSE crisis is designed to ensure sufficiently early slaughter of cattle as part of the disease control regime. But fattening cattle in under 30 months using traditional local breeds on species rich grassland is demanding. Beef cattle are better suited to traditional grasslands but current requirements for fattening in under 30 months threaten utilisation of low productivity grasslands. Thus it is that management of ecologically important grassland habitats even within livestock farming systems is becoming a problem in some instances. For example, the nationally important Culm grasslands of north Devon are located within a predominantly pastoral agriculture devoted to dairy, beef and sheep. In the past they have been threatened by drainage and fertilizers, but now it is not unheard of for Culm grasslands to suffer from under-management even within a livestock system as such grasslands are not compatible with modern livestock systems. It is particularly ironic that the 30-month ruling affects those low intensity grass-based systems which have had a very low incidence of BSE.
- 6.3.7 General trends of change affecting the beef sector have an environmental impact as they have the propensity to alter the density of stock, carrying capacity ability of a site, the seasonal pattern of grazing and/or the stock type kept on a particular habitat. The direct consequences of BSE for nature conservation are, as yet, unclear. Initially, the impact was to increase grazing pressure on grasslands as farmers could no longer sell cattle over 30 months. Instead, many had to be retained on holdings over the summer as abattoirs struggled to cope with the sheer volume of cattle that needed to be culled. In the longer term, Gaskell and Winter (1996) observe that despite 'considerable uncertainty', the BSE crisis will accelerate the trend towards fewer cattle in the UK, regardless of locality. However, there are already signs that certain types of beef enterprise are being discouraged more than others. With fewer cattle in demand, breeding suckler systems are suffering a decline in interest. These are located predominantly in upland areas of north and west Britain. Unfortunately, this coincides with localities in which farmers are under greatest pressure for continued business survival and where the environmental value of cattle tends to be greatest. A likely outcome, which requires detailed exploration, is that problems associated with overgrazing in the uplands will be exacerbated. In particular, there is a strong risk that the BSE crisis will exacerbate trends towards the substitution of sheep for cattle in the uplands with all the implications that has for the over-grazing problem.

²³Changing breeds are crucial here. The traditional downland breeds of sheep that grazed chalk and limestone downlands in the last century have largely been replaced by larger and faster growing breeds far less well suited to low productivity grasslands.

Farmers will endeavour to keep more sheep (by increasing their quota) to replace income lost from cattle.

The policy impact of the beef regime

- 6.3.8 Chapters 3 and 4 of this report have shown how the stocking rate rules associated with the 1992 reforms to the beef regime were not designed to achieve environmental benefits as such nor to decouple support payments from production levels other than in a very weak manner. Rather they served to place limits on levels of support payment. The rules only apply to specified categories of livestock and not to the actual number of animals on the farm. Farmers may keep animals for which no claim for premium is made and animals which are incligible for premia, such as nonbreeding female beef stock, calves under six months of age, lambs or alternative categories of livestock such as deer. Moreover, the stocking rates are set at such a level that few farmers have had to reduce stocking to qualify: less than 8% of farmers with beef enterprises were affected by changes to stocking density restrictions up until 1995 and just 20% anticipated a change in herd management to take account of the new 1996 level (Winter and Gaskell 1997, Winter and Gaskell et al 1997). Of course, the added pressure from the market place combined with the BSE measures may serve to encourage some farmers to extensify production or even to withdraw from beef production altogether. Where this occurs in the context of a mixed or grassland farming system there may be some environmental benefits although much will depend on the alternative uses to which the land is put. But, as has been made clear in Chapter 5, there are sites of considerable conservation importance in the lowlands, such as fragment grasslands within arable areas, which could suffer from neglect if beef systems decline. In some cases, the conditions mean that cattle are even more essential elements in the grazing regime than in the uplands. For example, the alluvium or alkaline peats of the Somerset Levels support vigorous swards in wet conditions that are unsuitable for sheep (Entec 1996).
- 6.3.9 An element of cross-compliance exists in both the BSPS and SCPS. Livestock must not be allowed to graze in numbers which damage growth, quality or species composition of vegetation on that land (MAFF, 1996b). MAFF will advise farmers on the number of animals it thinks is appropriate to graze on land where overgrazing is deemed to be a problem. MAFF also reserves the right to recommend changes in management practices. Scheme premia will then be paid according to the number of animals advised to the farmer or withheld if the conditions are not met. In the uplands, where overgrazing has long been a problem, MAFF introduced a 'Code of Good Upland Management' in 1992 to assist farmers to 'maintain the character of the countryside'. Although voluntary, government reserved the right to make the payment of HLCAs conditional on compliance with some or all elements of the code (Winter and Gaskell *et al*, 1997).

6.4 Conclusions

- 6.4.1 It should be clear both from the preceding discussion and the findings of the core chapters in this report that the future management of nature conservation sites is critically bound up with CAP policies for beef (as well as other commodity regimes). The development of Natural Areas profiles provides a framework for defining priorities for the future development of policy which takes into account the crucial relationship between agricultural policy and nature conservation outcomes. Natural Area profiles will seek to define objectives which:
 - Conserve, enhance and where possible expand remaining areas of high quality seminatural habitat (including aquatic ecosystems).
 - Conserve, enhance and where possible expand 'second tier' semi-natural habitat.

- Make the practices of modern farming more congenial to the conservation of characteristic habitats and species in the wider countryside.
- Prepare targeted programmes for particular rare or threatened species where generic measures alone will not be effective.

(Tilzey 1997a: p4)

- 6.4.2 In the final chapter we move to a consideration of the agricultural policy initiatives that might be taken to achieve these objectives. Of course, in the meantime it is important to remember that the current policies will continue to impact on the beef sector at the same time as consumption remains static or declining. With so much of the expansion of beef during the last decade located in the lowlands and with lowland farmers having many more options than upland farmers, the potential for a dramatic decline of beef farming in the lowlands cannot be ruled out. In the uplands there may be a continuing decline of beef grazing. In both cases the pace of change may be slower than might otherwise have been the case because of the rigidities in the system as a result of the '92 reforms. As the main alternative livestock systems are both subject to quota (milk and ewes), there is a limit to the speed with which farmers can shift to other commodities. This is particularly pronounced in the uplands where ewe quota imposes something of a ceiling on the extent to which a switch from beef to sheep can be implemented. As a consequence we can expect to see a continuing high demand for ewe quota in the uplands and a focus on improvements to ewe productivity. In addition we can expect a continuing retention of sheep in the uplands that might otherwise have been sold to the lowlands, a potentially worrying trend already established under changes to the retention rules applying to the sheep regime. The reduction of the number of application/retention periods for SAPS from one to two with effect from the 1996 marketing year has served to reduce demand for ewes from the hills in the lowlands and encouraged upland farmers to retain greater numbers of sheep²⁴. In the lowlands, there are more options available to farmers including unconventional options such as deer farming. Amongst the more conventional options that might suit particular farming circumstances are the following:
 - For farmers who have operated a mixed farming system with short levs, an obvious response would be to increase the cropped proportion of land eligible for Arable Area Payments. As beef profitability declines, so the use of any eligible land for grazing or fodder will seem an extravagant use of that land.
 - Some farmers with relatively small beef enterprises using permanent or semi-permanent grassland on largely arable businesses may be tempted to remove beef livestock from their systems altogether.
 - It is possible that for a small number of producers, the reduced margins coupled with lack of alternative options might induce more intensive beef systems.
 - Some farmers might consider switching from beef to outdoor pig or poultry systems, given the growing consumer demand for these products. This could be particularly attractive to farmers who have traditionally fed a proportion of their cereals to livestock on the farm²⁵.

²⁴ For full details see Winter 1996.
²⁵ It important to point out though that such a switch, even to outdoor systems, requires capital outlay, new labour skills and entry into markets with relatively little or no CAP support and subject to vagaries of price and demand. It will only appeal to some farmers.

- 6.4.3 However, it should be said that for many livestock farmers none of these options will be viable and their only course of action will be to take what the combined forces of the market and policy put on offer.
- 6.4.4 It is vital, therefore, that the policy signals are stronger from a nature conservation perspective. At present, the policy arrangements represent a very weakly decoupled framework in which productivism is still a dominant force. In fact, productivism is stronger within the policy framework for beef than for the other major commodity regimes and the Commission has recently predicted that intervention stocks will grow to 1.5 m tons by 2005 in the absence of other measures (European Commission 1997).