

A Review of the Loss of Commonable Grazing Land in the New Forest

A report to the Commoner's Defence Association, Hampshire Wildlife Trust and New Forest Association



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Summary

The remarkable survival of the common grazing system of the New Forest has been one of the most important factors in maintaining the nationally and internationally important nature and landscape conservation value of the Forest.

The report makes various references to National Park status. We have not taken a position in supporting, or objecting to, a National Park Authority. We have identified actions that may be appropriate for a National Park Authority to promote should one come into existence. We have similarly identified localities which we would recommend form part of a National Park should a boundary be confirmed by Ministers.

Although the common grazing system of the Forest remains active, a significant area of land is no longer accessible to New Forest stock. Most of this land was lost to stock grazing with the fencing of the perambulation in 1964. It has been estimated that at least 2,000 hectares of grazing land, equating to some 10% of the grazing lands in the New Forest, was lost to New Forest stock at this time. The loss of this grazing land has had a number of impacts on the nature and landscape conservation value of these excluded lands and is likely to have had a significant effect on the functioning of the grazing pattern within the perambulation.

Fencing of the perambulation excluded stock from a number of closely inter-related landscape types. These have been categorised as:-

- Adjacent commons
- Dispersed commons
- Road verges
- Village greens
- Coastal grazing land

The presence of free ranging livestock is widely seen as being synonymous with the New Forest. The exclusion of stock from these landscapes has fundamentally changed their identity. In many instances, the removal of stock grazing has also significantly degraded their nature and landscape conservation value. Reintroduction of grazing through an extension of the New Forest's grazing system is seen as the most desirable means of restoring and rehabilitating the wildlife habitats and landscape value of these formerly grazed areas. This would assist in meeting a number of nationally and internationally adopted targets and objectives developed through the UK Biodiversity Action Plan (BAP) and the EU Habitats Directive. The system of common grazing that has endured in the New Forest also provides an important resource of both stock and expertise that could be of great value in restoring extensive grazing systems to other habitats of nature conservation importance throughout lowland Britain.

Restoration of grazing to a larger area of the New Forest would also have significant benefits for maintaining the common grazing system of the New Forest in general and would re-establish the historic landscape and cultural links between these areas and the open Forest.

The extent to which New Forest stock strayed beyond the unfenced perambulation prior to 1964 has been determined by reference to the location of former stock pounds and through interviews with people associated with the New Forest at that time. It is concluded that the extent of summer straying equates to the functional extent of the New Forest. It is also concluded that if a National Park is to be established, the boundary should include the former extent of summer straying as defined by this report.

Within the perambulation there have been constant losses and gains of grazing land since 1964. There has been continued erosion of the grazing resource through small scale development of way-leaves and recreation facilities including camp sites and car parks. Countering this, there have also been gains in grazing land through the removal of concrete from World War II air fields and restoration of former allotment gardens to the open Forest. An analysis of information provided by the Forestry Commission suggests that these losses and gains have to a large extent cancelled each other out. Perhaps more significant has been the loss of grazing resulting from the creation of the Verderers Inclosures during the late 1950s. It is hoped that developing plans for the reduction of these will restore much of this lost grazing land to the Forest in the future.

The assessment of gains and losses resulting from development within the perambulation has not included any consideration of the impact of vegetation management on the grazing resource. This significantly complicates the picture as much of this management was undertaken with the intention of improving the quality of the grazing, for example by improving drainage of streamside lawns. In practice, such action may have resulted in a loss of grazing land by encouraging the growth of scrub on sediment dredged from stream beds and a reduction in grassland productivity following a decline in frequency of flooding.

There are also frequently quoted anecdotes of the loss of grazing due to a spread of bog and scrub over former streamside grassland. We have been unable to validate such claims within the time available to this project.

Restoration of grazing to much of the formerly grazed area of the New Forest is seen as an important objective with very considerable potential benefits. There are however a number of important obstacles that need to be addressed.

Consideration needs to be given to the extent of the Verderers responsibilities in relation to the management of commoner's stock. In particular consideration needs to be given to extending the Verderers influence beyond the current New Forest perambulation to a wider area, for example the area of the proposed National Park. This may involve a change in legislation.

Careful consideration should be given to the extent of a National Park or Heritage Area boundary. It is our view that where possible this should be inclusive of the extent of summer straying recorded prior to fencing the perambulation, shown in map 1. There is a strong case in favour of a public body taking responsibility for co-ordinating the restoration of grazing to the formerly grazed landscape types within the wider New Forest area.

To facilitate the restoration of grazing to these landscape types, there is a need to bring further areas into public ownership. Funds need to be available, possibly through a National Park Authority, to assist with the acquisition of such land when it becomes available.

Financial support for habitat management and restoration of grazing is currently available for land within SSSI through English Nature's Wildlife Enhancement Scheme. This has proved highly attractive to private land owners. This funding must be maintained in the future if the important gains made under this scheme are to be secured and extended. Outside statutorily protected sites there is also a need to assist in habitat restoration and rehabilitation, often through the reintroduction of appropriate stock grazing. The New Forest Committee is establishing the Forest Friendly Farming Project that could be influential on these sites but funding would be limited to that available through agri-environment schemes such as Countryside Stewardship which has been generally unpopular in the New Forest. A well resourced National Park Authority may be able to support such schemes with additional funding.

The massive network of formerly grazed roadside verges and village greens that were once accessible to New Forest stock offer great potential for extending the grazing resource. Perhaps more importantly, however, these grazed highways provide the links between the open Forest, the dispersed satellite commons and the coast. The growth of urban development and traffic levels now make it very difficult to extend grazing to these road verges but there are a few locations where this might be practical and would have significant nature and landscape conservation benefits.

Where road verges and greens can no longer be grazed for practical reasons, management schemes need to be developed which ensure the nature conservation and landscape value of these features is not lost. This might include development of more appropriate mowing regimes, removal of scrub and secondary woodland, restoration of ponds and wetlands and the control of sub-urban ornamental planting and beautification.

The loss of grazing from the coast over the last 40 years has been dramatic. It has not been possible to estimate the area concerned but the loss of grazing from these coastal habitats is likely to have had significant ecological effects. There are likely to be significant advantages of restoring grazing to these areas. In addition to the traditionally grazed salt-marshes and other coastal wetlands of the New Forest coast, extensive areas of coastal grazing land has developed at Dibden Bay and is proposed to be created at Manor Farm, Pennington. These offer great potential as back-up grazing land for New Forest stock.

1 Introduction

The 'New Forest is a remarkable survival of medieval England in both historical and biological senses. Nowhere else in the lowlands has a pastoral economy based on the exercise of common rights over a great tract of common land survived'. (Tubbs, 1997). It is indeed remarkable that the pastoral economy of the New Forest has survived in as intact a state as it has. Despite this however, this economy has altered significantly over the past few decades. This study has been commissioned by the Commoners Defence Association, Hampshire Wildlife Trust and New Forest Association to investigate to what extent the unenclosed grazing land of the New Forest on which the commoners stock depend has changed in extent over the last 40 years. It concentrates initially on the loss of grassland as this plays such an important role in maintaining the grazing system of the New Forest, but inevitably, when considering changes in the extent of available grazing land other habitats, particularly heathland, mire and the mix of coastal habitats are also considered.

Having identified the degree to which common grazing land has been lost from the New Forest, this report seeks to identify the potential benefits to nature and landscape conservation and the continued functioning of the New Forest pastoral economy by restoring grazing to these lost areas. Lastly the practical management and legal measures that might be needed to facilitate such a restoration of common grazing to these areas are considered.

The future status and administration of the New Forest is currently the subject of much debate following the government's announcement that it intends to designate it as a National Park. Without taking a view on the relative merits of National Park status, it is hoped that this report will assist in this debate. Firstly, by helping to identify the former extent of the New Forest as a functional unit and secondly by identifying measures needed to restore this area as an integrated management system. The views expressed in the report are however those of the authors and do not necessarily reflect those of the individuals or organisations that have contributed to it.

There are a number of terms used in this report that perhaps need some explanation. The 'open Forest' is a term frequently used in this report. It refers to the extent of land to which New Forest stock currently has free access. It includes the area of the Crown Lands and the associated adjacent commons and Manorial Wastes of the New Forest within the area defined by the 1964 New Forest Act.

The perambulation of the New Forest delimits the area within which the New Forest Verderers apply their by-laws for the control and health of the stock depastured on the Forest. Livestock are retained within this area by road grids and fences erected as a consequence of the 1964 Act. Nearly a quarter of the land within the perambulation consists of farmland and settlements, amongst which the stock forage only on the lane side verges and greens.

2 The value of grasslands within the New Forest

2.1 The value of New Forest grassland as forage

2.1.1 Vegetation types grazed by New Forest stock

The vegetation of the New Forest can be described in broad habitat terms as comprising mostly woodland, heathland, mire and grassland but within these habitats there is a wide range of botanical and structural variation. Woodlands include dry acid types on gravel soils through to wet streamside and bog woodlands. Heathland vegetation is also very varied both in terms of species composition and structure and ranges from wet heath through to dry and from short recently burnt or mown to mature tall heather. For the purposes of this study, it is however the grasslands that are of prime importance. These also display a wide range of types and have been variously classified according to their botanical composition, location and management history. This variety of classification makes it difficult to compare data between different reports and studies. Colin Tubbs (1986) provides approximate areas of grassland types within the Forest as follows:-

Neutral grassland	353 ha
Reseeded grassland	528 ha
Acid grassland	3993 ha*
Total	4874 ha

*including 266 ha of limed/fertilised grassland

Botanical descriptions often refer to New Forest grassland as acid grassland despite the fact that much is near neutral in character and some even displays features of calcareous grassland.

The most comprehensive summary of grassland types within the New Forest has provided by Sanderson (1998). This is reproduced in Table 1.

Table 1. New Forest grassland types by botanical composition (Sanderson 1998)

Grassland type	Description	Area (ha)
Parched Acid Grassland	Dry grasslands dominated by fine grasses and often species rich	1,121
Heathy Acid Grassland	Grassland often dominated by Purple Moor-grass <i>Molinia caerulea</i> with low growing heathers occurring on soils with impeded drainage	872
Moist Acid Grassland	A transition habitat between Parched Acid Grassland and Wet Lawn	19
Neutral (Chamomile) Greens	Dryer neutral grasslands with Common Bent <i>Agrostis capillaris</i> and Red Fescue <i>Festuca rubra</i> also frequent Daisy <i>Bellis perennis</i> and White Clover <i>Trifolium repens</i>	330
Wet Lawns	Occur on seasonally very wet soils which dry to some extent in the summer	741
Total		3,083

In other studies grassland has been described by reference to management history and origins. For example, Putman, et al (1983) identified grassland types based on management history. These are summarised in Table 2.

Table 2. New Forest grasslands by location/management

Grassland type	Description
Re-seeded grassland	Areas of grassland that have been cultivated and re-sown within the past 50 years
Commoners improved grassland	Acid grassland that has been treated with lime or fertiliser to increase productivity within the past 50 years
Village greens / Settlement-edge lawns	Heavily grazed and trampled grasslands, often containing a range of vegetation types, enriched by the dunging of commonable stock
Stream-side lawns	Wet grasslands found along stream sides which are regularly inundated during winter often with water of slightly raised nutrient and base status

The productivity of the various grassland types, in terms of biomass has been investigated by Putman, et al (1983) who found that the mean production of the different grassland types examined were as follows:-

Streamside lawns	1.96 tons/acre
Commoners improved grassland	1.31 tons/acre
Reseeded lawns	0.90 tons/acre
Acid grassland	0.63 tons/acre

This work clearly demonstrates the importance of the wet and seasonally flooded streamside lawns for grazing animals.

The productivity of the commoners improved grasslands and the re-seeded lawns is reduced by continued heavy grazing which prevents grass growing on to a more productive height.

2.1.2 Use of the New Forest by grazing stock

The most informative studies into ways in which large herbivores and in particular depastured stock utilise the New Forest vegetation are those undertaken by researchers at Southampton University. These have been summarised by Colin Tubbs (Tubbs, 1986) and NCC (1983). These studies compared the productivity and use of a range of grassland types by New Forest stock. However, the use of village green and settlement edge grasslands was not specifically investigated as part of these studies.

In terms of forage value, the slightly nutrient enriched acid grasslands associated with settlements most closely resemble streamside lawns and in many cases these two grassland types grade into each other. When assessing the forage value and use by grazing stock of grasslands in the New Forest, these two grassland types may be considered similar. There are however exceptions to this principle, for example, the

settlement edge grasslands at Bolton's Bench near Lyndhurst include much dry acid grassland - a vegetation type more normally associated with re-seeded lawns (Sanderson, 1999).

The stock depastured in the Forest in 1999 consisted of 2,985 cattle, 3,878 ponies and 83 donkeys (from marking fee payments). The stock utilises the Forest in different ways; in winter cattle make greater use of heathland whilst ponies make greater use of grasslands, this use varying from 35% in winter to 67% in the spring. In the winter food is bolstered by browse from woodland and gorse from heathland habitats. Of the grasslands, preference is shown for streamside lawns and roadside verges (Pratt, *et al.*, 1986).

Cattle are more intensively managed than ponies and are often removed from the Forest during the winter months, ponies are also removed though to a lesser extent. Unfortunately figures for winter removal are not kept. Cattle being ruminants are also more efficient feeders than ponies so animal for animal cattle have less of an impact upon the vegetation than ponies. Tubbs (1997) considered one pony to be equivalent to 2.5 cows in terms of vegetation throughput. It is therefore true to say that ponies are indeed the 'architects of the Forest'. There are also spatial differences in the selection of habitats used by cattle and ponies with cattle showing a stronger association with grasslands. There are also differences in the grassland types used, with cattle preferring re-seeded lawns and limed/fertilised areas. Cattle also regularly use dry heathland as opposed to ponies which make more use of purple moor grass *Molinia caerulea* in the wetter areas (Pratt, *et al.*, 1986).

Although this summary significantly simplifies the complex pattern of use of the different vegetation types, it is apparent that grassland is the single most important vegetation type in the New Forest for grazing stock. It is the grassland resource which therefore drives the grazing system. This is probably best summarised by Pratt, *et al.* (1986) who found that depastured stock spent c.50% of their time on grassland areas, which in turn comprise less than 5% of the total area available to stock within the open Forest.

2.2 Value as wildlife habitat

In terms of vegetation classifications such as the NVC (National Vegetation Classification) (Rodwell 1992) the majority of grassland in the New Forest falls within the broad category of lowland acid grasslands, though many of the grasslands concerned are in fact on soils that are near neutral in character. For a number of reasons, the nature conservation value of these grasslands, particularly when in a heathland setting, have been over-looked in the past. This is due largely to misconceptions about the species diversity of acid grasslands and, until relatively recently, poor systems of classification.

With the development of the NVC, a clear distinction can now be made between the upland and lowland acid grasslands. This has facilitated a much more meaningful assessment of the value of lowland acid grasslands. Within the United Kingdom, England has by far the bulk of lowland acid grassland sites. Of the 10 most important 'Natural Areas' (English Nature, 1998) for lowland acid grassland the New Forest is ranked second after the Brecklands of East Anglia (Sanderson, 1998b). The lowland grassland significance of the New Forest is rated as 'Outstanding' (Jefferson, 1997) though perhaps

Sanderson (1998b) summarises most succinctly the nature conservation value of the acid grasslands in the New Forest:

'The New Forest is an area of major international importance for its heathland habitats. The acid grasslands form an integral part of the heathland habitats and are of exceptionally high interest in their own right.'

Apart from the physical factors of soil type and climate a number of other factors have been vital to the conservation of acid grasslands within the New Forest. Most importantly is the long continuity of extensive common grazing on the Forest. This once widespread agricultural system has now virtually disappeared from lowland Britain and Western Europe, as common lands have been enclosed and 'improved' to increase agricultural productivity.

Some of the most botanically rich grasslands within the New Forest are those found around villages and other settlements, these have been described as settlement edge lawns. New Forest stock tend to congregate in these locations. The nutrient enrichment of these grasslands, due to the concentrated dunging of grazing animals, means that they often have a flora which is similar to neutral grasslands and have been termed 'Chamomile Greens' after one of the characteristic species *Chamaemelum nobile*. In wetter areas, the flora of these settlement edge grasslands is similar to those of streamside lawns whilst some also contain examples of the other four vegetation types described by Sanderson, i.e. Wet lawn, Parched acid grassland, Heathy acid grassland and Moist acid grassland. Settlement edge lawns can vary in size from small strips near isolated farm holdings to large areas such as that at Bolton's Bench Lyndhurst covering about 13.5 ha.

The settlement edge lawns are important for a number of rare or declining plant species (Chatters 1996) such as Small Fleabane, *Pulicaria vulgaris*, and Penny Royal, *Mentha pulegium*, both nationally rare species and Chamomile *Chamaemelum nobile*, and Pillwort, *Pilularia globulifera*, which are classified as nationally scarce.

The species diversity of settlement edge lawns is often increased by the presence of small, often ephemeral, pools and associated stock trampled muddy areas. These micro-habitats contain a large number of rare species such as the Small Fleabane. Four of the remaining eight sites for this species in Britain are within the New Forest, all of which are on settlement edge lawns, and one in the Avon Valley. The remaining three sites in the Britain are all on areas that were once common land (Fitzgerald, 1996) and have only continued to support Small Fleabane due to chance factors that mimic the conditions found on the settlement edge lawns. A review of the flora of muddy places such as these settlement edge ponds and trampled grasslands found the New Forest to be the richest single location in the UK for such species with 5 Red Data Book Species and 9 Nationally Scarce Species (Chatters, 1996).

Although the vascular plant flora of New Forest grasslands have received most attention, the Forest grasslands are also of considerable importance for a wide range of other species groups. Many of these are specialists being able to withstand or indeed depend upon the heavy grazing pressure and abundance of animal dung. The Nail Fungus *Poronia punctata* is one of these species. Abundant last century throughout Britain, it is now almost

confined to the New Forest, fruiting on the dung of New Forest ponies which have grazed on open unfertilised grassland (Cox 1999).

The invertebrate communities of the New Forest grasslands are also important but appear to have been subject to very little investigation. These include specialist species that feed upon grazing animals, most notably the horse-flies Tabanidae, the forest-fly *Hippobosca equina* and the deer-fly *Lepoptena cervi*. There is also a rich diversity of species associated with animal dung and trampled places including the nationally rare beetle *Aphodius niger*. Also there are the enriched ephemeral pool invertebrates *Triops chirocephalus* and Fairy Shrimp *Chirocephalus diaphanus*.

The open grazed grasslands of the New Forest are also of considerable importance to breeding birds, in particular Lapwing *Vanellus vanellus*. The New Forest grasslands and heaths support significant breeding populations of this nationally declining species. (Tubbs and Tubbs, 1996)

2.3 Value of the landscape

These settlement edge lawns within the New Forest perambulation often arose around strip encroachment along the boundaries of existing holdings and have occurred since at least medieval times and undoubtedly before. The development of this type of settlement reached its peak during the 18th century. The Richardson, King and Driver's Map of 1789 clearly identifies this small scale encroachment which is such a feature of the New Forest villages today.

Some settlements arose as natural expansion of villages while others came about due to more specific demands, for example East Boldre providing a workforce for ship building at Bucklers Hard, though no doubt general land prospecting occurred there as elsewhere. A report prepared by Land Use Consultants (LUC, 1991) identifies settlements which include these characteristics as either Heathland or Forest smallholdings & dwellings. The division between Heathland and Forest types is arbitrary though the Forest small holdings tend to be of, or are based around, the older settlements. These settlements are the most suitable from which to base a commoning practice, being close or adjacent to the open Forest and consisting largely of small fields and scattered dwellings to which stock can be removed during part of the year or where fodder crops can be grown. Furthermore, the majority of fields in these Forest edge settings are set aside for pastoral uses. Certain features are important in defining the Forest landscape including 'the network of lanes, track-ways and ancient drove roads which are a key element linking the enclosed landscapes into the adjoining open forest' as well as village greens and adjacent commons (LUC, 1991).

The physical characteristics of many settlements have strong links with the open Forest. A report by the Countryside Commission (1986) states that 'the elements of the surrounding Forest landscape are echoed in the villages, with their wide grazed grass verges, holly scrub, mature trees...'. This link between the enclosed and unenclosed landscapes is reinforced by a key element identified in the L.U.C. report (1991), this being 'the influence of commoning, including the presence of grazing animals and associated smallholdings'. In fact it is this element which has governed the development of many, if not all, of these

settlements. It is the presence of free ranging herbivores within and around these settlements which is therefore such a remarkable feature of the enclosed landscape of the New Forest.

These typical Forest edge settlements are however under threat. The Countryside Commission (1986) note that recent development 'has sometimes led to a breakdown of the normally close physical relationship between the villages and the surrounding Forest'. In addition, urbanisation of the Forest itself through signs, hard-standings and access tracks has added to this problem, quite apart from the loss of grazing land this represents. In the same way infilling and the extension of houses creates problems for the commoning community through loss of land and suitable affordable housing.

Outside the fenced perambulation the same patterns of settlement are identifiable in many locations. The presence of village greens and wide roadside verges represent the physical remnant of an agricultural system based around the exercise of common rights, as do the surviving patches of common land, Manor wastes and the many former drove roads and tracks which link these.

Forest smallholdings with their associated lawns and greens form the historical basis of commoning, and despite the threats this landscape faces, they remain prime representatives of a now very rare interaction between open and enclosed landscapes in the southern England. Tubbs (1997) goes even further, stating that the 'New Forest is a remarkable survival of medieval England in both historical and biological senses. Nowhere else in the lowlands has a pastoral economy based on the exercise of common rights over a great tract of common land survived'.

2.4 Value of New Forest grassland to the functioning of the New Forest

Not only are the New Forest grasslands of intrinsic nature conservation value they are vital to the functioning of the New Forest ecosystem. This contains almost 19,774 ha of rough grazing land comprising heathland, grassland, mire and woodland Tubbs (1997). This is considered the largest area of extensively grazed semi-natural vegetation in lowland Britain.

This extensive pastoral system is recognised as being central to the health and well being of the New Forest, Jeffereson (1997), stating that the 'maintenance of which is necessary for conserving the Forest's considerable nature conservation interest'.

The New Forest is unique in maintaining an agricultural system that has persisted for at least 900 years. As Colin Tubbs has stated, 'Nowhere else in the lowlands has a pastoral economy based on the exercise of common rights over a great tract of common land survived' (Tubbs 1997).

The maintenance of stock grazing in the New Forest is largely dependent upon the presence of extensive grasslands. The nature and landscape conservation value of these grasslands is equally dependent upon the continued grazing by commoners stock. The presence of these grazing animals is also of critical importance in maintaining a wide range of other habitats within the New Forest. For example the Ancient and Ornamental

woodlands of the New Forest are of international importance to nature conservation due in large part to the presence of grazing animals. Similarly the biological diversity of heathland and mire vegetation in the Forest is very much reliant upon the effects of grazing animals. The New Forest grasslands therefore provide the fundamental driver that allows the New Forest to function as a single interdependent ecosystem.

Numbers of stock on the Forest are currently at a historic high, although the actual stocking rate is difficult to determine accurately. Concerns have been expressed that the current grazing pressure is damaging to the Forest's ecology, although there is little evidence to support this. Although the numbers of stock may currently be high when compared with historic levels, the long-term underlying trends are of greater concern. Although the number of animals may be high, the number of commoners responsible for the management of these has declined rapidly over recent years so that a relatively small number of commoners are now responsible for the majority of stock. These commoners are often the older members of the community and unless new younger commoners take up the tradition of commoning, the number of stock could decline suddenly and dramatically as the older commoners retire or die. Whereas fluctuations in grazing pressure have occurred over many centuries, this fundamental shift in the pattern of common grazing could have significant and far reaching implications for the ecological functioning of the New Forest.

The larger the physical resource of the Forest is, the more resilient it will be to such variations in grazing pattern and intensity. Indeed before the perambulation was fenced in the 1960s, the grazing resource was physically unlimited. Seasonal fluctuations in grazing pressure within the New Forest both through the year and over a number of years would then have had a significant influence on the range over which stock strayed outside the Forest (see Appendix A). The grazed verges and inter-linked village greens and commons around the Forest would therefore have provided an important buffer to absorb such fluctuations in grazing pressure.

2.4.1 The importance of grasslands for the sustainability of commoning

In much the same way that grassland is vital to maintaining the New Forest ecosystem, the commoners who own and manage the grazing animals and the provision of suitable land around the Forest to sustain these stock throughout the year are also of fundamental importance. Of particular significance is the presence of more productive, enclosed grasslands within and around the Forest to which stock can be withdrawn to gain condition or where hay can be harvested. This type of grassland has been termed 'back-up land'. Ivey (1991) stated that access to housing and to land is by far the biggest problem facing commoning today. The problem being one of competition between commoners and those who wish to purchase these attractive Forest edge small holdings for reasons other than grazing stock on the Forest. ADAS (1993) recognised that there is a danger that some of the best located back-up grazing land will be 'lost' to individuals who do not exercise their grazing rights and that commoners will be priced out of the market for grazing land.

The value of small fields in the New Forest was estimated in 1994 as being between £3,000 and £20,000 per acre, the value depending largely on the location, as well as the condition

(Cox *et al*, 1994). The same report stated that 'land within the perambulation is virtually unobtainable: whether to rent or buy', and it is interesting to note that young commoners starting out are more and more to be found well outside the Forest perambulation, particularly where houses and land are cheaper, such as the Waterside. While ADAS (1993) add that the shortage of Forest smallholdings is a barrier to young commoners getting started.

From a practical point of view land adjacent to the open Forest is much more valuable to the commoning community than land which is some distance removed. Historically a large number of commoners turned out dairy cattle that returned to the small holding each day. Today some beef cattle are managed in this way, although this has caused localised damage to the grasslands due to the number of stock concentrated around these small-holdings. Due to the lack of holdings adjacent to the Forest many commoners have to transport their stock a number of miles to small-holdings well outside the perambulation. However, within a certain distance ADAS (1993) found that travelling is not a significant factor limiting the overall availability of grazing though acknowledging the increase in cost that travelling represents.

Restoring former common land to the open Forest system would increase the length of the Forest perimeter, thereby increasing the pool of backup grazing land directly adjacent to the open Forest. This could potentially ease the pressure on maintaining a viable commoning economy in the Forest, although the same problems of competition would remain. Ironically the competition often comes from those people who have purchased New Forest ponies for riding and require paddocks in which to keep them. Although perhaps difficult to enforce, consideration could be given to the use of planning policy to ensure such land remains in use to support stock grazing on the New Forest.

3 Recent History of Fencing in the New Forest

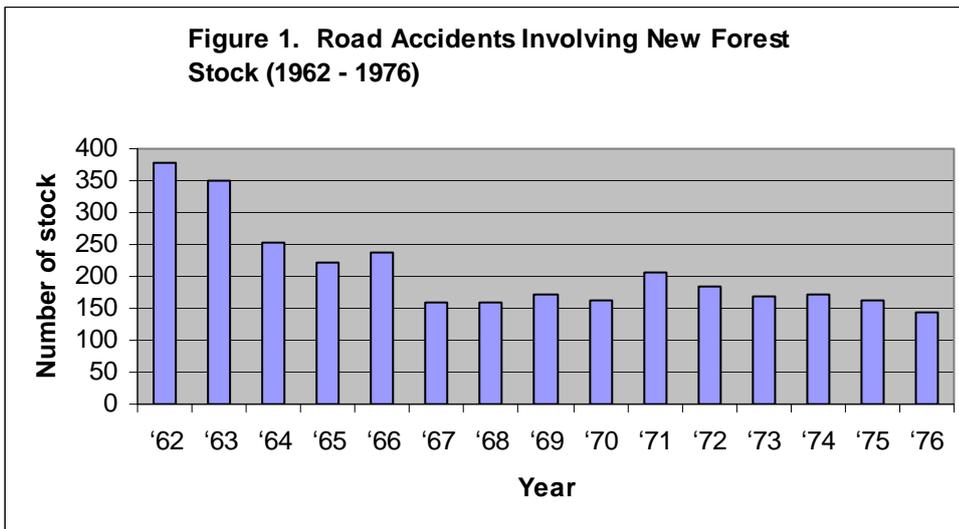
The perambulation of the New Forest was historically unfenced, however after World War II it became clear that this situation was no longer sustainable. Two main problems arose that required attention.

1. The stock within the Forest for which marking fees had been paid were managed well and various schemes were in place for disease control. However the adjacent commons had no such set up and any outbreak of disease amongst stock on the adjacent commons would threaten the health of Forest stock. The Verderers therefore wanted to have some measure of control over the health of the stock when grazing outside the perambulation. Physically separating the lands which the Verderers had powers over from those they did not was seen as a logical way of resolving this problem.
2. Stock straying from the Forest were regularly becoming involved in road traffic accidents as the numbers of motorcars increased and housing development rapidly expanded around the Forest. The local authorities were also required to operate pounds in which straying stock were kept until their owners retrieved them in return for a payment of a fee. Fencing of the perambulation was seen as a logical mechanism for resolving these problems.

Straying stock once roamed far beyond the perambulation of the Forest raiding gardens, being impounded by local authorities, and being involved in traffic accidents. They often roamed as far as Christchurch in the south west, in the north they nearly reached Salisbury, and wandered into the suburbs of Southampton to the east (Tubbs, 1986). Groups of stock more or less resident outside the Forest were to be found on grazing near the Forest in Wiltshire, Fordingbridge, Ringwood, Bransgore, Milford-on-Sea, Lymington and the coast from Lepe and Calshot to Hythe. The furthest distance stock are known to have wandered seems to be Abbots Ann, near Andover, from whence Raymond Bennett, a former agister, had to recover a mare and foal. Before the perambulation was fenced the agisters 'were constantly gathering them (the ponies) up from five miles away or more' (Pasmore, 1995).

Local authority pounds were located around the Forest, particularly in the towns. Totton had three, Hythe had two and Marchwood, Calshot, Lymington, Hordle and Ringwood one each. Additionally farmers often impounded stock and on the main road at Kingston in the Avon valley, a group of farmers impounded stock in their private brick built pound. An insight into the numbers of stock straying some distance from the Forest can be obtained from the Commoners Defence Association Annual Report of 1964. In the second half of 1963, 261 animals were impounded south of the Forest. In the following year, after the fencing of the perambulation, only 4 animals were impounded in the same period.

Loss of stock to road accidents was increasing steeply with the rise in car ownership after the War. As a result the 1949 Act contained provisions for the fencing of the A31, and although there was some opposition to this, the remaining A-roads were later fenced under other New Forest legislation. In the period from 1956-1963 road accidents outside the perambulation involved between 20.7% and 37.5% of depastured stock. Following the fencing, the number of road accidents declined dramatically, as shown in Figure 1.



Figures from the Commoners' Defence Association Annual Reports.

3.1 Fencing the Perambulation

The 1964 New Forest Act included a new perambulation for the Forest to replace the one that had changed little since medieval times. The previous perambulation contained 92,365 acres of which 27,658 acres were private lands (Baker Report, 1947). The 1964 perambulation contained 92,758 acres of which 27,791 acres were private lands (Pigott, 1966). The changes to the perambulation allowed some of the adjacent commons to be bought within the Verderers jurisdiction as well as protecting the animals turned out on these commons from motor accidents. Although the 1964 Act received a slow and often problematic passage through Parliament, the new perambulation finally included most of the adjacent commons to the north and north-west of the Forest.

Fencing the perambulation began before the 1964 Act in 1962 on the eastern boundary of the Forest under a previously agreed scheme. This was later to be incorporated into the 1964 Act fencing plans. Fencing of the perambulation was officially finished on the 27th July 1964 when Lord Ashburton, the Lord Lieutenant of Hampshire, closed a gate at the Cadnam round-about. Early in 1965 the agisters were having increasing difficulties in preventing animals straying through the 'Holbury Gap', this resulted in an extension of Fawley Inclosure by 55 acres to close the gap.

The 1964 fences not only incorporated a number of adjacent commons into the perambulation; they also excluded many other areas from the Forest. Perhaps most importantly, the commons and greens in Wiltshire were excluded largely to avoid problems that would have arisen should Wiltshire County Council have gone ahead with their proposed objection to the 1964 Act.

3.2 Fencing the Roads

The various Acts of Parliament under which the roads across the Forest were fenced transferred control of the road verges from the Forestry Commission to Hampshire County Council or the Department of Transport (Highways Authority). The roads were also upgraded and otherwise improved in parallel with the fencing work. The land transferred was indicated on plans, it being the line shown on these plans which is the

legal boundary, though the practicality of renewing the fences means that the actual position of the fence fluctuates by a foot or two every 15 years or so (Parke, pers comm.).

There are many opportunities to return land excluded from the grazed Forest by road fencing, particularly near road junctions, such as that at Sporelake Lawn, on the turning for New Park near Brockenhurst. These opportunities should certainly be examined as and when the fencing is replaced. In some areas however the scrub that has grown up on the verges acts to screen the traffic from the Forest and its loss could have other detrimental effects on the Forest.

3.2.1 Assessment of area lost to road fencing within the New Forest

The following calculations of the area of road verge grassland lost as a consequence of fencing were arrived at in two ways, for the A31 the width of land between the fences were measured from 1:10,000 aerial photos at half-mile intervals, from which was derived an average width (55m). The carriage way width (19m) was then subtracted and the resulting figure was then applied to that section of the A31 noted below, by which method the estimate of land enclosed by the fence excluding the road itself was arrived.

The A35 and A337 verges were paced out at half-mile intervals to produce the average verge width. This was then used to calculate the overall width of verge for the entire length of the road. All averages were rounded down to the nearest metre.

Fencing of the A31 Ringwood to Cadnam

Fenced under the provisions of section 16 of the 1949 New Forest Act. The fencing did not go ahead straight away due to financial constraints. Work started belatedly in 1963 and finished simultaneously with the fencing of the perambulation.

The verge/central reservation of the A31 was estimated between Picket Hill (SU 185 057) and the Cadnam Roundabout (SU 289 135).

Length of Road	Area of land fenced	Area of grazing lost
13,400m	737,000m ²	48.24 hectares or 119 acres

Fencing of the A35 Ashurst to Christchurch

Fenced under the provisions of section 4 of the 1964 New Forest Act. Work started late in 1966 and was completed in mid-1967 and included the fencing of much of Lyndhurst including Goose Green and Gales Green.

The verges west of Lyndhurst have been measured at sample locations between Forest Lodge (SZ 216 982), Hinton, and Swan Green (SU 289 081), Lyndhurst. On the verges east of Lyndhurst the northern verge was measured between the English Nature Offices (SU 308 085), Lyndhurst, and the entrance to the New Forest Hotel (SU 332 101), Ashurst. The tarmac path was not included in the measurements. The southern verge was sampled between the Forest Park Hotel (SU 302 081), Lyndhurst and the New Forest Hotel (SU 332 101), Ashurst. This estimate thereby excludes the verges and greens in Lyndhurst.

Verge	Section	Av. Width	Distance	Area
North	East of Lyndhurst	5m	2,925m	14,625m ²
South		6m	3,625m	21,750m ²
North	West of Lyndhurst	9m	12,375m	111,375m ²
South		7m	12,375m	86,625m ²
Total				23.44 ha. (58 acres)

Fencing of the A337 Cadnam to Battramsley

Fenced under the provisions of section 2 of the 1964 New Forest Act. Work started in 1973 and finished by the late summer of 1975, the work undertaken being held up due to supply problems in respect of concrete for the cattle grids. At the same time the opportunity was taken to improve and otherwise widen the road.

To the north of Lyndhurst the western verge was measured as sample locations between Broughton Road (SU 298 089), Lyndhurst, and the Cadnam roundabout (SU 295 135). The eastern verge was sampled between The Custards (SU 298 086), Lyndhurst, and the Cadnam roundabout (SU 295 135). To the south of Lyndhurst the western verge was sampled between the Cobler's Corner (SZ 305 993), Battramsley, and Clay Hill (SU 301 068), Lyndhurst. The eastern verge was sampled between Bridge Farm, Brockenhurst (SU 302 029), and Clay Hill (SU 301 068), Lyndhurst. This estimate thereby excludes the verges and greens in Lyndhurst and Brockenhurst as well as the large ungrazed area at Setley.

Verge	Section	Av. width	Distance	Area
East	North of Lyndhurst	4m	4,900m	19,600m ²
West		5m	4,575m	22,875m ²
East	South of Lyndhurst	5m	3,850m	19,250m ²
West		4m	5,350m	21,400m ²
Total				8.31ha (20.5 acres)

This total does not include the area of verge lost through road widening at the time of enclosure.

3.3 Other fenced areas

Two significant areas of the Forest were left outside the fences but included under the 1964 perambulation as they were severed from the Forest by major roads. These areas of the Forest at Setley, Brockenhurst (3.44 ha. or 8.5 acres) and Forest Front, Dibden (10.12ha or 25 acres) remain ungrazed. The area at Setley is largely untouched, excepting vegetation management by Forest Enterprise, including Bracken harvesting. At Forest Front much of the area has been converted into a recreational area including a football pitch and the area has also been used to site a part-buried water reservoir.

What are now termed A & O Regeneration Plots were made under the provisions of section 13 of the 1949 New Forest Act, through which the Forestry Commission with the assent of the Verderers may "enclose and carry out work in order that such woods may be preserved and regenerated". No one plot was to exceed 20 acres and 85 plots were made

under proposals presented to the Verderers in 1951, 1954 & 1959. The total area enclosed under this scheme was 1,406 acres (Peterken *et al.*, 1999). All fences from these plots have now been removed, with the exception of 4.7 acres at Gibbet Wood, which has remained temporarily fenced due to the presence of a rare invertebrate species.

A similar 'enclosure' has been fenced in Bratley Wood with the same objective as the earlier, and largely unsuccessful, Regeneration Plots. The area fenced in this enclosure is approximately 0.5 hectares or 1.2 acres. Another enclosure exists at Ironshill, where a block of open Forest sits amongst timber enclosures. The fence line crosses a narrow entrance passage from the statutory Busketts Lawn Inclosure to the Crown freehold Ironshill Inclosure and was erected in the early 1970's (Gulliver, pers. comm.). Within this fenced area there is approximately 7.7 hectares or 16.5 acres, within which a limited amount of planting and self seeding of Norway Spruce and Scots Pine has occurred. This represents a loss of browse habitat and removes this wooded area from the grazing system which makes the Forest's open woodlands so important from a nature conservation and historic landscape perspective.

Encroachments are still sometimes made on the open Forest as at North Wiers, Brockenhurst, where the ditch has been enclosed by stock fencing. While the ditch is the private property of the person owning the enclosed land, Forest stock still has the right to graze over the ditch which must therefore be left open.

Outside the fenced perambulation encroachments are just one of many factors that threaten roadside verges and small greens from which Forest stock were excluded in 1964. This process of verge and green attrition can be seen in all settlements both within and around the perambulation of the Forest.

4 Consequences of fencing

4.1 Overview

Fencing the perambulation reduced the area over which New Forest stock could roam, this has concentrated grazing pressure within the perambulation. Before fencing, stock would overflow out of the perambulation when grazing became scarce in the Forest. This buffering capacity helped ensure that the grazing resource was being grazed optimally, with stock straying from the Forest during winter to find additional forage. The calculations of area given in Appendix A suggest that at least 1,603 hectares of grazing land has been lost from around the perambulation in this way, although this figure does not include the significant area of coastal grazing that has also been lost. With the removal of this buffer, the effects of reduced forage in the Forest can be expected to show in the condition of stock and on the impact of increased grazing pressure on the vegetation. It may be that access to better quality grazing land is now more important in providing the buffering capacity that was formerly offered by the lands to which stock had access outside of the perambulation.

The fate of land excluded from the grazed Forest is extremely variable and depends largely on the ownership of the land in question. While some areas have remained physically intact, exclusion has proved a significant catalyst for change. Unfortunately this change is seldom for the better, and large areas of the previous grazing resource has now been functionally destroyed.

Wider factors play a significant role in determining the future of this excluded grazing land and the potential for it to be returned to the open Forest grazing system. Perhaps the best example of this is the increase in traffic levels. Traffic volumes on roads linking the Forest with many of the dispersed commons around the perambulation now make it difficult to envisage how these could be restored with direct links to the grazed Forest. For example, Pennington Common was once linked to the Forest via the roadside verges between it and Sway. It may be impossible to restore grazing to this busy road network, although there may be alternative strategies for restoring grazing to this and other commons with stock from the Forest.

4.2 Vegetation succession

In the absence of grazing, the excluded grasslands undergo a natural process of ecological succession. Without grazing or other active management, these grasslands become dominated by vigorous growing grasses and become progressively more botanically species poor. Some of the first species to be lost being the rarer and most uncommon species most reliant upon the important micro-habitats created by grazing live-stock. Brambles, woody shrubs and trees soon colonise the rank grassland that develops as a stable broad-leaved woodland vegetation develops often dominated by birch, sycamore and oak. These recently developed woodlands are now a feature of many of the formerly grazed verges and commons around the New Forest. In other instances, the process of succession is from heathland habitat to pine or mixed pine and oak woodland. In other instances, *Rhododendron* is also a problem particularly in areas of the Forest adjacent to gardens from where *Rhododendron* and other introduced shrubs slowly encroach onto common land. On the coast, the impact of grazing on the salt-marsh flora has been less

well studied. There is however some evidence to suggest that the grazed salt-mashes to which New Forest stock have access are more species rich than those from which they have been excluded where shrubby salt-marsh plants such as sea purslane *Atriplex portulacoides* now dominate. The value of these previously grazed habitats for nature and landscape conservation and in maintaining the historic land use pattern of the Forest is thereby lost with the removal of stock grazing. This process is however reversible although this would take considerable financial and management input to be successful.

The process of ecological succession begins the instant stock grazing is removed, with dense vegetation appearing quite soon after. Although recently cleared of encroaching scrub, the verges of Woodlands Road near Ashurst clearly demonstrate this process. These were excluded from the Forest with the fencing of the perambulation in 1964 and have been left ungrazed since then. In other instances the commons that are adjacent to the Forest, but now fenced from it, have become covered with pine woodland. In places this trend has been reversed, for instance on Bisterne Common where large areas of self-sown pine have recently been cleared with funding from English Nature under the Wildlife Enhancement Scheme.

As vegetation growth on ungrazed areas becomes rank, access also becomes more difficult. For example Miller (1997) compared 'walkability' on the ungrazed portion of Plaitford Common (north of the A36) with the grazed portion (south of the A36). In assessing 'walkability' a line transect was placed into three categories, the third category being where the route cannot be followed without deviation from the line due to dense vegetation growth. On the ungrazed area 91.1% of the line transect fell into this category whereas on the grazed portion this category made up only 16.7% of the transect.

4.3 Land-use change

Most of the ploughing and reseeded of land excluded from the New Forest grazing system has taken place on the adjacent 'commons'. For example a large area of rough grazing at Bisterne was ploughed and planted with Corsican Pine. This treatment necessarily implies the enclosure of land from the wastes of the 'common' and conversion from grazing land. Once this gross habitat change has occurred it is much more difficult to restore. However reseeded schemes on the open Forest after WW II demonstrate that these areas can recover.

4.4 Ornamentation

The ornamentation of grassland excluded from the Forest is most readily seen in residential areas such as Lyndhurst and Brockenhurst. It varies from odd plantings of crocus bulbs to full scale encroachment to create an extended garden, which is often later enclosed. One major problem that arises is the planting of poisonous plant species. The presence of these might seriously compromise attempts to reintroduce grazing to such areas. In addition to private land-owners, parish councils tend also to be responsible for loss and damage to former grazing land within these urban locations. These municipal greens are often considered the ideal location for ornamental tree, shrub and bulb plantings and for locating seats. These can occupy fairly large areas for example the cherry trees planted on Goose Green, Lyndhurst. The area of potential grazing land lost as

a result of this type of ornamental planting and management is impossible to quantify, due to the large number of small areas involved and range of impacts on the grazing that different species have.

4.5 Others losses

Losses due to access and parking encroachment and the installation of utilities cause loss of former grazing land that has been excluded from the open Forest, in much the same way as it does to land within the Forest perambulation. This process of attrition is however even more acute in areas now excluded from the open Forest. This is due in large part to the lack of management interest in the land outside the 1964 perambulation. These are often seen as waste-land of little nature conservation or landscape value. As a result they are perceived as convenient places for locating electricity transformers, making car parks and extending gardens, despite the fact that the only major difference between these areas and those within the open Forest is that they are no longer grazed by the commoners stock. Some of these excluded areas remain within the Crown freehold and fall within the management responsibility of the Forestry Commission. There is clearly much potential to enhance the conservation value of these excluded grasslands, either by restoring them to the open Forest or through other management strategies.

4.6 Landscape types from which New Forest stock have been excluded

The erection of fences around the perambulation and along the main roads within the Forest have excluded New Forest stock from a range of different but closely related landscape types. These have been classified as follows:-

- Adjacent Heathlands
- Dispersed Commons
- Coastal Grazing
- Village Greens
- Roadside Verges

The majority of these areas were grazed up until the time the 1964 perambulation was fenced. They have rather different nature conservation and landscape values although in all instances, the loss of grazing has probably resulted in a decline in these values.

There is tremendous potential for restoring grazing to many of these areas and with it the nature and landscape conservation value that has been lost. In addition, the extension of common grazing to these areas would also assist in the long term viability of grazing within the Forest perambulation. The extension of the practice of common grazing with suitably adapted breeds of stock also provides a potentially very important reservoir of grazing animals. These could be used to promote the conservation and restoration of heathland and other formerly extensively grazed landscape types throughout southern England, including the flood plain grasslands of the Avon Valley.

4.6.1 Adjacent Commons

There are a number of extensive areas, consisting mostly of heathland but also containing grassland and wood pasture, which are situated more or less adjacent to the fenced perambulation of the Forest. Most of these are commons or relict commons (i.e. no longer Registered Common Land). They closely resemble the character of the open Forest and were once grazed along with it. Under the 1964 Act, a number were incorporated into the Forest perambulation, however a number of others were excluded. The Baker Report of 1947 lists these adjacent commons and gives approximate areas of those that remained open in 1947. Although technically many of these remain as commons, on others the common rights have lapsed or enclosure awards of the 18th & 19th centuries have nullified rights over them.

Table 3 gives details of the area of adjacent common land fenced from the New Forest in 1964. These are taken from the Baker Report of 1947. The figures given in the Baker Report seem to identify land that was still open to grazing animals as opposed to being restricted commons in the legal sense. This list gives some idea of lost grazing, and provides a starting point for the identification of lands suitable for restoration as part of the 'open Forest'. As a comparison with areas from the *Common Lands of England & Wales* (Hoskins & Stamp, 1963) is given, the differences between the two set of figures are probably a result of uncertainty in the actual areas open land.

Table 3. Areas of common land adjacent to the New Forest perambulation

	Baker Report, 1947 (acres)	Hoskins & Stamp, 1963 (acres)
Arnewood Common	37	not given
Bashley Common	56	not given
Poors Common	111	100.6
Shirley Common	495	not given
Bisterne Common	489	515.5
Hamptworth Common	236	Wilts
Landford Common	479	Wilts
Shelley Common	257	257
Newbridge	31	not given
Copythorne Common	232	63
Badmiston Common	39	not given
Kingston Great Common	308	246.5
Total	2770	

The recommendation of the Baker Report (1947) was that these commons should be acquired by the Forestry Commission and incorporated within the Forest's management regime. This clearly implies an intention, even at this time, that these areas should be incorporated into the 'open Forest'. Despite the passage of time and the subsequent fencing of the perambulation, the recommendation that these commons should be managed as part of the open forest remains equally valid today.

4.6.2 Dispersed commons

There are a large number of formerly grazed commons around the New Forest. These were once grazed as part of the general commoning economy of the region with stock moving between them and the New Forest. We have termed these the dispersed commons.

A list of these is given by Hoskins & Stamp (1963), based on information collated in the period 1955-61 and is reproduced in Table 4.

Table 4. Area of dispersed commons within the New Forest

Name	Area (acres)	Notes
Chewton Common	82	Derelict
Barton Common	47.4	Owned by Lymington BC
Hordle Common (Golden Hill)	7	Owned by Lymington BC
Upper Pennington & Pennington Commons	78.3	Owned by Lymington BC
Great Marsh, Eling	31.7	
Bickerley	11	
Kingston North	69	
Kingston Lower	17	
Sopley Common	80	the old RAF Sopley site
Crowe	33.5	
Burton Common	93	
Whiteparish Common, Wilts	87	
Cowesfield Green, Wilts	30	
Holmere Common, Wilts	10	
Total area	676.9	

To this list can be added the extensive areas of common land on the western side of the Avon Valley such as Town Common and Sopley Common. Although New Forest stock would once have had access to these, the distance they would have to roam to reach them would limit the numbers of stock making such movements. The value of these more distant commons in sustaining the grazing system of the New Forest would therefore have been limited.

To the north of the Forest are also the former common lands of Pound Bottom, Horse Common and Franchises Common. Stock formerly gained access to these areas by circumnavigating the Forest edge fences by straying into the Redlynch area (Bennett, per comm.).

The practical difficulties involved in integrating these dispersed commons back into the New Forest grazing system are greater than for the adjacent commons. Restoration of grazing to these areas would however greatly assist in sustaining the grazing system of the open Forest. Extensive stock grazing would also mirror previous use and provides the only sustainable method of restoring and conserving the important wildlife habitats that survive on many of these commons.

Due to the distance of these dispersed commons from the open Forest they were often subject to a slightly different grazing regime to that in the open Forest. This included differences in type of stock and generally a reduced grazing pressure. This variation would have provided greater diversity in habitat structure in these dispersed commons and some degree of contrast with the open Forest. These factors may influence the type of grazing regime proposed when plans are being developed to restore grazing management to these commons. Certainly there is no need to mirror the Forest grazing regime in every detail. The dispersed commons therefore provide something of a contrast with the adjacent commons and that within the open Forest.

The New Forest Committee are currently investigating the potential for establishing a Forest Friendly Farming Project to encourage better management of land within the Forest's farmland areas, for the benefit of farming and in particular commoning. There is significant potential to integrate the restoration of grazing to these dispersed commons in such a project. To the west of the Forest, the Avon Valley and West Hampshire Project has been established to assist in promoting nature conservation management of land associated with the Avon Valley. This Project could also promote the use of New Forest stock to conserve and restore many formerly grazed areas associated with the Valley.

4.6.3 Coastal grazing lands

Prior to the fencing of the New Forest perambulation in 1964, New Forest stock had access to a large expanse of coastal grazing stretching from Keyhaven in the south west to Eling in the north east of the Forest, including much of the coastline of the Solent and Southampton Water. Up until the 1964 Act, the perambulation of the Forest ran along the coast from Walhampton, near Lymington to the Darkwater, near Lepe, and again between what is now the Esso refinery and Langdown, near Hythe. At present only a section of coastline between the Lymington and Beaulieu rivers remains open to New Forest stock. All the coastal grazing east of the Beaulieu river to Calshot and north of Calshot to Hythe is now no longer accessible to New Forest stock.

While industrial development and reclamation has changed much of this coastline, extensive areas of coastal grassland and saltmarsh still exist or indeed have been created. These include the wet coastal grasslands at Dibden Bay that have developed on sediment dredged from Southampton Water. Further areas of grazing land adjacent to the coast will also be created following the restoration of the Manor Farm waste disposal site at Efford near Lymington. Extensive areas of formerly grazed saltmarsh also occur between Esso Refinery and Hythe.

Grazing on salt-marsh creates a distinctive flora and associated fauna. Under heavy grazing pressure from sheep, such as that experienced in north and east England for example, this can lead to loss of species diversity. There is however some indication from Solent salt-marshes that lower levels of grazing pressure may increase botanical diversity by reducing the dominant effect of some species such as sea purslane *Atriplex portulacoides* and sea couch grass *Elytrigia atherica*. On the Hythe to Calshot Marshes there is evidence that the current dominance of sea purslane may be limiting the ability of the rare cord-grass *Spartina* species to maintain their populations.

Access for stock to these coastal grasslands and marshes could in some instances be re-established using the existing network of grazed lanes and roadside verges that extend from the New Forest, for example the coastline around Calshot. In this respect, the problems and potential benefits of the restoration of grazing to these areas can be considered similar to that for the adjacent commons. In other instances, the development of urban areas and the increase in traffic volumes since the 1960s make it more difficult to restore direct access to these coastal sites from the New Forest. Although the benefits for the Forest and for the conservation of biodiversity could be very significant in these instances, alternative strategies for restoring stock grazing will need to be employed. In this respect these more distanced coastal sites are similar to the dispersed commons described earlier.

Table 5 provides a brief review of potential coastal grazing areas within the New Forest. This is by no means an exhaustive list although the most important and potentially significant sites have been identified.

Table 5. Areas of potential coastal grazing land within the New Forest

Area	Comments
Efford Landfill Site	Restoration plans include the creation of a large area of extensively managed coastal grassland that could provide a significant grazing resource for New Forest stock
Keyhaven and Pennington Marshes	Coastal grazing marshes, some grazed by New Forest stock
Foreshore from Exbury to Calshot	Previously grazed by New Forest stock
Lepe Foreshore Country Park and adjacent marshes	Provides considerable area of potential coastal grazing land
Calshot Marshes	Previously grazed saltmarshes
Reclaimed ground from Calshot to Ashlett Green	Power Station site and disused contractors depot potentially available to stock grazing – possibly in conjunction with plans to decommission the power station
Ashlett Creek Waste Water Treatment works	Adjoining fields to be managed as rough pasture and for nature conservation
Esso refinery to Hythe marshes	Previously grazed saltmarshes and waste ground
Dibden Bay	Extensive area of wet coastal grassland created on deposited dredged material
Saltmarshes from Marchwood to Eling	Upper saltmarsh still grazed in part by New Forest ponies

4.6.4 Village greens.

Village Greens are open areas of land within villages made available for recreational use. They are defined by the Commons Registration Act 1965 as areas where people, local or otherwise, have indulged in, or have a customary right to indulge in, lawful recreation and pastimes. This definition emphasises the recreational and amenity value of village greens but ignores the role village greens once had in providing an important grazing resource for commoners' stock. The high density of stock that often congregated on

village greens creates a distinctive flora and associated fauna that is now rare in Britain and largely confined to the New Forest.

Village Greens are often small and heavily used by the public, by their definition they are also located in urban areas. The potential to conserve and restore the nature conservation value of these greens through the restoration of extensive stock-grazing is made significantly more complex as a consequence of these factors.

A number of village greens have become separated from the open Forest grazing as a result of road fencing and the fencing of the Forest perambulation. Relicts of the distinctive village green flora may persist for many years following the removal of grazing animals although this eventually disappears after a few decades of regular mowing.

Where greens can be reconnected with the extensive grazing regime of the open Forest and the problems of urbanisation and vehicular access can be overcome then there are significant nature, landscape and grazing benefits to be gained. In other instances, it is likely that such an approach will be difficult or impossible to achieve in the foreseeable future. Despite this, some slight changes in mowing regime, in particular the removal of cut grass, is likely to restore or conserve some of the typical flora of village greens or at least allow grassland of some nature conservation value to establish.

Some examples of formerly grazed village greens within the New Forest are listed in Table 6. This list could be significantly extended with further research, as almost every village and hamlet around the New Forest would once have had a village green to which New Forest stock had access.

Table 6. Village greens to which New Forest once had access

Goose Green, Lyndhurst	Isolated from the open Forest by main roads, now of minimal nature conservation value
Gales Green, Lyndhurst	Isolated from the open Forest by main roads, now of minimal nature conservation value
Chequers Green, Lymington	Mown greens now of little nature conservation value
The Marsh, Breamore	Still grazed but not by New Forest stock – retains high nature conservation value
Shaves Green, Ellingham	
Milford Green, Milford on Sea	

4.6.5 Roadside verges

Many roads that were once accessible to New Forest stock were fenced out of the perambulation in 1964 due to level of road accidents. A feature of the network of lanes that extend out from the perambulation is their wide verges and the frequent occurrence of small triangular patches of grassland at the intersection of roads. In many instances, the verges have become overgrown with woodland since they were last grazed whilst in others the grassland has been maintained in an open condition through regular mowing. In both instances, the rich flora and specialist fauna associated with grazed roadside

verges within the perambulation has been replaced with habitats of with very much limited nature conservation value.

The area of road verge grazing lost has been estimated by reference to the extent of typical stock roaming outside of the perambulation shown in Map 1. This is based upon the more restricted area of stock straying during the summer months and hence represents the core area of road verges used by New Forest stock outside of the perambulation. Within this area the loss of roadside verge has been estimated by measuring length of roads within the following categories.

Roads used in estimate of road verge grazing loss in the New Forest since 1964

Included	All A-roads, B-roads and C-roads
	All unclassified roads outside built-up areas
	All R.U.P.P.'s and B.O.A.T.'s

Rights of way excluded from the length calculation included all bridleways, footpaths and motorways.

Within this area, the length of road formerly accessible to New Forest stock was equated at 417 kilometres. An average verge width of 5 metres (see section 3) has been used to estimate the area of road verge grazing lost from these roads. Using these measurements, an estimated area of some 208.5 hectares (515.2 acres) of roadside verge grazing has been lost to New Forest stock since the fencing of the perambulation. This represents the minimum amount of grazing land lost as it ignores the considerably longer length of roads used by winter straying stock.

4.7 Examples of the fate and potential for restoration of land excluded from New Forest Stock

The losses of grazing land within the five landscape categories described above can be illustrated in more detail by reference to specific examples. In many instances, steps have been taken in recent years to reverse earlier trends, however much potential exists for promoting nature and landscape conservation and extending the grazed areas of the New Forest in all of these categories.

4.7.1 Bisterne Common

This area is a good example of an 'adjacent common' that if restored to the open Forest would have considerable intrinsic nature conservation benefits as well as assisting in the maintenance of grazing within the perambulation.

Bisterne Common is now only a common in name, though physically it still retains many of the characteristics of a common. Historically a large part of the Bisterne Estate consisted of common land. In 1811 (under an Enclosure Act of 1807) the area of common lands around Bisterne were fixed. Although some of the enclosed common land was fenced and converted into farmland, much remained accessible to commoners stock even though it had lost its status as a common.

The coming of the railway in 1847 split Kingston Great Common in two, with the part south of the railway being called Bisterne Common. During the 1850s, when claims were being made for rights in the New Forest, land holders at Bisterne made claims for their enclosed lands. When mapped out, these claims show that at this time large areas remained open to grazing stock from the New Forest including Broad Heath and Ripley Wood. By the time of the Baker Report (1947) a total of 198 hectares (489 acres) remained open to New Forest stock (although only the 89.7 hectares of this were legally common). At this time Forest stock were able to stray from the Forest across common land and other areas of open rough grazing land west to the Bransgore to Ringwood road (Bennett, pers comm.). To prevent stock straying beyond perambulation towards Christchurch along this route, a forestry plantation was created in 1962 along the Forest edge of the

perambulation at Dur Hill Inclosure. This created a physical barrier between the Forest and Bisterne Common. Two years later and possibly as a consequence of this, Bisterne Common was excluded from the perambulation of 1964. This contrasts with other manorial wastes such as Ibsley Common that had remained accessible to New Forest stock, which were included in the perambulation. As Bisterne Common now had no commoners of its own and was excluded from the Forest, the owners were free to de-register the common under the 1965 Commons Registration Act. Ironically, this was an Act designed to protect common rights.

Referring to the 89.7 hectares that formed the pre-1965 Bisterne Common Westerhoff (1992) noted that since being fenced out of the Forest it had been grazed heavily for a time, but since has not been grazed by domestic stock. The vegetation consists mainly of valley mire, wet heath and humid heath, most of the heather being in the mature phase of growth (Westerhoff, 1992), while invasion by Scots Pine was locally severe. Finally Westerhoff (1992) concludes by saying 'the site would benefit from (a) the removal of the fenced inclosure and (b) management by a sympathetic owner.' A large part of the section of previously open rough grazing which had been legally, though not physically, enclosed under the 1807 Enclosure Act was purchased by a commercial Forestry company, then ploughed and planted with Corsican Pine. This has since been bought back from the forestry company by the previous owners and most is now a commercially viable forestry plantation. This area could be returned to the open Forest system, though the management of the area as a timber plantation complicates the process of restoring it to open grazing land.

Since 1996, a five year Wildlife Enhancement Scheme (WES) agreement has been in operation over 87 hectares of Bisterne Common. Through this, 2 years of scrub clearance has taken place with financial assistance from English Nature. This involved removing quantities of self sown pine and birch and also the treatment of dense Bracken stands. The area has now been fenced and is being grazed annually by a Forest commoner who pays a minimal rent for the grazing. The WES on Bisterne Common extends into a small section of the forestry plantation where a valley mire was too wet for the growth of the Corsican Pine. Through the WES agreement much has been achieved in restoring the nature conservation value of Bisterne Common as well as providing additional grazing for New Forest stock.

4.7.2 Burton Common

Burton Common was technically still a common before the 1965 Commons Registration Act and extended to an area of 37.6 hectares (93 acres) (Stamp & Hoskins, 1963). It has since been de-registered. It is located some 3 kilometres from the Forest perambulation to the north west of Highcliffe. Access to the common would have been via unfenced roads and lanes leading from the Forest. As a result it seems to have been grazed less heavily than the open Forest within the perambulation. During the Second World War cattle seem to have made up the bulk of the stock grazing the common and may have been turned out locally with ponies only occasionally straying this far from the Forest perambulation.

On the 1st December 1999 the Meyrick 1968 Combined Trust entered an agreement with English Nature under the Wildlife Enhancement Scheme. This agreement provided

capital funding for scrub clearance and fencing and annual payments for grazing and management fees.

As with Bisterne Common, the WES agreement has achieved much in restoring the nature conservation value of this Common. In addition, the extra grazing area has the potential to support commoning activity in this part of the Forest.

4.7.3 Calshot area

The coast between Ashlett Creek and Calshot Spit has been much altered by the construction of Fawley Power Station and Esso Refinery. Despite this, several areas of rough coastal grassland remain both south of Ashlett Creek and at Calshot where former intertidal has been reclaimed with dredged material from Southampton Water. Under the purchase agreement the Power station site has to be restored to its previous condition if the land is not to be used for a new power station. With the planned decommissioning of the power station there is tremendous potential to restore a significant area of land in this section of coastline to grazed coastal grassland and associated habitats. The whole of this area would provide a significant grazing resource if linked to the open Forest, via the network of minor roads in the area.

Also within this area, grazing could be extended along the foreshore from the Bourne River to Lower Exbury. In the centre of this section of coast lies the Lepe Foreshore Country Park which could also provide a significant area of grazing land.

Further linking these areas, and adding to the potential grazing resource are the commons and river valleys lying within the Cadlands Estate. Some of these areas fall within the North Solent National Nature Reserve, which on the Cadland Estate contains a total area of 190 hectares (450 acres). The Cadland Heathland Project also operates within Cadland Estate and covers an area of 90 hectares (222.3 acres). This has been established by the Estate with the aim of regenerating and grazing heathland 'on areas restored after gravel extraction and other areas no longer viable for normal grazing use'. This area is managed under a Countryside Stewardship Scheme agreement. Further gravel extraction soon to commence at Badmiston Farm could further increase the potential grazing resource in the future and also act to improve links between the Cadland heathlands, the open Forest and the coast.

4.7.4 Village Greens - Lyndhurst greens

These greens were once part of the open Forest, however the fencing of the A35 and A337 led to them being cut off from the Forest stock. These greens would have been botanically as interesting as the other village greens on which grazing still continues. However since the fences were erected this value has declined to the point of being virtually lost. These greens are now managed as urban open spaces with little regard to their former nature conservation or historic value. While they physically remain fairly well intact, there has been some loss of their integrity, particularly following the planting of ornamental trees on parts of Goose Green and by the Fire Station.

Regular mowing of the grasslands on these greens creates a sward that is superficially similar in structure to that on the short grazed greens within the open Forest. However, the impact of mowing and more importantly, leaving grass cuttings to remain after mowing, has a very different impact upon the nature conservation value of these greens. The slow build-up of plant nutrients in the soil that results from this mowing regime encourages the growth of coarser grasses which dominate the more specialist species typical of grazed greens. In addition, the specific micro-habitats created by localised poaching and trampling and the deposit of animal dung that are found on grazed village greens are also absent. Obviously the best way to restore these greens would be to reinstate grazing. The practical difficulties of erecting fencing to achieve this are likely to prove both unpopular and possibly rather unsightly. As an alternative, a better design of mowing regime could be developed which reduced soil nutrient levels, increased botanical diversity, permitted some longer grassland to develop and create a green that is not ecologically the same as the grazed habitat that has been lost but equally forms a new habitat of nature conservation as well as landscape value.

4.7.5 Exbury and Cadlands roads

There is a complex network of small roads and lanes that link the open Forest with coast between the villages of Beaulieu and Fawley. Opening some or all of these roads to stock grazing would link the open Forest with the coastal grasslands and saltmarshes from Ashlett to Calshot and Lepe and some of the adjacent common lands such as Badminton Common.

This network of roads contains an extensive area of potential grazing land along its verges. Perhaps more importantly, they provide a link to potential coastal grazing areas and connect a large area of potential back-up grazing land to the open Forest. The amount of road traffic in the area is relatively small, and appears similar to that using the minor road network on the adjacent Beaulieu Estate. The animal accident statistics show the number of accidents on minor roads west of the Beaulieu River are comparatively low. Though any rise in accident figures should not be tolerated without very good reason, it is possible that opening up the roads and associated tracks to grazing in the Exbury to Cadland area may in fact reduce accident figures. This is possible, as the new grazing resource may draw stock away from the Hill Top to Dibden and Ipers Bridge roads which are well known accident black-spots.

An important example of lost road verge grazing is the enclosed section of road from Hill Top to Exbury. The first mile of this road south of Otterwood Gate has verges that are so wide they can hardly be described as verges. This area excluding the containing ditch and banks and the road surface contains approximately 2.2 hectares (5.5 acres). The mix of grassland and scattered old oaks along these verges creates an area of relict pasture woodland that supports a rich woodland flora including an abundance of the nationally scarce narrow-leaved lungwort *Pulmonaria longifolia*. Restoration of grazing to this area would be both practically viable and would extend the area of available grazing for New Forest stock. In addition, it would result in the restoration of an area of relict wood pasture, a habitat of national nature conservation importance for which the New Forest is the premier location. In addition to the wide verges on the Hill Top to Exbury Road, there are many other roadside verges and a number of small greens at road junctions in this

corner of the Forest that combine to create a significant grazing resource. There is potential to extend this further by removal of wartime concrete from the roadsides, particularly on the road south of Langley.

To estimate the area of potential road verge grazing land in Exbury to Cadland area (excluding the 2.2 hectares mentioned above) 19 random verge widths were measured from which an average was taken. This was rounded down to the nearest metre giving an average verge width of 5 metres. The length of road in this area is approximately 17,500m giving an estimated area 8.75 hectares (21.5 acres) of road side verge. This total excludes the area of potential grazing associated with wide bridleways, the coastal grazing at Calshot, Exbury and Lepe and the possible inclusion of other areas of rough grazing in the area. If these additional areas are taken into consideration the extent of potential grazing land is quite significant.

5 A Brief History of Attrition and Gain

5.1 Introduction

Set against the major changes in the extent of grazing land available to New Forest stock following the fencing of the perambulation and main roads, are a number of smaller scale changes in the area of grazing land. Although small in extent, these incremental changes can over time amount to significant losses and gains in the area of available grazing land. The value of these small scale changes is also often heightened by their location in areas of better quality grassland adjacent to settlements and holdings from where stock are depastured. The full scale of this process of small scale attrition and gain is difficult to assess over a long period of time without significant amounts of research, however, the Forestry Commission have provided some helpful information which gives some indication of the scale of these changes.

5.2 Licences and Wayleaves

Associated with increased affluence of property owners in the New Forest has been an increased demand for private vehicular access routes to properties across the Forest. These are granted as wayleaves by the Forestry Commission. An annual rent is charged for the use of these wayleaves by the Commission. The Verderers are compensated for the loss of grazing land that results from the creation of these wayleaves.

Over the period 1972 to the end of March 2000 a total of Forestry Commission records indicate that the Verderers were compensated for 9,399 sq. of wayleave granted by the Forestry Commission (1.94 acres or 0.78 hectares). This figure includes not only the granting of licences and permissions for areas of gravel for new access but also where existing accesses were granted a new permission for the use of a track or access already in existence. These might have been in existence for a long time or represent retrospective licenses for tracks constructed without the necessary permission.

5.3 Public utilities

The New Forest is crossed by numerous pipelines and cable lines providing water, gas, sewage, electricity and telephone services. The installation of these facilities creates temporary loss of grazing land as the route is often fenced to allow vegetation to recolonise. In most instances, the restored pipe or cable line is difficult to detect after a few years, however, there are notable examples of poor restoration where the route of pipe and cable lines is still visible after many years.

5.4 Car Parks

Car parks were constructed in the late 1960s and early 1970s to combat the situation that had developed with unrestricted access to vehicles throughout the Forest. This caused significant damage to the fabric of the Forest so that at the time of development of car free areas and associated car parking and campsites was widely appreciated as means of protecting the Forest.

In 1974 the total area of gravelled car parks was 57.22 acres (23.16 hectares). The area was recalculated in 1996 and was found to extend to a total of 58.67 acres (23.74 hectares). Since 1996, alterations to car parks has resulted in the reduction of car park area so that by March 2000 the area car parks had been reduced to 56.38 acres (22.82 hectares).

Although the area of official car parks has been reduced in recent years, Matthew Leppard in his study (Leppard 1996) suggest that a further area of the Forest are occupied by unofficial parking sites covering an additional 38.8 acres (15.7 hectares).

Further changes in the area of car parking are planned to take place during the winter of 2000/2001. This will include the reduction in size of some car parks but plans are also being implemented to increase the area of gravelled car parking, for instance at White Moor Car Park near Brockenhurst and Knightwood.

5.5 Campsites

Associated with the development of car free zones mentioned above was the development of authorised camp sites to control the unrestricted camping that was permitted throughout the Forest prior to the late 1960s. The earliest figure for the area of authorised camp sites available is for 1978 when authorised camp sites extended to 739.27 acres (299.18 hectares).

The area of authorised camp sites has been significantly reduced since the late 1970s so that by March 2000 a total area of 387.94 acres (157 hectares) was authorised for camping. This area includes a total of 110.24 acres (44.61 hectares) of roads, tracks, concrete areas, camping pitches and buildings.

Most recently, radical plans to relocate camping from some of the most sensitive parts of the Forest have been proposed, including the removal of camping from Hollands Wood. Such a move would allow this important woodland to be restored and follows one of recommendations made by Jonathan Cox and Francis Rose in their study of Hollands Wood made in 1996 (Cox & Rose 1996). However, it will be important that any replacement campsites are designed and located in ways that do not simply transfer environmental impacts from the existing camp site to a new locations.

5.6 Verderers Inclosures

The New Forest Act of 1949 authorised the enclosure of up to 5,000 acres of the open Forest to create forestry plantations. In the event considerably less than this area was fenced and planted. In 1976 the total fenced area of inclosure was 1,808.45 acres (731.87 hectares). By March 2000 the area of inclosure for which the Forestry Commission pay compensation to the Verderers for loss of grazing was calculated as 1,641.65 acres (664.36 hectares). This figure does however include some areas of inclosure to which commoners stock have access but which the Forestry Commission have not given up the right to re-enclose for the growing of timber in the future.

In addition to the financial compensation paid to the Verderers for loss of grazing as a result of forestry inclosures, a total of 251 acres (101.58 hectares) of reseeded grasslands

were created as grazing strips around the inclosures to provide improved grazing areas for stock. In many cases these strips have reverted to the habitat type from which they were created whilst others are not particularly productive due to the soil types on which they are located.

5.7 Loss of grazing related to recreation facilities

The development of car free zones and associated car parking and camping provision was aimed at controlling the impact of rapid and unconstrained growth in recreational use of the New Forest during the 1960s. Despite the success of these measures in conserving the fabric of the Forest, localised damage to Forest vegetation is still evident particularly around and associated with recreational facilities. Areas especially sensitive to trampling and erosion include streamside locations such as Balmer Lawn and Puttles Bridge where trampling by visitors has removed a large proportion of the vegetation cover along the stream edge near to the car parks (Cox & Rose 1996).

In other instances, riding establishments can exert considerable pressure on fragile open Forest vegetation causing significant erosion along paths and tracks. An estimate was made by English Nature of a loss of some 10 hectares of heathland per year resulting from this sort of erosion, based on a detailed study of air photographs in the north west of the Forest.

Although detailed figures are not available, the Forestry Commission undertakes a major programme of restoration each year along paths eroded by horse riders, walkers and commoners stock. Although much of this work is essential, where it involves laying of additional gravel or other hard surfaces, this results in the long term loss of habitat. In these cases perhaps more weight should be directed at relieving or redirecting the pressure that are causing the damage.

The New Forest also contains a number of cricket pitches from which New Forest stock have been excluded from the cricket square. This represents a small loss of the total grazing resource but would be of much greater concern if the same principle were to be applied to the outfield or to golf courses.

5.8 Summary of losses

It is unfortunate that figures for gains in open Forest grazing are not readily available as the area of grazing made available from the removal of war time concrete areas and opening of allotments to the open Forest represent a considerable area. In addition, plans are currently being developed for the removal of further significant areas of forestry plantation to restore areas to the open Forest. By contrast the record of loss of grazing is more accurately kept, largely due to the legal requirement for the Forestry Commission to compensate the Verderers for such loss or administer the facilities created. The following table does not therefore provide a balanced account of losses and gains but gives an indication of the relative magnitude of loss from the various activities described above.

Licenses for wayleaves (1972 – 2000)	0.78 ha
Car parks (2000)	22.82 ha
Camp sites (2000)	157.0 ha*
Verderers Inclosures (2000)	664.36 ha
Total	844.96 ha

*of which 44.61 ha are hard surfaces

5.9 Gain of Grazing

5.9.1 Exchange land

There are provisions with the New Forest Act 1949 for the Minister to exchange grazing rights with the Verderers' consent from one area to another.

Over the period 1964 until 1986 virtually the whole of the former Crown Freehold property at Ashley Lodge has been exchanged and thrown open with the establishment of commoning rights amounting to a total of 24.637 acres (9.97 hectares). The biggest proportion of this exchange was made in 1981 when 12.3 acres (4.98 hectares) were exchanged for the rights at Setley over the area to the east of the A337 which was separated from the open forest when the road was fenced.

Other parts of Ashley Lodge were exchanged for the rights over small parcels of land around the Forest which were subsequently sold for example:-

New Forest Services, Lyndhurst High St.	0.12 acres in 1964
Walkers Lane, Fawley	1 acre in 1964
Lyndhurst sewage works	2.75 acres in 1972
Furzey Lawn Cottage	1 acre exchanged for 0.01 acres of garden

Exchanges for the benefit of private property owners have been rare and generally involve a much larger area being thrown open than being closed to stock, as in the case of the Furzey Lawn Cottage example.

5.10 Removal of war-time concrete

Large areas of the open Forest were lost to the construction of air fields, bombing ranges and other buildings during the second World War. Ignoring the removal of concrete from Stoney Cross Airfield in the mid 1960s, significant areas have also been removed in the last 10 years from the following places:-

Ashley Walk Bombing Range at Leadenhall
North Bentley
Ocknell Campsite
Stoney Cross Airfield
Beaulieu Airfield
Holmsley Airfield

Unfortunately, the Forestry Commission does not have detailed measurements of these individual areas and hence no estimate of the area of restored grazing land can be made.

5.10.1 Restoration of other areas to the open Forest

Although figures have not been calculated, additional areas of land have been thrown open to the Forest around a number of villages and settlements. This includes the former allotment gardens at Brockenhurst, Lyndhurst, East Boldre and Pilley.

The development of housing estates in some villages have also resulted in the extension of grazing at a few places, for instance Grigg Lane in Brockenhurst and Swineslease at East Boldre where public open space created as part of housing development has been made accessible to New Forest stock.

6 Restoration of lost grazing land of the New Forest

6.1 Potential for restoring important wildlife habitats

Since the 1960s, New Forest stock have been excluded from over 1,700 hectares of grazing land within and around the perambulation. This has had widespread implications for the management of commoners stock within the New Forest and for the landscape and nature conservation value of these excluded areas. Although no longer managed as part of the New Forest grazing system, much of this former grazing land remains physically intact even if its landscape and nature conservation value has declined. Moreover, the links these areas once had with the open New Forest have been largely lost and many are no longer considered part of the New Forest. It is as if the exclusion of New Forest stock from an area equates to the removal of that area from the New Forest whereas ecologically and historically these places have been part of the New Forest for centuries and the removal of New Forest stock is well within living memory.

Despite these changes, the excluded areas of the Forest have huge potential for restoration. The benefits in terms of nature and landscape conservation and in sustaining the economy of common grazing in the Forest by restoring grazing to these areas could be immense.

6.2 Contribution to Biodiversity Action Plan targets

Bio-diversity: The UK Steering Group Report was published by the Government in December 1995. It identified a number of priority habitats and species for which specific action was needed to halt and reverse their decline. The New Forest is one of the richest areas for biological diversity in the UK and contains examples of many of the habitats and species populations identified in the Steering Group Report. For some habitats, such as lowland heathland and wood pasture the New Forest is the most important area in the UK. A total of 17 Biodiversity Action Plan (BAP) priority habitats have been identified by English Nature within the New Forest Natural Area (English Nature 1998). Of the 17 priority BAP habitats present within the New Forest Natural Area, extensive stock grazing is either essential or important to maintaining biodiversity in 8 of these habitats listed in Table 7. The Action Plan for all of these habitats identifies the need not only stem further loss but also to restore or rehabilitate these habitats to a favourable condition. For most habitats targets areas for rehabilitation and re-establishment have been set. These are also reproduced in Table 7.

Table 7. Priority BAP Habitats Reliant Upon Extensive Stock Grazing in the New Forest Natural Area

BAP Habitats	UK BAP Targets
Coastal and flood plain grazing marsh	Rehabilitate 10,000 ha and recreate 2,500 ha
Purple moor-grass and rush pasture	Secure sympathetic management of 13,500 ha (5,000 ha in England) attempt to re-create 500 ha by 2005
Lowland heathland	Improve management of all remaining heathland and re-establish 6,000 ha by 2005
Fens	Initiate rehabilitation of critical sites by 2005
Lowland wood pasture	Restore 2,500 ha to favourable ecological condition by 2010. Initiate expansion of 500 ha by 2002.
Lowland hay meadows	Initiate rehabilitation of all significant stands of lowland hay meadow within SSSI and 30% of other stands by 2005
Lowland dry acid grassland	Initiate rehabilitation of all significant stands of acid grassland within SSSI and 30% of other stands by 2005
Coastal salt marsh	Target not published

In many instances the restoration of grazing to the landscape types identified in section 4 will contribute directly to meeting BAP targets for these priority habitats, in particular for lowland heathland, fens (in the form of valley and seepage mires) purple moor-grass and rush pasture, lowland dry acid grassland and in places wood pasture. On the coast there is further potential for New Forest stock to assist in the conservation of coastal and flood plain grazing marsh and salt marsh.

In other situations, management of traditional hay meadows will assist in the provision of fodder to support New Forest stock through the winter and provide back-up grazing.

The remarkable survival of the common grazing system within the New Forest provides a unique opportunity to restore grazing to many of these formerly grazed habitats within and around the open Forest. Elsewhere in lowland Britain, the restoration of extensive (low intensity) stock grazing is now appreciated as being the best and in some circumstances only means by which the nature conservation value of these important wildlife habitats can be restored. In most situations this is an immensely difficult task as the tradition of stock grazing has long since been lost. Modern commercial breeds of cattle and domesticated breeds of pony are unable to sustain themselves on the poor quality of forage available on these sites and there is often difficulty in finding appropriate breeds of animals to graze them. In addition, there is a lack of experience in the management of free ranging animals and frequently a strong public reaction against introducing livestock onto commons and other publicly accessible open spaces. The retention of the common grazing system in the New Forest and the expertise available in its management represents an invaluable resource. This could be used to assist in the restoration of low intensity extensive stock grazing to important wildlife habitats in the vicinity of the Forest but perhaps equally importantly, the New Forest experience and source of stock can help rehabilitate such habitats throughout lowland Britain.

6.3 Conserving habitats of international importance

Many of the wildlife habitats and species found within and around the New Forest are of international importance to nature conservation. This has been recognised in the identification of the Forest as a candidate Special Area of Conservation (SAC) in accordance with the EU Habitats Directive. The New Forest has also been classified a Special Protection Area (SPA) in accordance with the EU Birds Directive on account of the important populations of breeding and migrant birds it supports. The Forest has also been listed as a Ramsar Site in accordance with the Ramsar Convention on the Conservation of Wetlands. In addition, many of the coastal wetlands around the New Forest have been included within the Solent Maritime candidate SAC and Solent and Southampton Water SPA/Ramsar Site. To the west of the Forest, the Avon Valley is also a wetland of international importance and has been classified as a SPA and Ramsar Site.

Sites designated as SAC in accordance with the Habitats Directive and classified as Special Protection Areas under the EU Birds Directive will collectively form a network of sites of European importance to nature conservation that will be termed Natura 2000. The wildlife habitats within and around the New Forest perambulation support many internationally important wildlife sites that will contribute to the Natura 2000 network.

The Habitats Directive requires Member States not only to maintain the important habitats and species populations that occur within Natura 2000 sites but also, where appropriate, to restore these to a favourable condition. Much of the grazing land to which New Forest stock once had access contains habitats and species populations of European importance, even if these are not currently included within the proposed Natura 2000 site boundary. The restoration of stock grazing to these habitats would be assisting in conserving these habitats of international importance and meeting the requirement of the Habitats Directive to restore them to favourable condition.

Habitats of European importance for which the New Forest has been identified as a candidate SAC are listed below.

Dry heaths

Northern Atlantic wet heaths with *Erica tetralix*

Oligotrophic waters containing few minerals with amphibious vegetation

Mediterranean temporary ponds

Depressions in peat substrate (*Rhynchosporion*)

Beech forests with *Ilex* and *Taxus*, rich in epiphytes (*Ilici-Fagion*)

Old acidophilous oak woods with *Quercus robur*

Bog woodland

Residual alluvial forest (*Alnion glutinoso-incanae*)

The presence of grazing animals is fundamental to maintaining the specific ecological structure and functioning of these habitats within the New Forest. Where examples of these habitats survive outside of the Forest perambulation, they are often in a degraded condition due to a lack of grazing. Long term, sustainable restoration of these habitats can only be achieved through the restoration of grazing to these areas.

Other habitats of European importance also occur within the New Forest. A review of habitats for which the candidate New Forest SAC has been selected has recently been undertaken by English Nature. As a result a number of additional habitats have been added to the above list. Of particular interest has been the treatment of grassland and wetland habitats within the Forest that had been largely overlooked until recently. Additional habitats of European importance recently proposed for inclusion in the New Forest SAC include: -

Alkaline fens

Transition mires

Molinia meadows on chalk and clay' (*Eu-Molinion*)

All three of these additional habitats require grazing to maintain their nature conservation value. The largest and most intact examples of these habitats are within the perambulation where they are grazed by New Forest stock. Other examples of these habitats also survive in a degraded form on formerly grazed areas around the Forest. As with the habitats originally proposed for inclusion within the New Forest SAC, restoration of grazing to these additional habitats would also be assisting in meeting the UK's obligations under the Habitats Directive.

6.4 Sustaining the New Forest grazing system

Not only would there be significant gains for nature conservation in restoring grazing to those areas which New Forest stock once had access, such a strategy would also assist in maintaining the commoning economy of the whole Forest. As has been identified, there is a worrying trend in the numbers of commoners exercising their rights to graze stock on the Forest. This is believed to be due in large part to high property and land values within the New Forest, in particular those Forest edge properties attached to a small number of enclosed fields that traditionally supported commoners' small-holdings. The purchase of these valuable properties by people with no interest in perpetuating the common rights associated with them has resulted in a decline in both the number of practising commoners and the area of back-up land available to maintain stock grazing on the open Forest. Restoration of grazing to areas from which it has been lost over the last 40 years will help reverse this worrying trend in a number of ways.

Extensive areas of better quality grassland could be made accessible as back-up grazing to support New Forest stock during the winter months or be used to produce hay to be fed to stock. Areas that may be suitable for this sort of management would include the coastal grasslands at Dibden Bay or those to be created with the restoration of the Manor Farm waste disposal site at Pennington. There is also potential for an expansion in hay production on flood plain grazing marshes within the Avon Valley that could be used to provide fodder for New Forest stock.

Extending the area over which New Forest stock have access will bring a larger area of potential back-up grazing nearer to the edge of the open Forest. Although it has been concluded that the distance between back-up grazing and the edge of the Forest perambulation is not a significant factor in determining the economics of commoning,

clearly the nearer the back-up land is to the Forest edge the more convenient it is for commoners to utilise.

The fencing of the perambulation in the early 1960s has reduced the available grazing land by at least 1,700 hectares, excluding the coastal grazing land described in section 4. If this is taken into account the lost area is probably in excess of 2,000 hectares. This represents a loss of about 10% of the grazing land currently available to New Forest stock. At the same time, numbers of stock depastured on the Forest have actually increased from some 2,000 ponies and 2,200 cattle in 1964 to 3,878 ponies and 2,985 cattle in 1999. This equates to an increase in grazing pressure of over 43%. Increasing the area of land accessible to New Forest stock would restore the important function the commons, greens, road verges and coastal grazing land around the Forest once had in buffering the effects of increased stock numbers and variations in the quantity of available forage on the Forest.

7 Actions needed to restore lost grazing land in the New Forest

There is without doubt huge potential for expanding the area of land over which New Forest stock have access. This will have significant benefits for nature and landscape conservation and will assist in the maintenance of a viable commoning economy in the Forest. Achieving this objective raises a number of issues that would need to be resolved, both through changes in management structures and legal arrangements.

7.1 Legal arrangements

7.1.1 Changes in the extent of the Verderers jurisdiction

The Verderers currently regulate the management of grazing within the New Forest. They only have jurisdiction within the legal perambulation of the Forest. New Forest stock grazing the adjacent and dispersed commons beyond the perambulation would therefore be beyond their control. In the past this created problems with control of disease and maintenance of the health of animals on the Forest. To increase the area over which the Verderers had jurisdiction would require either a re-definition of the New Forest perambulation through an additional New Forest Act (Pasmore, pers. comm.). Alternatively, they could be extended to an area outside the perambulation, for instance within a National Park. Either option would require a change in legislation.

A neat mechanism has been proposed that might be used to extend the Verderers powers to these additional commons in certain circumstances. Section 19 of the 1949 New Forest Act permits the sale of small parcels of land from within the Perambulation providing a suitable area of land is given in exchange. There is no requirement for this exchange land to be the same size as that which has been sold, for example 200 hectares could be given in exchanges for a few square metres. In theory it would be possible to sell a small piece of 'sacrificial' land from within the perambulation to be exchanged for a much larger area of land which would then fall under the same jurisdiction the Verderers have over the open Forest. This mechanism would not be applicable in every instance and would need the full co-operation of all landowners concerned.

Perhaps a less radical solution would be for the Verderers to enter into a legal agreement with the landowner of the common or other land to which New Forest stock would be given access. Such an agreement could give rights to the agisters to enter such land for the purpose of tending to New Forest stock and to ensure the suitability of stock depastured on these adjacent commons was agreed with the agisters. Some financial mechanisms would need to be agreed to underpin such an agreement but this should be possible to negotiate with funding from the New Forest Committee or National Park Authority. This sort of arrangement would allow the skills and expertise of the agisters to be used more widely in the New Forest without the added complication of extending the legal powers of the Verderers over additional areas of land.

7.1.2 The extent of the New Forest National Park or Heritage Area

It is apparent that a significant area of land outside the current perambulation of the New Forest once played an important part in maintaining stock grazing on the Forest. The loss of stock from these areas since the fencing of the perambulation has created the mistaken impression that these areas are no longer part of the New Forest. In practice they have

strong ecological, landscape, historic and cultural links with the open Forest within the perambulation.

Much of this land is still of high nature conservation and landscape value but is in increasing need of restoration and rehabilitation. The New Forest Committee is attempting to fulfil the role of providing a unifying management authority with responsibility for a co-ordinated approach to restoration of these areas. However, it may be that a National Park Authority would have more resources to successfully achieve this objective. If a National Park Authority is to take on this role, it will be important for this wider area of the New Forest to be included within the National Park boundary. Our preference would be for the National Park boundary to be extended beyond the current Heritage Area boundary to encompass the full extent of summer stock straying prior to the 1964 fencing of the perambulation as shown in Map 1. This would incorporate most of the grazing land that has been lost from the New Forest since 1964.

7.2 Management issues

7.2.1 Land purchase

A recommendation of the Baker Report in 1947 was that the commons adjacent to the New Forest should be acquired by the Forestry Commission and incorporated within the Forest's management regime. This clearly implied an intention, even at this time, that these areas should be incorporated into the open Forest. Some of these commons were subsequently included within the New Forest perambulation and are now seen as being functionally part of the Forest. However, the commons listed in Table 3 remain outside of the perambulation and many have become degraded in terms of nature conservation and landscape value and are no longer accessible to New Forest stock. Despite the passage of time and the subsequent fencing of the perambulation, the recommendation of Baker that these commons should be bought into public ownership remains valid today.

The same recommendation is also applicable to those other commons that we have termed dispersed commons listed in Table 4. There are a wide range of public bodies with the experience and expertise in managing these areas for nature and landscape conservation purposes and funding should be made available to support such bodies should these commons become available for purchase.

Larger grazing units have significant ecological and management advantages over smaller isolated grazing units. In large grazing units a more natural pattern of grazing can become established without the need for seasonal stock removal and close monitoring of grazing levels. Larger grazing units are also more able to buffer the impacts of annual variation in vegetation growth patterns and the mix of habitat structure that develops is consequently more diverse. There is therefore a need to link as many of the dispersed commons with the coastal grazing lands and the open Forest as possible. To achieve this objective there is a need to purchase additional areas of land, especially where road links between commons and coastal areas can no longer be restored for use by grazing animals due to high traffic volumes. Linking grazing land in this way may necessitate the purchase of land for example along river valleys or former drove roads. Support for such an approach is given in the EU Habitats Directive, article 10 of which requires Member

States to improve the ecological coherence of the Natura 2000 network by encouraging the management of linear features of the landscape which are of major importance for wild fauna and flora.

7.2.2 Use of Agri-environment schemes and wildlife conservation agreements

Whereas land purchase may provide one mechanism for improving the management of the adjacent and dispersed commons associated with the New Forest, there is also an important role for agri-environment schemes and wildlife conservation agreements. These have been used to provide financial support to both private landowners and public organisations to support management that restores these commons through the removal of tree and scrub growth and reintroduction of extensive grazing management. In many instances this will be best achieved through letting the grazing to New Forest commoners. At present the English Nature's Wildlife Enhancement Scheme (WES) has been seen as the most attractive to private landowners in achieving these objectives, as capital payments can be made up to 100% of cost and there is no requirement to allow public access. These agreements are, however, confined to land that has been notified as Sites of Special Scientific Interest. There is consequently an important additional role for another organisation possibly a National Park Authority or the New Forest Committee to take a more proactive role in promoting the re-introduction of grazing to private land outside of SSSI throughout the area of former summer straying shown on map 1.

In this respect, The New Forest Committee are currently investigating the potential for establishing a Forest Friendly Farming Project to encourage better management of land within the Forests farmland areas, for the benefit of farming and in particular commoning. There is significant potential to integrate the restoration of grazing to these formerly grazed commons in such a project using. At present, funding for such initiatives would be largely dependent upon the Countryside Stewardship Scheme, although this has not proved to be as popular with landowners in the New Forest as the WES. A National Park Authority may be in a position to support such agreements with additional funding to make them more attractive.

7.2.3 Provision of back-up grazing land

Restoration of grazing with New Forest stock to the commons, roadside verges, village greens and coastal areas would need to be under-pinned with the provision of sufficient suitable back-up grazing land. The coastal grazing at Dibden Bay and the potential grazing on the restored Manor Farm waste disposal site at Pennington is likely to be of considerable value in this respect. The need to graze larger areas of common and other low productivity habitats in the wider New Forest area will however place even greater demands on the need for back-up grazing land. To meet this demand, there will continue to be a need to strongly defend remaining back-up grazing from conversion to other uses and renewed efforts to support the creation of additional back-up grazing land in other locations around the Forest.

7.2.4 Roadside verges

Many of the roads fenced out of the perambulation in 1964 are now subject to such high levels of traffic that it would be impossible to restore grazing to them or to use these highways for their traditional purpose of linking the open Forest with the dispersed satellite commons and the coast. Despite this there are potential opportunities to restore parts of the road network to grazing, as described in section 4, in particular, between the villages Exbury and Fawley and those in the north of the Forest where they link the open Forest with the Wiltshire commons. There is a potential role for the County Councils, local authorities and landowners to work together in these areas to realise this potential.

Restoration of grazing to roadside verges will require a significant input of resources not only to reposition cattle grids but also to install the necessary speed limits and traffic calming measures. A major publicity and consultation programme would be required. In many instances, boundary fences, gates and hedges would also need to be reinforced, particularly where these are around private gardens.

Where it is no longer practical to restore grazing management to former grazed road verges and associated greens it is important that the landscape context of these features is not lost and where possible management should be introduced to maintain open grassland and other wildlife habitats using mechanical means. This might include removal or thinning of secondary woodland to restore more open grassland and the development of more ecologically sensitive mowing regimes which remove the cut vegetation and promote the development of more botanically diverse grasslands. In many places there are also relict ponds and other wetlands within the wider verges. Again many of these features have become overgrown and neglected and have lost much of their wildlife and historic value. Local authorities with the responsibility for management of road verges in the New Forest should review the historic and nature conservation value of the land within the road verges under their management responsibility, particularly where these are wide and have become overgrown with scrub and secondary woodland. A revised management programme should then be instigated which results in better woodland, scrub, tree, grassland and wetland management practices that restore the nature and historic landscape value of these verges.

7.2.5 Management of village greens

Where possible it will be beneficial to restore grazing management to village greens but in many instances, the growth in traffic volumes and the sub-urban nature of these greens now make it impossible to achieve this objective. As with the roadside verges, a lot can still be done to restore some nature and landscape conservation value to these historic features. As with the management of road verges, an initial audit of the resource is needed to determine the location and character of the remaining historic village greens within the New Forest area (within the summer straying line shown in map 1). It should then be possible to develop more ecologically appropriate management techniques for these greens that are compatible with their recreational and amenity value. In many instances, for example Goose Green at Lyndhurst, these former greens are now no more than traffic islands. It would be possible to significantly increase the nature conservation and landscape value of such areas with only minor changes to the mowing regime.

7.2.6 Coastal grazing

The traditional links between the open Forest and the grazing lands of the New Forest coast have become heavily urbanised and carry high volumes of traffic. It may now be impossible to restore these links in anything but a few instances. However there would be significant benefits to extending the area of coastal grazing available to New Forest stock. In a few instances, this would be possible through extending grazing along the road network between the open Forest and the coast, for example in the vicinity of Calshot. In other instances, motorised transport will be required to move stock to the coast. Some of the most extensive and productive coastal grasslands are those that have been created in recent decades or are proposed for creation in the future, for instance at Dibden Bay and at Manor Farm, Pennnigton. The nature and landscape conservation value of these grasslands would benefit immensely from grazing but perhaps equally important, these extensive grasslands could be invaluable in providing back up grazing for New Forest stock.

8 Conclusions

Although the common grazing system of the Forest remains active, a significant area of land is no longer accessible to New Forest stock. Most of this land was lost to stock grazing with the fencing of the perambulation in 1964. It has been estimated that at least 2,000 hectares of grazing land, equating to some 10% of the grazing lands in the New Forest, was lost to New Forest stock at this time. The loss of this grazing land has had a number of impacts on the nature and landscape conservation value of these excluded lands and is likely to have had a significant effect on the functioning of the grazing pattern within the perambulation.

In many instances, the removal of stock grazing has resulted in a loss of nature and landscape conservation value. Reintroduction of grazing through an extension of the New Forest's grazing system is seen as the most desirable means of restoring and rehabilitating the wildlife habitats and landscape value of these formerly grazed areas.

Restoration of grazing to these areas would assist in meeting a number of nationally and internationally adopted targets and objectives developed through the UK Biodiversity Action Plan (BAP) and the EU Habitats Directive. The system of common grazing that has endured in the New Forest also provides an important resource of both stock and expertise that could be of great value in restoring grazing to other habitats of nature conservation importance throughout lowland Britain.

Restoration of grazing to a larger area of the New Forest would also have significant benefits for maintaining the common grazing system of the New Forest in general and would re-establish the historic landscape and cultural links between these areas and the open Forest.

The extent to which New Forest stock strayed beyond the unfenced perambulation prior to 1964 has been determined by reference to the location of former stock pounds and through interviews with people associated with the New Forest at that time. It is concluded that the extent of summer straying equates to the functional extent of the New

Forest. It is also concluded that the boundary of a New Forest National Park should equate to the former extent of summer straying as defined by this report.

Within the perambulation there have been constant losses and gains of grazing land since 1964. There has been continued erosion of the grazing resource through small scale development of wayleaves and recreation facilities including camp sites and car parks. Countering this, there have also been gains in grazing land through the removal of concrete from II World War air fields and restoration of former allotment gardens to the open Forest. An analysis of information provided by the Forestry Commission suggests that these losses and gains have to a large extent cancelled each other out in terms of area. Perhaps more significant has been the loss of grazing resulting from the creation of the Verderers Inclosures during the late 1950s. It is hoped that developing plans for the reduction of these will restore much of this lost grazing land to the Forest in the future.

The assessment of gains and losses resulting from development within the perambulation has not included any consideration of the impact of vegetation management on the grazing resource. This significantly complicates the picture as much of this management was undertaken with the intention of improving the quality of the grazing, for example by improving drainage of streamside lawns. In practice, such action may have resulted in a loss of grazing land by encouraging the growth of scrub on sediment dredged from stream beds and a reduction in grassland productivity following a decline in frequency of flooding.

There are also frequently quoted anecdotes of the loss of grazing due to a spread of bog and scrub over former streamside grassland. We have been unable to validate such claims within the time available to this project.

Restoration of grazing to much of the formerly grazed area of the New Forest is seen as an important objective with very considerable potential benefits. There are however a number of important obstacles that need to be addressed.

Consideration needs to be given to the extent of the Verderers powers, in particular if these should be extended beyond the New Forest perambulation to a wider area, for example the area of the proposed National Park. This would require a change in legislation.

Careful consideration should be given to the extent of a National Park or Heritage Area boundary. It is our view that where possible this should be coincident with the extent of summer straying recorded prior to fencing the perambulation shown in map 1. There is a strong case in favour of forming a public body with responsibility for co-ordinating the restoration of grazing to the formerly grazed landscape types within the wider New Forest area.

To facilitate the restoration of grazing to these landscape types, there is a need to bring further areas into public ownership. Funds need to be available, possibly through a National Park Authority, to assist with the acquisition of such land when it becomes available.

Financial support for habitat management and restoration of grazing is currently available for land within SSSI through English Nature's Wildlife Enhancement Scheme. This has proved highly attractive to private land owners. This funding must be maintained in the future if the important gains made under this scheme are to be secured and extended. Outside statutorily protected sites there is also a need to assist in habitat restoration and rehabilitation, often through the reintroduction of appropriate stock grazing. The New Forest Committee is establishing the Forest Friendly Farming Project that could be influential on these sites but funding would be limited to that available through agri-environment schemes such as Countryside Stewardship which has been generally unpopular in the New Forest. A well resourced National Park Authority may be able to support such schemes with additional funding.

The massive network of formerly grazed roadside verges and village greens that were once accessible to New Forest stock offer great potential for extending the grazing resource. Perhaps more importantly, however, these grazed highways provide the links between the open Forest, the dispersed satellite commons and the coast. The growth of urban development and traffic levels now make it very difficult to extend grazing to these road verges but there are a few locations where this might be practical and would have significant nature and landscape conservation benefits.

Where road verges and greens can no longer be grazed for practical reasons, management schemes need to be developed which ensure the nature conservation and landscape value of these features is not lost. This might include development of more appropriate mowing regimes, removal of scrub and secondary woodland, restoration of ponds and wetlands and the control of sub-urban ornamental planting and beautification.

The loss of grazing from the coast over the last 40 years has been dramatic. It has not been possible to estimate the area concerned but the loss of grazing from these coastal habitats is likely to have had significant ecological effects. There are likely to be significant ecological advantages of restoring grazing to these areas. In addition to the traditionally grazed salt-marsh and other coastal wetlands of the New Forest coast, extensive new coastal grasslands have been created or are proposed at Dibden Bay and Manor Farm, Pennington. These offer great potential for supporting New Forest stock by providing an extensive area of back-up grazing land.

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11 Appendix A: Loss of Grazing in the New Forest Area since c.1950

Description	Area (ha)	Area (acres)	Section in text
Fenced Roadside verges within the 1964 perambulation	79.9	197.5	2.2
Fenced off open Forest within the perambulation	20.2	50	2.3
A&O Regeneration plots	2.4	5.9	2.3
Excluded Adjacent Commons	1121	2,770	4.2.2
Dispersed Commons	273.9	676.9	4.2.3
Coastal Grazing	Not estimated		4.2.4
Village Greens	Not estimated		4.2.5
Roadside verges excluded from the 1964 perambulation	208.5	515.2	4.2.6
Total	1,705.9	4,215.5	