

branding of new foals, marking (the tail is trimmed to a particular pattern to indicate which area/Agister is assigned to) and removal of any animals that commoners want to sell or return to their holding. Checks can also be made that animals are legally depastured and 'marking fees' paid where appropriate.

Table 3-22: Commoning Rights

Rights	Definition
Common of pasture for commonable animals	Applies to ponies, cattle, donkeys, and mules. Applies to 65,000 acres of private enclosed land in and around the New Forest as calculated by the 1858 Register of Claims. Allows animals to graze freely on the Open Forest and certain Inclosures on Crown Lands and adjacent commons
Common of pasture for sheep	Confined to certain former monastic property in the S.E. of the Forest and to a few fields in the extreme NW. Right is not currently exercised.
Common of mast	Right to turn out pigs in the autumn to eat acorns. Mast season generally runs for 60 days.
Common of turbury and common of marl	No longer exercised
Estovers	Right to receive free firewood annually from the Forestry Commission. Less than 100 households benefit from this Right.

As well as the Crown Lands stock can graze freely on the Adjacent Commons. The Adjacent Commons (Table 3-23 and Figure 23) are areas of common land, contiguous with or near the New Forest. They fall under the docrine of right of vicinage which states that where two commons adjoin, stock which may be depastured by right on one common, may wander freely between both. Therefore animals depastured on the Adjacent Commons can wander freely onto Crown Land.

Stock depastured on the Forest comprise ponies, cattle, donkeys and at certain times of the year Pigs can be turned out under the "Right of Mast" to eat the acorns which are potentially toxic to horses and cattle. Ponies form the greatest proportion of stock on the Forest while cattle form a larger proportion on the Adjacent Commons as shown in **Figure 24**. The large dip in stock numbers in 2001 was due to the Foot and Mouth Crisis.

Commoning is under pressure from poor financial returns, soaring house prices which prevent the younger generation of commoners from acquiring property from which to continue their commoning rights and the high percentage of commoners who are of an age where they will inevitably give up commoning in the next 10-25 years. There are also a number of key issues relating to commoning and sustainable wetland restoration which are discussed more fully in section **3.8.6**.

Figure 24: Stock Numbers

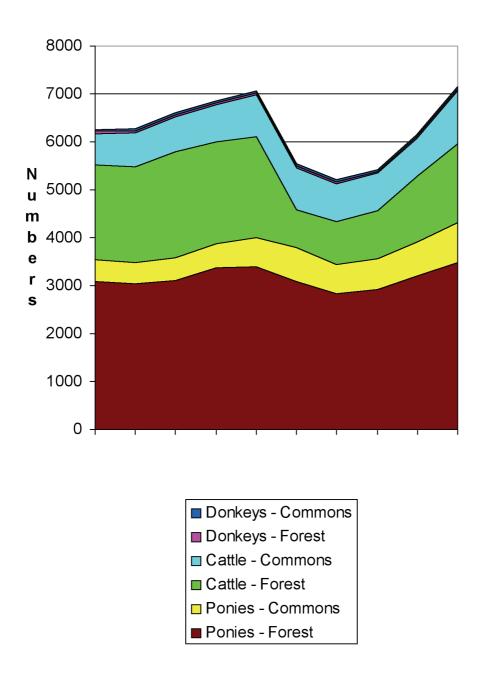


Table 3-23: Adjacent Commons

Adjacent Common Ownership

Hyde Common Hampshire County Council
Gorley Hill Hampshire County Council

Ibsley Common National Trust & Hampshire County Council Rockford Common National Trust, Hampshire County Council &

several private owners

Hightown Common National Trust

Kingston Great Common Private

Hale Purlieu National Trust

North Charford Common Private

Plaitford Common National Trust
West Wellow Common Parish Council
Half Moon Common National Trust
Cadnam and Furzley Commons National Trust

Minstead Manor Private

3.8.4 Recreation

The public has had access to a large part of the Forest within the Perambulation on foot and on horseback since time immemorial. Today, recreation and access in the New Forest is overseen by a variety of organisations and individuals including the Forestry Commission's, National Trust, Hampshire County Council, private estates and other individuals. In the future, the new National Park Authority is also likely to adopt a key strategic role. The main recreational uses within the Perambulation are managed by the Forestry Commission and are shown in Table 3-24. The Forestry Commission's *Access and Recreation Plan* guides the policies and strategies for managing and developing recreational access.

The Forestry Commission operates a policy of permissive free access on foot to its land (where lease arrangements allow) and byelaws allow free access to the Crown Lands on horseback. Under the Law of Property Act 1925, most of the Crown Lands are exempt from the CROW Act but at least 800 hectares of Crown Freehold Inclosures will be dedicated for open access under the CROW Act. Cycling is restricted to a cycle network using tracks and roads around the Forest. Other activities are controlled by a licensing system. The Forestry Commission Ranger Team has a key role in educating the public about the Forest and its environment and regulating recreational activities.

The powers conferred to the Forestry Commission for the provision and management of recreation under the New Forest Acts are only exercisable with the agreement of the Verderers. However the two parties have not always been able to agree whether particular items legally require the agreement of the Verderers. Therefore a Memorandum of Understanding Between the Forestry Commissioners and the Verderers of the New Forest (2002) has been drawn up to clarify the position and is intended to be binding in honour only (Appendix L).

Recreational activities outside Crown Land take place at the discretion of individual land owners and activities such as walking, horseriding and off road cycling are subject to local byelaws or restricted to the Right of Way network of footpaths and bridleways.

However, the Countryside and Right of Way Act 2000 (CROW Act) may provide some limited opportunities for new accessible green space.

In terms of visitor numbers, it has been estimated that at the current time (2005) around 15 million people visit the Forest each year of which 60-70% are made by local people from surrounding villages and conurbations.

Table 3-24: Recreational Use within the Forest Perambuation

Recreation Use	Level of Use	Current Management
Walking including dog walking	10 million visits per year	Forestry Commission operates policy of free access on foot
Horse riding	5000 horses & riders use New Forest	Forestry Commission byelaws allow free access on horseback within perambulation
Cycling	7% of visitors	Forestry Commission operates policy of encouraging cycle access on way marked tracks
Specialist recreation	1200 permits per year	Activities require permits from Forestry Commission with seasonal, locational and other restrictions applying. Activities include orienteering, model boats and aircraft, hunting, fishing, BBQ, Duke of Edinburgh awards, husky training, carriage driving
Other activities	900 permits per year	Activities require permits from Forestry Commission with seasonal, locational and other restrictions applying. Activities include filming, car access to inclosures, military training, bee keeping

Source: Forestry Commission

3.8.5 Settlements & Infrastructure

Figure 25 shows the key settlements and infrastructure. It is estimated that the population contained within the National Park Boundary is around 34,400. The majority of the population is concentrated in towns and villages with the remaining found in isolated properties and hamlets scattered throughout the New Forest. Within the Forest itself the main population centres are focused in Lyndhurst, Brockenhurst and Burley.

The main infrastructure routes through the Forest are the A31, A35 and A337. A network of smaller B and C class roads criss-cross the Forest linking up the major networks. The London to Weymouth railway bisects the southern half of the Forest linking Bournemouth and Southampton.



A network of gravel tracks gives access to the Inclosures and the Open Forest and is used for maintenance access and timber hauling. Parts of this gravel track network combined with sections of public highway are used to provide cycle routes and public access throughout the Forest.

3.8.6 Land Use Issues

a) Restricted access to timber harvesting sites

Wetland restoration works have resulted in the modification of some access routes within the Inclosures by taking out culverts and replacing them with fords. Timber harvesting of hardwoods takes place during the winter and there is the possibility that during wet periods when the rivers are high, it will not be possible for machinery and vehicles to use the fords, leaving certain forest stands temporarily isolated. This has already happened at the "concrete ford" in Vinney Ridge (November 05) when timber lorries were unable to cross the ford to pick up timber stacks. Although fords are only likely to be inaccessible for a matter of hours or possibly days during extreme rainfall events, plans for timber extraction routes and locations for timber stacks may need to be given additional thought during the planning stages of timber harvesting. Gauges will also need to be installed at certain fords to assist timber lorries assess the feasibility of crossing fords in flood.

Additional pollution prevention measures will also have to be taken at ford crossings during timber extraction to limit excess sedimentation, including the use of Heather bales and/or booms or sediment mats.

b) Location of works relative to recreational activities

To date the majority of Life 3 works have taken place in areas reasonably remote from recreational pressures where the main activities are restricted to walking and riding. It has only been during the construction phase that any access restrictions have had to be imposed on safety grounds. It has been essential to ensure that crossing points have been maintained and if possible improved.

There is also the perception among some users of the Forest that wetland restoration works will make the Forest less accessible. Future works are unlikely to affect the gravel track network but there may be a few instances were informal "traditional" routes cross an area of restoration. In such cases the recreational use will be given due consideration and if necessary paths re-routed via the existing path network.

c) Honey pot effects along rivers and streams

Certain reaches of the rivers are under significant pressure due to visitor numbers. Where car parks are located close to rivers they act as a honey pot for people to come and play and picnic beside the river. Certain localised reaches of the rivers do suffer from increased bankside erosion as a result. Where damage has been putting SAC habitats at risk, certain car parks

have been closed to try and relieve the pressure. However the public reaction following such closures has demonstrated that much advanced planning and sensitivity is required when carrying out any permanent car parks closures.

d) Grazing Patterns

The commoning community is concerned that wetland restoration works do not affect the quality of the grazing and that the productivity of any new grazing is recognised when opening up new areas. Therefore it is important to understand grazing patterns of stock and the relative productivity of different habitat types. A detailed study examining the food and feeding behaviour of cattle and ponies was conducted in the late 1970's, the findings of which are still highly relevant today (Putman et al 1983).

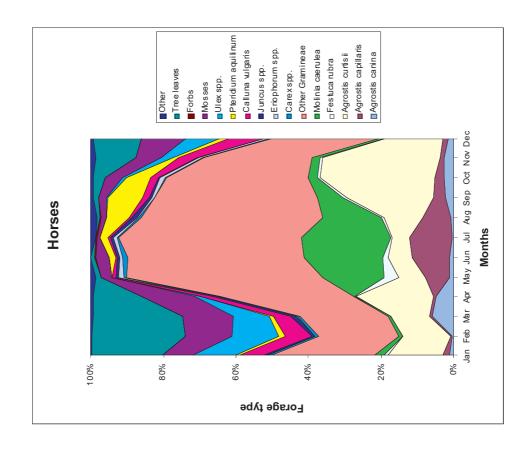
Both cattle and ponies are selective grazers and follow fairly regimented patterns. Cattle use their preferred habitat types throughout the year and have a heavy preference for lawns and improved grasslands with extensive use of heathland. They tend to graze wet heath in summer and drier areas of heath in the winter. Feeding use of other communities is not extensive although deciduous woodland is exploited at times during the winter and acid grassland is used sporadically for most of the year. Cattle tend to spend less time actively feeding than ponies (60% compared to 75-88% for ponies) and restrict much of their feeding activity to daylight hours.

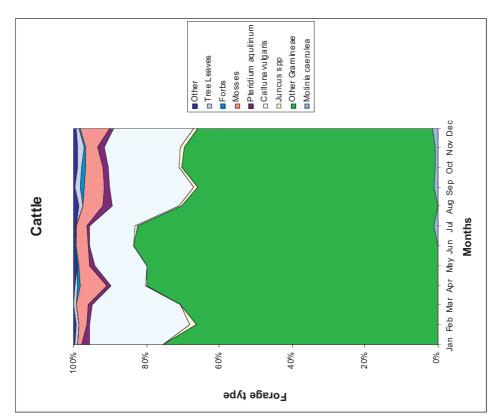
Ponies on the other hand exhibit a more marked seasonal and diurnal use of vegetation types. Improved grasslands and acid grassland are important throughout the year with streamside lawns being particularly favoured. Indeed the majority of ponies feed in discrete groups with each group having a favoured lawn which forms the focus of their grazing. However, wet heath, bogs and regenerating heathlands are used seasonally with peak use in the summer (May – September), which is related to Molinia growth which is the most important forage species in bogs and heathland. Feeding in gorse-brakes and deciduous woodland is largely restricted to winter, although woodlands are used for night feeding throughout the year. Indeed ponies tend to move off the lawns and heath during the night to seek shelter among the trees where they continue to graze throughout the night.

Although both ponies and cattle feed on lawns each has its own preferred area on the lawn. Ponies rarely graze their own latrine areas leaving areas of longer sward which in turn are utilised by the cattle which prefer to graze a longer sward.

The feeding preferences of cattle and ponies for different plant species are shown in Figure 26 while the productivity of different habitat types is shown in Table 3-25.

Figure 26: Forage Preferences of Cattle and Horses





Based upon the percentage species composition of cuticular fragments in the faeces of New Forest cattle & ponies

Source: R.J. Putman et al (1987)

Table 3-25: Productivity and grazing pressure on different habitat types

1	Growing Season duction (tons/acre)	Percentage removed by grazing
Reseeded lawns	0.90	94%
Commoners' improved grassla	and 1.31	86%
Streamside lawns	1.96	66%
Acid grassland	0.63	91%
Bog	1.84	89%
Molinia Heath	0.90	48%
Molinia Bog	0.90	48%
Juncus sp	4.89	72%
Bramble leaves	1.27	24%

Source: Putnam et al

e) Importance of grazing in maintaining habitats

The streamside lawns and mires are key sources of grazing for commoners' stock and indeed grazing is essential in maintaining the characteristics and sward composition of the SAC habitats. Indeed several areas of riverine woodland within the Inclosures would benefit from increased grazing. In some wet areas poaching by stock is important in developing habitat diversity and encouraging species which would not otherwise colonise these areas.

Ponies are capable of foraging deep into mires which helps to control scrub ingress and maintains an open habitat. However, ponies are also quite territorial and are often reluctant to graze new areas even when the productivity of grazing on their favoured areas is low.

f) Fencing & Drift Lines

The pattern of fencing is important for maintaining drift lines during the annual round up of stock. When planning any changes to Inclosure fences it is necessary to consider the impact on drifting and take into account potential stock holding areas highlighted in the "Foot and Mouth Contingency Plan".

It is also important to maintain crossing points.

g) Creation of increased grazing

The wetland restoration works offer the potential to increase the area available for grazing through:

- ◆ Opening up areas within Inclosures for grazing
- Restoration of lawns
- Scrub clearance
- Erosion repair and drain infilling

There is also potential for increased productivity on some lawns due to flushes of nutrients from the restoration of natural flooding. A key point to bear in mind is that as long as the flooding is of short duration (less than 48 hours) damage to the sward is generally negligible (Oakwood Environmental 1992, Scott Wilson/Environment Agency 1996). Flood peaks on Forest streams are likely to pass through in a matter of hours rather than days.

It has also been noted that bracken prefers drier ground and it is possible that bracken coverage could reduce alongside restored watercourses. However, this will require observation and monitoring over time.

h) Stock watering

During dry summers accessible drinking water for stock can become scarce in some areas putting pressure on remaining "watering holes" resulting in increased poaching and erosion around some mires. Raising bed levels should mean that stock can more readily and safely access water sources that were previously unavailable or dangerous due to the narrow, over-deepened channels. If restoration works are successful in reducing the drying of mires then more water should also be available for watering stock in the summer.

Some localised reaches of streams and ditches running alongside certain lawns, for example Butts Lawn and Lyndhurst race course have suffered from excess erosion and poaching from stock trying to access the over deepened watercourse. A number of stock have also had to be rescued from over deepened ditches. The aforementioned sites have now been restored.

i) Improved safety

Deep drainage ditches have resulted in stock fatalities in the past. The works will result in the infilling of many of the deeper, more dangerous ditches which may make the Inclosures safer for legitimate and/or straying stock.

j) Consultation and consent

A significant component of the Life 3 Project to date has been consultation with stakeholders and increasing public awareness of the importance of wetland habitats, the type of work required and the issues involved. It has been extremely important to get public and stakeholder support in order for works to proceed successfully. It is important to retain this support if works are to proceed into the future.

k) Socio- Economic Impacts of Wetland restoration works

It is likely that restoration and maintenance works will provide some additional temporary employment for contractors and staff within the Partner Organisations. At this point in time it is not envisaged that restoration works will result in any significant changes to the current grazing regime or recreational activities within the Forest.

Further Reading

Management Plan For the Crown Lands of the New Forest 2001-2006, Forestry Commission

Plan For the Ancient & Ornamental Woodlands of the New Forest, April 99, Forestry Commission

Enjoying the Forest - Access & Recreation Plan, June 2001, Forestry Commission

Heathland Plan, March 2001, Forestry Commission

New Forest Special Area of Conservation Management Plan 2001

Putman R.J. et al (1983) The Food and Feed Behaviour of Cattle and Ponies in the New Forest Hampshire, NCC

Putman R.J et al (1987) Food and Feeding Behaviour of Cattle and Ponies in the New Forest, Hampshire, Journal of Applied Ecology, Vol 24, p369-380

Verderer's Countryside Stewardship Scheme – Grazing Management Plan (2003)

www.verderers.org.uk

3.9 OTHER LEGISLATION, PLANS & STRATEGIES

3.9.1 Existing Legislation, Plans & Strategies

A number of plans and strategies have been prepared or are currently being developed for the New Forest, which are relevant to the Wetland Management Plan because:

- ◆ They contain statutory policies relevant to the works that may be important for supporting and/or gaining statutory approvals for works proposed.
- ◆ It is important to be aware of any contradictory policies that could prevent the works from progressing beyond the planning stage.
- Non statutory plans may contain policies or objectives which could be important in gaining general support or otherwise during the consultation process
- ◆ The Strategies and actions proposed under another plan may be complimentary to solving issues highlighted in relation to wetland restoration and present opportunities for collaboration with other organisations to progress certain works or associated projects.

A summary of the relevant plans & strategies including their relevance to the Wetland Management Plan is given in Table 3-26.

A significant amount of UK legislation applicable to wetland restoration works in the New Forest including the:

- ♦ Water Resources Act 1991
- ♦ Environment Act 1995
- ◆ Salmon and Freshwater Fisheries Act 1975
- ◆ Land Drainage Act 1991
- ♦ Wildlife and Countryside Act 1981
- ◆ Countryside and Rights of Way Act 2000
- ◆ Town & Country Planning Act 1981
- Conservation (Natural Habitats &c) Regulations 1994
- ◆ Waste Management Licensing Regulations 2005

This legislation helps to determine which consents and conditions are applicable to the restoration works. Further details and explanations of the legislation can be found at www.legislation.hmso.gov.uk

3.9.2 Issues relating to Plans & Policies

a) Compliance with legislation

When preparing work plans it is important that sufficient time is allowed in the project planning process to obtain the necessary consents. The PATHFINDER Project is currently reviewing the consents procedure and will be reporting later in 2006.

b) Compliance with existing policies & plans

It is important when preparing plans and consents for the works that a check is made to ensure that the works are in accordance with policies and plans set out in key documents, in particular the:

- New Forest Special Area of Conservation Management Plan 2001
- Management Plan for the Crown Lands of the New Forest 2001-2006 (or any revisions) and associated Subject Plans

Due regard should also be given to the Verderers' Policies (Appendix L)

The Forest Design Plan which maps out in general terms how the Forest will be managed over the next 50-100 years is part of the Management Plan for the Crown Lands of the New Forest. The Management Plan is currently under review and the Forest Design Plan is being updated accordingly. Therefore it is important that any plans for future wetland restoration works are built into this review process.

Where works require permission for structures (e.g. bridges) under the Town & Country Planning Act 1990 then consideration must be given to the policies set out in the New Forest Local Plan (or future plans produced by the National Park Authority).

c) Stakeholder interest in other plans & strategies

Other plans that are currently being prepared are of interest and relevance to issues associated with wetland restoration in the New Forest, notably:

- ◆ New Forest Catchment Abstraction Management Strategy (CAMS)
- ◆ New Forest Catchment Flood Management Plan

Therefore it is important that the Partner Organisations maintain their interest in stakeholder consultations to ensure that the staff involved in preparing these plans have the necessary information to allow them to consider wetland restoration issues within the plan preparation process.

d) Actions arising from other plans & strategies

Actions arising from other plans and strategies are often of direct relevance to the wetland restoration works. Therefore there may be scope for mutual co-operation between various partner organisations to achieve similar aims and objectives.

Plan/Strategy	Background	Relevant Catchments	Status*	Relevance to Implementation Plan
New Forest District Council Local Plan (Adopted July 2005) NEW FOREST DIS- TRICT COUNCIL	The New Forest District Local Plan First Alteration was adopted in August 2005 and is part of the statutory Development Plan for the District, together with the Hampshire County Structure Plan 1996-2011 (Review) and the Hampshire, Portsmouth and Southampton Minerals and Waste Local Plan (1998).	= V	Current. Will be reviewed after 5 years	A number of planning policies are relevant to the works where works require consent under the Town & Country Planning Act 1990
New Forest Special Area of Conservation Management Plan 2001 PREPARED BY ENGLISH NATURE ON BEHALF OF NEW FOREST LIFE 2 PARTNERSHIP	Describes the New Forest's features of European Importance for nature conservation and cultural factors of significance for their well being. Evaluates SAC habitats and issues affecting them. Outlines set of generic management prescriptions for habitat restoration and management.	All	Due for review in 2006	Of key relevance to Implementation Plan both in terms of issues and management prescriptions for SAC habitats targeted for restoration under Life 3
Management Plan for the Crown Lands of the New Forest 2001-2006 FORESTRY COMMISSION	Management Plan drawn up as a result of the Minister's Mandate 1999 and is a key component in implementing both the objectives of the Minister's Mandate and the management prescriptions set out under the SAC Management Plan. Supported by seven subject plans relating to Heathlands, Ancient & Ornamental woodlands, Inclosures, Deer Management, Scheduled Ancient Monuments, Access and Recreation, Community Involvement.	All	Currently under review.	All subject plans contain key policies, strategies and objectives directly relevant to the implementation of wetland restoration works. Need proactive involvement in any plan revisions to ensure that future works are in compliance with the Forest Design Plan and where possible included within budget allocations.

Plan/Strategy	Background	Relevant Catchments	Status*	Relevance to Implementation Plan
New Forest Catchment Abstraction	CAMS set out how water resources will be managed at a local level. Consider how water abstraction	All except Hampshire Avon Tribs.	In preparation. Consultation document due	Protection of wetland water resources and possible actions to help alleviate low flows.
Management Strategy (CAMS) ENVIRONMENT AGENCY	need to be balanced against the needs of the environment		Summer 2006. Final report due for publi- cation in Spring 2007	Partners need to take active part in consultation process to ensure potential benefits for wetland restoration are considered.
Hampshire Avon Catchment Abstraction Management Strategy (CAMS) ENVIRONMENT AGENCY	CAMS set out how water resources will be managed at a local level. Consider how water abstraction need to be balanced against the needs of the environment	Hampshire Avon Tribs	Published March 2006	Protection of wetland water resources
New Forest Catchment Flood Management Plan ENVIRONMENT AGENCY	Strategic level plan setting out flood control policies for the New Forest	All except Hampshire Avon Tribs which fall under Environment Agency SW Region	In preparation	Need to ensure that aims, objectives and flood benefits of wetland restoration works are considered within New Forest Catchment Flood Management Plan. Project partners need to maintain role as stakeholders through consultation process.
River Avon cSAC Conservation Strategy (2003) ENGLISH NATURE	Prepared as part of Life in UK Rivers, which is a partnership project between the EU Life Nature Fund and main statutory bodies in the UK. On the Avon the 10 year strategy aims to define issues affecting the rivers, to note any mechanisms in place to tackle the issues and to identify any further action required.	Hampshire Avon Tribs	10 year plan	Strategy applied to Dockens Water. Need to be aware of any initiatives being progressed in relation to such issues as debris dams & flood control, non-native invasive plant species and habitat rehabilitation. Scope to co-ordinate works and potential to set up partnership projects
Local Environment Agency Plan (LEAP) New Forest ENVIRONMENT AGENCY	Identified issues & actions to be incorporated into Agency's Business Plans	All except Hampshire Avon Tribs	Out of date	Useful for identifying key issues

Plan/Strategy	Background	Relevant Catchments	Status*	Relevance to Implementation Plan
Local Environment Agency Plan (LEAP) Hampshire Avon ENVIRONMENT AGENCY	Identified issues & actions to be incorporated into Agency's Business Plans	Hampshire Avon Tribs	Out of date	Useful for identifying key issues
Lymington River Strategy (June 2004) ENVIRONMENT AGENCY	Considered various options to alleviate flooding in Brockenhurst and Lymington	Lymington R	Options selected for Lymington.	Considered effects of Life 3 works on flooding. Proposed a number of options which would have had implications for the Life 3 restoration works. Could be relevant in the future if flood alleviation work is progressed for Brockenhurst or Life 3 works are carried out on the Weir Stream.
Verderer's Countryside Stewardship Scheme Grazing Management Plan (May 2005)	10 year agreement between the Verderer's and DEFRA which allows commoners to receive headage payments via the Countryside Stewardship Scheme by entering their stock into a management agreement which has the aims and objectives to support commoning and the environmental and economic benefits of the traditional depasturing of animals	AII	Current	Grazing is important in maintaining wetland SAC habitats and need to liaise with Verderers over management of grazing in restored areas.
Strategy for the New Forest 2003 NEW FOREST COMMITTEE	Sets out policies and actions needed to conserve the special character of the Forest	All	Current	Being used by National Park Authority as a basis for the new National Park Management Plan.
Verderers' Policies (July 2005) VERDERERS	The primary objective of the Verderers is to protect the special qualities of the Forest including commoning, traditional landscape, aesthetic character, flora & fauna, peacefulness, natural beauty and cultural heritage.	AII	Current	Need to be aware of Policies particularly when planning works and undertaking consultation in the open Forest where the Verderers' consent is required.

Further Reading

Strategy for the New Forest, New Forest Committee 2003

New Forest District Council Local Plan (Adopted July 2005)

Forestry Commission, Management Plan for the Crown Lands of the New Forest 2001-2006 plus associated subject plans

English Nature, New Forest Special Area of Conservation Management Plan 2001 -

English Nature (2003) River Avon cSAC Conservation Strategy

www.legislation.hmso.gov.uk

(N.B. At the time of writing the Environment Agency's New Forest Catchment Abstraction Management Strategy, New Forest Flood Defence Strategy and River Basin Management Plans are still under development)

PART 4 WETLAND RESTORATION WORKS

4. WETLAND RESTORATION WORKS

4.1 Introduction

This section of the Plan:

- ♦ Presents a summary of the works carried out to the end of the Life 3 Project (June 2006)
- Provides information on potential future works to help plan work programmes or prepare applications for funding to carry out the works
- Gives an idea of potential project costs through the provision of itemised cost menus and Case Studies
- ♦ Highlights the different restoration techniques used to date
- Notes the maintenance actions required to secure the habitat improvements made under the Life 3 Project
- ◆ Provides a summary of Issues/Actions & Priorities

4.2 Wetland Restoration Works (2002 – 2006)

A number of generic activities have been carried out to achieve habitat restoration, notably:

- River restoration in channel
- ◆ Selective felling and removal of exotics from the immediate floodplain and waterways
- ◆ Drain infill
- Vegetation management including holly pollarding, scrub clearance, grazing and fence realignment
- ◆ Road and track maintenance in particular road/ride side drains

These tasks can be applied across several habitat restoration types as shown in Table 4.1 and are described in more detail in Section 4.8.

Table 4.1: Restoration Works

Habitat Restoration Type	Potential works required
Mire	Scrub clearance & management
	Drain infilling
	Tree felling
	Removal of conifers and other exotics
Riverine & Bog	
Woodland Restoration	n • Drain infill
	Scrub management
	Pollardng of holly/oak/ash/beech
	• Exotics removal and treatment (including conifers)
	 Glade creation and mire restoration in previously mixed
	woodland and disruption of the even aged structure of woodland
	Deer fencing for small regeneration exclosures
	Re-aligning of Inclosure fences to re-introduce grazing
	• Re-establishment of a natural river system, by reconnecting the
	river with its floodplain through reinstatement of the original
	river channel including meanders and debris dams
Wet grassland	
(streamside lawns)	 Re-establishment of a natural river system, by reconnecting river with its floodplain through reinstatement of original river channel including meanders and debris dams
	Scrub management
	 Pollarding of holly/oak/ash/beech
	Exotics removal and treatment

Table 4-2: Wetland Restoration works carried out under Life 3

Catchment/Location	E.U. Action	Habitat Restoration	Partner
	Туре	Туре	Responsible
Lymington			
Highland Water - River Restoration	C4.1-4.3	River Restoration	EA
Blackensford Bottom River Restoration	C4.1-4.3	River Restoration	EA
Dames Slough River Restoration	C4.1-4.3	River Restoration	EA
Rhinefield River Restoration	C4.1-4.3	River Restoration	EA
Holly Coppicing/Pollarding	C1.1 C1.1	Riverine Woodland Riverine Woodland	FC FC
Pollarding Oak/Ash/Beech	C1.1	Riverine Woodland	FC
Waters Copse (fencing/hedging)			
Access Routes	C1.1 C2.1	Riverine Woodland Riverine Woodland	FC FC
Anderwood Riverine Work Burley Outer Rails	C2.1	Riverine Woodland	FC
Dames Slough	C2.1	River Restoration	FC
Vinney Ridge Deer fencing (Exclosure Plots)	C2.1	Veg Management	FC
Highland Water (Deer fencing)	C2.1	Veg Management	FC
3,		• •	FC
Highland Water Holmhill Riverine Work	C2.1 C2.1	Mire Riverine Woodland	FC
Holmhill Fencing	C2.1	Grazing	FC
Knightwood Fence Re-alignments	C2.1	Grazing	FC
Knightwood Western Hemlock Removal	C2.1	Exotics Removal	FC
North Oakley Riverine Works	C2.1	Riverine Woodland	FC
Slufters Fence Removal	C2.1	Heath & Mire	FC
	C2.1	Riverine Woodland	FC
Vinney Ridge Markway Lawn	C3.1	Wet Grassland	FC
Markway Lawn	C3.1	River Restoration/Riverine Woodland	-
I	C3.1		FC
Allum Green Brinken Wood Lawn	C3.1	Wet Grassland Wet Grassland	FC
Warwickslade Bog	C3.1	Mire	FC
Withybed Bottom	C3.1	Mire	FC
Slufters Mires	C3.1	Mire	FC
Bratley Mire	C3.1	Mire	FC
Millyford Green	C3.1	Wet Grassland	FC
Sporelake Lawn	C3.1	Wet Grassland Wet Grassland	FC
Mill Lawn	C3.1	Mire/Wet Grassland	FC
Red Rise/Creek Bottom	C3.1	Mire/Wet Grassland	FC
Black Knowl/Butts Lawn	C3.1	Wet Grassland	FC.
Whitemoor	C3.1	Mire	FC
Markway Inclosure	C3.1	Heath	FC
Avon Water			FC
Removal Sallow Carr/Invasive Species	C1.1	Mire	FC
Sheepwash Lawn Scrub Management	C1.1	Wet Grassland	FC
Pollard 140 trees (not Holly)	C1.1	Riverine Woodland	FC
Holly Pollarding/coppicing other species	C1.1	Riverine Woodland	FC
Re-instate access routes	C1.1	Erosion protection	FC
Holmsley Fence Removal	C2.1	Heath & Mire	FC
Holmsley Riverine Work	C2.1	Stream Restoration	FC
Wilverley Bog	C3.1	Mire	FC
Wooton Copse Riverine Works	C1.1	Riverine Woodland	FC
Wooton Deer Fencing/fence re-alignments	C2.1	Grass/Lawn Restoration	FC
Holmsley Bog	C3.1	Mire	FC
Stony Moors	C3.1	Mire	FC
Sheepwash Lawn	C3.1	Wet Grassland	FC
Hampshire Avon Tributaries			
Broomy Bottom	C3.1	Mire	FC
Holly Hatch	C3.1	Mire	FC
Rhododendron control	C1.1	Riverine Woodland	FC
Alluvial Grasslands- burning up scrub	C3.1	Wet Grassland	FC
Broadway Bottom	C3.1	Wet Grassland	FC
Woodford Bottom	C3.1	Wet Grassland	FC
Ibsley Common	C2.2	Mire/Riverine & Bog Woodland	NT
Newlands Plantation	C2.2	Mire/Riverine & Bog Woodland	NT
Digden Bottom	C3.1	Wet Grassland	NT
Milkham	C3.1	Mire	FC

C1.1 = Ensure Favourable Condition of riverine woodland and stimulate natural succession

C2.1 = Restoration of Links between pre-Inclosure riverine and bog woodland and nearby networks to stimulate natural succession on Crown Land

C2.2 = Restoration of Links between pre-Inclosure riverine and bog woodland and nearby networks to stimulate natural succession on National Trust Land

C3.1 = Restoration of periodic inundation pattersn in the upper catchments to maintain stream water levels throughout the year on the Crown Lands C4.1 - 4.3 = River Habitat Restoration Work to Protect and Enhance Natura 2000 Priority Habitats

4.3 Future Works

The information on Future Works can be used to help support or target funding applications and/or to plan works as funding becomes available.

An initial indication of the location and priorities¹ for future works is given in **Figures 27 to 34**. The series of plans show:

- ◆ The river reaches where some form of restoration work needs to be carried out
- ◆ The potential type of restoration work that needs to be carried out, although a detailed review needs to be conducted in the field to ascertain the exact extent of work required. River corridor survey data is also available to help with planning along some reaches
- A priority for those works
 - ➤ Priority 1 works are the most urgent where action is required to meet the favourable SSSI condition targets (**Appendix P**). In order to meet the PSA Target these works need to have been carried out or be in the advance stage of planning by 2010.
 - ➤ Priority 2 works tend to be located on the Open Forest or in more sensitive areas. Although these works are still required to meet the favourable SSSI condition targets it is considered that more time is needed to ensure that the techniques and works completed under Life 3 are working according to plan and to ensure that stakeholders have confidence that any new works will achieve their aim.
 - ➤ Priority 3 works are works which are not necessary to achieve SSSI favourable condition status but if undertaken would help to restore the condition of the majority of New Forest Wetlands.
- ◆ Forestry Commission Inclosure Working Blocks where possible it is useful to phase works to coincide with the 5 year working block rotation in order to reduce the impact on these areas.

Tables 4.3 to 4.8 summarise the map data in written form and can be used as a cross reference tool.

Data relative to the Future Works will be held on the Forestry Commissions ARC9 system and can be added to/modified as more data becomes available.

¹The potential future works were identified by representatives from English Nature, Environment Agency and Forestry Commission who are extremely familiar with the network of Forest streams and watercourses.

Table 4-3: Future Work Requirement - Lymington River

Aquatic Exotics	
Veg. Mgment.	• • • • • • • • • • • • • • • • • • • •
Spoil Bank Removal	•
Meander Restoration	••••
Debris Dam	
Bed Level Raising	
Drain Infill	
Nick Point Restoration	•• • •••
Priority	
Location	Slufters Mill Lawn Brook Mill Lawn Brook Mill Lawn Brook Mill Lawn Brook Mackpits- Bagshot Gutter Anderwood/Dameslough Puckpits- Bagshot Gutter Anderwood/Dameslough Puckpits- Bagshot Gutter Anderwood/Dameslough Puckpits- Bagshot Gutter Anderwood/Dameslough Puckpits- Bagshot Gutter Mightwood Inclosure Knightwood Inclosure Marwickslade Cutting Warwickslade
Reach Code	LR1 LR3 LR4 LR5 LR6 LR7 LR8 LR8 LR11 LR11 LR11 LR12 LR12 LR13 LR13 LR14 LR22 LR23 LR23 LR34 LR36 LR36 LR36 LR37 LR37 LR38 LR38 LR38 LR38 LR38 LR38 LR38 LR38
Working Block*	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
SSSI Condition Unit	113 113 113 114 114 114 114 114 114 114

* Working b	olock dates -	
Block 5	2006-2007	2012-2013
Block 1	2007-2008	2013-2014
Block 2	2008-2009	2015-2016
Block 3	2009-2010	2016-2017

Block 4 2010-2011

Table 4-4: Future Work Requirements - Cadnam River

SSSI Condition Unit	Working Block*	Reach Code	Location	Priority	Priority Nick Point Drain Restoration Infill	Drain Infill	Bed Level Raising	Debris Dam	Bed Level Debris Meander Spoil Bank Veg. Aquatic Raising Dam Restoration Removal Mgment. Exotics	Spoil Bank Removal	Veg. Mgment.	Aquatic Exotics
93'26	OF	LR1CR1	Sheepwash Green	8		•		•				
109,110	2	CR2	Coppice of Linwood	-	•	•	•	•				
109	2	CR3	Coppice of Linwood	-	•	•	•	•				
109	2	CR4	Coppice of Linwood	-		•	•	•				
109	2	CR5	Coppice of Linwood	-		•	•	•				
109	2	CR6	Coppice of Linwood	-		•	•	•				
110	2	CR7	Coppice of Linwood	-		•	•	•				
549	2	CR8	King's Garn Gutter	-		•	•	•				
389,399	m	CR9	Shave Green Inclosure	m				•				
389,399	m	CR10	Shave Green Inclosure	m			•	•	•			
399,400	ю	CR11	Shave Green Inclosure	m			•	•	•			

2012-2013 2013-2014 2015-2016 2016-201

* Working block dates Block 5 2006-2007 2
Block 1 2007-2008 2
Block 2 2008-2009 2
Block 3 2009-2010 2
Block 4 2010-2011

Table 4-5: Future Work Requirements - Bartley Water

Priority Nick Poi Restorati								
	Priority Nick Point Restoration	: Drain n Infill	Bed Level Raising	Debris Dam F	Meander Restoration	Spoil Bank Removal	Veg. Mgment.	Aquatic Exotics
Brockshill Inclosure	8		•	•	•			
rockshill Inclosure	m			•				
re 3	m			•				

Table 4-6: Future Work Requirements - Avon Water

Unit Block Code	Location	riiolity	Priority Nick Point Drain Restoration Infill		Bed Level Debris Raising Dam	Debris Dam	Meander Restoration	Spoil Bank Removal	Veg. Mgment.	Aquatic Exotics
337 2 AW1	Holmslev Inclosure	m			•					
OF	Holmsley Bog	-	•		•					
2	Little Wootton Inclosure	2		•	•					
537 2 AW4	Wootton Copse Inclosure	2		•	•					
2	Wootton Copse Inclosure	2			•					
2	Wootton Copse Inclosure	2			•					
OF	Avon Water (Wilverley)	2			•	•	•	•	•	
m	Wilverley Inclosure	m		•						
m	Wilverley Inclosure	m		•						
2	Broadley Inclosure	-	•	•	•					
523,535 5 AW11	Broadley Inclosure	-	•	•	•					
,	Wootton Copse Inclosure	2		•	•					

* Working block dates Block 5 2006-2007 2012-2013
Block 1 2007-2008 2013-2014
Block 2 2008-2009 2015-2016
Block 3 2009-2010 2016-2017

2012-2013 2013-2014 2015-2016 2016-2017

* Working block dates Block 5 2006-2007
Block 1 2007-2008
Block 2 2008-2009
Block 3 2009-2010
Block 4 2010-2011

Table 4-7: Future Work Requirements - Beaulieu River

404 4 BR1 Pondhead Inclosure 362,581,384,375 n/a BR2 Pondhead Inclosure 381,384 n/a BR3 Longwater Lawn 381,384 n/a BR4 Fulliford Bog 381,384 n/a BR5 Bishop of Winchesters Purlieu 388,488 5 BR6 Bishop of Winchesters Purlieu 458 4 BR7 Bishop of Winchesters Purlieu 458 4 BR8 Frame Heath Inclosure 464 4 4 BR8 Frame Heath Inclosure 464 4 4 BR11 (Worts Gutter) Hawkshill Inclosure 464 4 4 BR11 (Worts Gutter) Hawkshill Inclosure 464 4 4 BR13 (Worts Gutter) Hawkshill Inclosure 464 4 4 BR13 (Worts Gutter) Hawkshill Inclosure 464 4 4 BR14 (Worts Gutter) Hawkshill Inclosure 412 0F BR18 Yew Tree Heath Worts Gutter) Hawkshill Inclosure	ure 2 June 2 Seters Purlieu 2 Seters Purlieu 2 Soure Ockley Indosure 1 awkshill Indosure 1	••••	•••••	• • • • • • • • • • • • • • • • • • • •			•	
4 BR2 10/4 BR3 5 BR3 6 F BR5 6 F BR7 7 BR7 7 BR7 7 BR11 8 BR11 7 BR11 7 BR11 7 BR11 7 BR11 7 BR11 7 BR12 7 BR12 7 BR13 7 BR13 7 BR14 7 BR15 7 BR22 7 BR22 7 BR23 7 BR23 7 BR23 7 BR24 7 BR25 7 BR25 7 BR25 7 BR26 7 BR26 7 BR27 7 BR29		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	•••				
0			• • • • • • • • •	••••••			•	
Display BR4 5			• • • • • • • • •		•	•		
5 BR5 6 OF BR6 7 BR7 7 BR1 7 BR10 7 BR11 7 BR11 7 BR11 7 BR11 7 BR11 7 BR12 7 BR12 7 BR21 7 BR22 7 BR22 7 BR23 7 BR25 7 BR25 7 BR26 7 BR26 7 BR26 7 BR27 7 BR26 7 BR26 7 BR27 7 BR26 7 BR26 7 BR26 7 BR27 7 BR26 7 BR27 7 BR26 7 BR26 7 BR26 7 BR26 7 BR27 7 BR26 7 BR26 7 BR26 7 BR27 7 BR26 7 BR27 7 BR26 7 BR27			• • • • • • •	• • • • •	•			
5 BR6 OF BR7 4 BR11 4 BR12 4 BR112 4 BR112 OF BR13 OF BR18 OF BR22 OF BR22 OF BR23 OF BR25 OF BR25 OF BR26 OF BR27 OF BR27 OF BR27 OF BR27 OF BR27 OF BR26 OF BR26 OF BR27 OF BR27 OF BR26 OF BR26 OF BR26 OF BR27 OF BR27 OF BR27 OF BR27			• • • • • • •	• • • • •	•			
OF BR8 4 BR10 4 BR10 4 BR11 4 BR11 4 BR11 OF BR13 OF BR15 OF BR16 OF BR20 OF BR21 OF BR22 2 BR22 2 BR22 4 BR22 OF BR21 OF BR21 OF BR22 OF BR22 OF BR23 OF BR24 OF BR26 OF BR26 OF BR27 OF BR27 OF BR27 OF BR27 OF BR27 OF BR27 OF BR29			• • • • • •	• • • • •	•			
4 BR8 4 BR11 4 BR11 4 BR12 6 BR12 6 F BR13 6 F BR15 6 F BR16 6 F BR16 6 F BR17 6 F BR21 6 F BR21 7 BR22 7 BR23 7 BR23 7 BR24 7 BR25 7 BR26 7 BR26 7 BR27 7 BR27 7 BR27 7 BR27 7 BR29 7 BR29 7 BR29 7 BR29 7 BR29 7 BR29			• • • • •	• • • • •	•			
1 8R9 4 8R11 4 4 8R11 4 4 8R11 6 6 6 8R14 6 0 6 8R16 6 7 8 8R18 6 7 8 8R18 6 7 8 8R2	ockley Inclosure 1 awkshill Inclosure 1		• • • • •	• • • • •	•			
4 BR10 4 BR11 4 BR11 4 BR13 6 F BR13 6 F BR16 6 F BR16 6 F BR17 6 F BR18 6 F BR21 6 F BR22 7 BR22 7 BR22 7 BR23 7 BR24 7 BR25 7 BR25 7 BR26 7 BR26 7 BR26 7 BR26 7 BR27 7 BR27 7 BR27 7 BR29	awkshill Indosure 1 awkshill Indosure 1 awkshill Indosure 1 awkshill Indosure 1 1	•	• • • •	• • • •		•		
4 BR11 4 BR12 6 FR BR13 6 FR BR14 6 FR BR16 6 FR BR16 6 FR BR17 6 FR BR18 6 FR BR20 6 FR BR22 7 BR22 7 BR22 7 BR23 7 BR24 6 FR BR26 6 FR BR36 6 FR BR36	awkshill Inclosure 1 awkshill Inclosure 1 awkshill Inclosure 1 1		• • • •	• • • •				
4 BR12 4 BR13 6 F BR14 6 F BR15 6 F BR16 6 F BR17 6 F BR21 6 F BR22 7 BR22 7 BR22 7 BR22 7 BR23 7 BR22 7 BR23 7 BR24 7 BR26 7 BR26 7 BR26 7 BR26 7 BR27 7 BR27 7 BR27 7 BR27 7 BR29 7 BR30 7 BR30 7 BR30	awkshill Inclosure 1 awkshill Inclosure 1 1	•	•••	• • •				
4 BR13 4 BR14 OF BR16 OF BR16 OF BR18 OF BR20 OF BR22 2 BR22 2 BR23 4 BR24 OF BR25 OF BR26	awkshill Inclosure 1 awkshill Inclosure 1	•	• •	• •				
4 BR14 OF BR15 OF BR16 OF BR17 OF BR21 OF BR22 OF BR22 OF BR24 OF BR26 OF BR27	awkshill Inclosure 1 1	•	•	•				
OF BR15 OF BR16 OF BR18 OF BR20 OF BR21 OF BR22 2 BR23 4 BR24 OF BR25 OF BR26		•			•	•		
OF BR16 OF BR17 OF BR19 OF BR20 OF BR22 2 BR22 2 BR23 4 BR24 OF BR26 OF BR26 OF BR26 OF BR26 OF BR26 OF BR26 OF BR27 OF BR27	_							
OF BR17 OF BR19 OF BR20 OF BR21 OF BR21 OF BR21 OF BR25 OF BR25 OF BR26 OF BR30		•						
OF BR18 OF BR20 OF BR21 OF BR23 A BR23 OF BR25 OF BR25 OF BR25 OF BR26	-	•	•					
OF BR19 OF BR21 OF BR21 OF BR24 OF BR24 OF BR26 OF BR27 OF BR29	_	•	•					
OF BR20 OF BR21 2 BR22 4 BR24 OF BR25 OF BR26 OF BR26 OF BR26 OF BR30 OF BR30 OF BR30	ĸ	•	•					
OF BR21 2 BR22 4 BR24 OF BR25 OF BR26 OF BR26 OF BR27 OF BR27 OF BR30 OF BR30	m	•	•					
OF BR22 2 BR24 4 BR24 OF BR25 OF BR26 OF BR28 OF BR29 OF BR30 OF BR30	m	•						
2 BR23 4 BR24 OF BR25 OF BR26 OF BR29 OF BR30 OF BR30	m	•						
4 BR24 OF BR25 OF BR26 OF BR27 OF BR29 OF BR30 OF BR30		•						
OF BR25 OF BR26 OF BR27 OF BR29 OF BR30 OF BR31		•	•					
OF BR26 OF BR27 OF BR28 OF BR29 OF BR30 OF BR31	2	•	•				•	
OF BR28 OF BR29 OF BR30 OF BR30 OF BR31		•						
OF BR28 OF BR29 OF BR30 OF BR31		•	•	•			•	
OF BR29 OF BR31 OF BR31		•						
OF BR31 OF BR31 OF BR32		•						
OF BR31 OF BR32		•	•					
OF BR32	2	•						
	_	•						
OF	2	•						
455 OF BR34 Peaked Bottom	2	•						
444,465 3/OF BR35 Norley	m	•						
4 BR36 Frameheath Inclosure		•						
4 BR37 Frameheath Inclosure		•						

Table 4-8: Future Work Requirements - Hampshire Avon Tributaries

atic ics		2012-2013 2013-2014 2015-2016 2016-2017
Aquatic nt. Exotics		l block dates - 2006-2007 2007-2008 2008-2009 2009-2010
Veg. Mgment.	•	b u
Spoil Bank Removal		* Worki Block 5 Block 1 Block 2 Block 3
Meander Restoration		NOT FC LAND
Debris Dam	• • • • • • • • • • • • • • • • • • • •	
Bed Level Raising		
Drain Infill		
Nick Point Restoration	•••••	
Priority		- m 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Location	Godshill Wood Godshill Inclosure Millerford Plantation Cunninger Bottom Must Thorns Bottom Ditchend Bottom Ditchend Bottom Sland Thorns Island	Ambersiade Bortom Broomy Inclosure Digden Bottom Picket Bottom Thompson's Castle Foulford Bottom
Reach Code	HA1 HA2 HA3 HA49 HA13 HA13 HA21 HA21 HA22 HA23 HA23 HA23 HA33 HA33 HA33 HA33	НА44 НА45 НА47 НА48 НА49
Working Block*	4 4 v Q Q Q w - Q r v v v v v v Q Q Q Q Q Q Q Q Q Q Q Q Q	7 4 9 9 9 9
SSSI Condition Unit	65 162,68 28,33 33 33 38,41,543 540 540 540 540 540 540 540 66 66 66 66 66 66 66 11,104,548 54 54 54 54 54 54 54 54 54 54 54 54 54	552 256 91 43 125

