A WOODLAND STRATEGY

FOR DARTMOOR NATIONAL PARK

2005 - 2010

Produced on behalf of Dartmoor National Park Authority by Countryside Associates
Unit 2 Briston Orchard, St Mellion, Saltash, Cornwall PL12 6RQ

1. Introduction

This is a local strategy produced by the Dartmoor National Park Authority for the benefit of those directly concerned with trees and woods on Dartmoor. In order for the strategy to have the widest possible impact across the park, it was agreed that woodland owners, managers and the timber industry should all be involved in its development and implementation.

Over 30 organisations and individuals, representing private, public and voluntary sector interests have been consulted over a 5 month period between August and December 2004. Many of the consultees have attended two separate discussion meetings as well as submitting written responses.

The strategy has attempted to embody the views of the managers, practitioners and stakeholders who will have to implement the action plans over the next five years. The strategy aims to provide a guide for those who derive their livelihood from trees, woodlands and timber, and those employed to protect landscape, access, biodiversity and cultural features.

The need for a Dartmoor Woodland Strategy
Many environmental, social and economic factors relating to trees and woodlands tend to be dealt with in isolation. This strategy brings these together on a local scale, to help owners, managers and stakeholders set priorities and achieve optimum benefits from their limited resources.
The strategy also comes at a time of considerable change within farming and forestry, and will assist all those who have responsibility for the future of Dartmoor. Because of the sheer rate of change, detailed action plans have only been produced for the next five years.

Vision Statement
In the Dartmoor National Park management plan of 2001, there is a vision statement regarding woodlands.

"All broadleaf woodland is being actively conserved and conifer plantations are better integrated into the landscape"

In order to achieve this long-term vision the following objectives have been set out:

- To conserve and enhance the quality and wildlife interest of woods in the landscape;
- To ensure the long-term stability, health and renewal of broad-leaved woodland;
- To secure the best possible integration of conifer plantations into the landscape;
- To ensure protection, management and planting of individual trees and orchards;

The purpose of this strategy is to create a working framework that enables all those involved with trees and woodlands to make progress towards these objectives over the next five years.

The current Moors Future Project is producing a vision for the National Park Authority as to how the moorland areas of Dartmoor might look in 2030. It expects to see an overall increase in the woodland area as natural regeneration spreads in valleys where grazing pressure drops, and where existing woods are extended through planting.

2. Context

2.1 Dartmoor Woodlands

Only 11% of Dartmoor is woodland, yet the river valley systems are dominated by upland oakwood of international importance. There are 2750 hectares of ancient semi-natural woodland with 4500 hectares of other broadleaf woodland, and 3900 hectares of coniferous plantation. This wide spectrum includes woodlands of great wildlife, scenic, amenity and commercial value.

Much of the ancient upland oakwood is of international ecological importance, recognised in the designation of the south Dartmoor woods as a Special Area of Conservation under the European Habitats Directive. Seventeen woods covering 2000 ha are notified as sites of special scientific interest (70% of all Ancient Semi-natural Woodlands). Five woods are National Nature Reserves (Yarner wood, Bovey Valley, Dendle's wood, Wistman's wood and Black-a-Tor copse.). This represents the largest concentration of upland sessile oak NVC types W11 and W17 in southern England.

In addition to the ancient woods, there are important areas of broadleaf woodland which has been planted or self sown within the last 200 years.

There are in excess of 700 hectares of conifer plantation which have been established on what were once ancient woodland sites. These are now important target areas for restoration and improvement for biodiversity.

Upland conifer plantations established since the 1920's have undergone wide-scale restructuring and now achieve multi purpose objectives on a wide scale.

Dartmoor has many important veteran trees on farms and in woodlands, as well as traditional orchards and hedgerow trees. These are often of great wildlife and historical interest, and are key components of the overall landscape character.

Dartmoor woodlands contain a wide variety of archaeological features. These include the archaeology of the woodlands themselves, such as historic boundaries, charcoal hearths, coppice, pollards and wood pasture. There are also other archaeological

features found within woodlands which often pre date the existence of the wood and include prehistoric sites, medieval settlements and many industrial features.

It is estimated that there are over 500 private woodland owners within the national park, all with differing management objectives. English Nature manages the five NNR's, large conifer areas are managed by Forest Enterprise and South West Lakes Trust. The voluntary sector is also active on Dartmoor, principally through the National Trust, Devon Wildlife Trust and Woodland Trust, and through community linked organisations such as Moor Trees, BTCV and the Okehampton STOC Group.

2.2 History

Woodlands have only survived on Dartmoor through centuries of management and by playing an integral role in the rural economy. The woods have adapted and changed over time, and will continue to adapt, in response to changes in local needs.

The upland oak woodlands have been managed for centuries as coppice for local timber needs, predominantly firewood and tanbark. From the medieval period mining became increasingly important, and large areas of oak were regularly cut for charcoal production for mineral smelting. Charcoal hearths are a common sight in ancient woodlands, along with many old mining features, which have survived undisturbed.

Oak coppice was cut on a large scale, in coupes of several acres, right up until the end of the nineteenth century. At this time mining stopped and demand for coppice products disappeared. Many areas of coppice and timber were cut during the two world wars.

Exotic conifers have been grown extensively on the moor since the nineteenth century, and have developed into popular recreation sites as well as the central core for forestry skills and employment on Dartmoor. The Dartmoor climate supports exceptional growth rates and timber quality, and the park is at the hub of the Devon forest industry.

2.3 National Context

A Dartmoor Woodland Strategy cannot be viewed in isolation and lies within a framework of existing regional and national strategies. Forestry practice now operates to nationally and internationally agreed standards. (See appendix Glossary note)

The UK government have a stated objective that all woodlands should meet **The UK Forestry Standard** (Forestry Commission 1998 revised 2004), this is "the centrepiece of a system to guide and monitor forestry". It is linked to all major international protocols and provides the basis for the UK Woodland Assurance scheme, and management certification standards such as ISO 14000.

The UK Forestry Standard will be implemented through voluntary certification systems, such as UKWAS, and also through the Forestry Commission's grant and licensing systems. The UK Forestry Standard covers all the economic, environmental and social aspects of woodland management, and extends existing consultation

measures to include community consultation, recreation and access, health and safety and staff training issues.

The Habitat Action Plan for Woodlands and the Dartmoor Biodiversity Action Plan form integral components of the UK Biodiversity Action Plan and follow its format and methodology.

All woodlands under active management, whether certified or not, will be expected to show that they meet these standards, when applications are made for felling licences or for grant aid through the English Woodland Grant Scheme (EWGS).

2.4 Regional Context

This strategy is designed to contribute to targets set within the English Forest Strategy (1998).

This strategy will take note of the regional forestry framework review presently being undertaken by the Government Office South West. This will assist with setting priorities for support for woodland owners and local processing initiatives. The Forestry Commission are in the process of consulting with owners and woodland users on behalf of the GOSW steering group.

Dartmoor National Park Authority will continue its Woodland Accord with the Forestry Commission. The FC, Dartmoor and Exmoor National Parks have agreed shared objectives for landscape, biodiversity and recreation. Plantations owned or leased by the Forestry Commission are managed on their behalf by Forest Enterprise.

With such a large concentration of internationally important woodland habitat, Dartmoor National Park Authority will develop closer links with partner national parks and protected landscape areas, and support the work of the regional ancient woodland forum.

DNPA will encourage co-operation with other regional initiatives such as the South West Forest Project and regional Woodmeet groups.

The following quote is from a consultation document for the South West Regional Assembly –Towards a regional strategy for the South West Environment. “To help ensure the ….. Forestry industries provide the environmental goods and services which people living in, working in and visiting the region need and expect”.

Forest Enterprise Peninsula District have recently revised their objectives in line with this statement, so as to more effectively meet the needs of the community as a whole. (See FE Strategic Plan for 2004-2014)

The Dartmoor National Park Management Plan 2001 has specific woodland objectives and priorities which have been incorporated within this strategy.

2.5 Dartmoor National Park and the role of the National Park Authority

Covering an area of 368 square miles, Dartmoor contains the largest area of open country in the south of England. Unlike National Parks in many other countries, it is not owned by the state, but by many landowners, public bodies and private individuals. The National Park Authority provides advice and assistance for woodland owners and timber processors within the Park. It is consulted by the Forestry Commission on all applications made for woodland grants and for licences to fell areas of woodland. The authority makes recommendations on all issues which relate to its twin statutory purposes, which are :

- To conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park
- To promote opportunities for the understanding and enjoyment of the special qualities of the park by the public.

The NPA also seeks to foster the economic and social well being of local communities in pursuing these purposes.

3. Issues relating to Woodlands and trees on Dartmoor

This section details the current issues on which the strategy action plan is based. The information has been provided by National Park Authority staff, consultees and desk research. Further consultation with woodland owners, statutory and non statutory groups on the moor has highlighted a number of important issues relevant to the strategy.

3.1 to 3.7	are cross cutting issues relevant to all or many types of woodland.
3.8 to 3.15	are concerned with resource issues, and are type specific.
3.16 and 3.17	are issues directly related to people

3.1 Woodlands in the Dartmoor Landscape

Woodland only covers 11% of Dartmoor, yet it dominates the landscape of the major river valleys, leading out from the high moor. While most of the woods are concentrated to the east and south of the park, there are also significant features to the west and north. The large upland oak woods on the steep, boulder strewn, valley sides, are the most characteristic, with smaller woods spreading into adjoining agricultural landscapes.

Small fingers of woodland extend up stream sides from farm land up onto the moor, creating both visual and wildlife links between the two landscapes. There are opportunities to strengthen and improve these links through natural regeneration and creating new native woodlands.

The large number of hedgerow trees and small groups of trees give many parts of the park the appearance of being heavily wooded, even when the actual woodland area is small. Management of these trees will require careful consideration in relation to their overall contribution to the landscape. Much of the eastern part of Dartmoor is a complex mosaic of fields and woodlands which need to stay in scale with each other.

Broadleaf woods have been planted on lower ground, while scattered broadleaf and conifer shelterbelts have frequently been planted on upland farms. Many of these have an even age structures and little natural regeneration.

More recent planting of exotic conifers has accompanied the building of reservoirs, and large scale upland conifer planting between the world wars. These have developed over time into a series of varied landscapes, and robust habitats, well suited to large scale recreational activities. There continues to be concern regarding the visual and environmental impact of conifer plantations on both the high moor and on ancient woodland sites.

This strategy aims to integrate with others, such as the moorland vision, which aims to maintain the wild character of the open moor.

3.2 Biodiversity

The Dartmoor Biodiversity Action Plan (Action For Wildlife 2001) has created a framework for protecting and improving woodland biodiversity, which is tried and tested.

The BAP has a specific Habitat Action Plan for woodlands, with targets contributing towards 13 woodland objectives. There is also a Habitat Action Plan for field boundaries, isolated tree and veteran trees.

Individual Species Action Plans for the blue ground beetle and dormouse are particularly relevant as these require specific woodland habitats. Other key species which occur in Dartmoor woodlands are wild daffodil, buzzards, bats (14 of the 16 Dartmoor species) and a number of moss and lichen species.

Dartmoor ASNWs are particularly important for their richness in lower plants, while nightjars, crossbills, goshawks and Dorset heath are important species found within conifer plantations. Some woodland strategy issues such as scrub encroachment can affect other key habitat types, for example moorland and Rhôs pasture. Species such as salmon and otter use rivers which pass through woodland and can be affected by management.

Agencies seeking to raise the quality of woodland mangement have highlighted the need for more effective site monitoring for biodiversity. Large amounts of existing information from the National Vegetation Classification Survey and other sources, needs analysing and collating with respect to woodland targets. Web based data platforms, such as the National Biodiversity Network and English Nature's "Biodiversity Action Reporting System" (BARS), are making it easier to access and share information.

In order to comply with the UK Forestry Standard, woodland owners need to provide evidence that they are taking positive action for biodiversity in their woodlands (ancient and PAWS sites in particular). Much good work is already being undertaken to support biodiversity, access and cultural features, but at present little is being formally recorded. The UKWAS system of record keeping could be more widely adopted.

This strategy embraces all the relevant aspects of the BAP, and will assist in achieving agreed targets. These have been incorporated into the individual strategy action plans. The Dartmoor BAP is a ten year plan which will undergo an interim review in 2006.

3.3 Education

The National Park Authority wishes to see all Dartmoor woods managed in a sustainable way. There is no better way of demonstrating this achievement than through an educational programme that covers all the aspects of conservation and sustainable timber production.

The Woodland HAP Objective 12 seeks to encourage public understanding and appreciation of the wildlife resource on Dartmoor, specifically seeking opportunities to promote good woodland management practice and public enjoyment of woods. More events and demonstration days are planned for National Parks own woodlands.

There are opportunities to develop educational links with the forest industry, both academic and skills based. Academic links can introduce woodland owners to innovation and new technologies. Training links help to maintain the pool of skilled workers within the park. Bringing growers, processors and users together through "Woodmeet" and other initiatives can lead to mutual benefits and new ideas.

Many woodland owners are keen for their woods to be used for educational or training activities. A register of sites may be useful in developing new initiatives, and to take pressure off sites which are over visited or degraded from too many research or study projects. This information can be made available over web links.

There is an increasing skills deficit among forestry contractors, as they find it difficult to invest in staff training. This comes at a time when health and safety, and quality standards, require ever higher levels of training for forest workers. These need to be achieved to comply with UK Forestry Standards, and to obtain basic insurance cover. Current skill levels (and investment in machinery) can only be maintained through the development of profitable local timber markets.

In the consultation draft of the English Woodland Grant Scheme it was proposed that all applicants would have to provide evidence that health and safety and training standards are being met.

3.4 Access and Recreation

In general terms existing access to woodlands in the park is good. The NPA access policy seeks new and improved access to woodlands where they are large enough, with specific reference for horse riders and cyclists. There are also needs to provide opportunities for access by local residents and communities. Any increase in visitor numbers must be taken into consideration so as not to pose any threat to wildlife or archaeological features. In many cases access at specific times for events or activities is preferable, and causes less disturbance, than people visiting continuously.

It is possible that in the future new through routes or woodland trails can link up through valley systems, where owners come together to attract or redirect visitors through their land.

The South West England Woodland and Forestry Strategic Economic Study (2002) found that the tourism and recreation value of South West woods was between £300 and £375 million, while timber production was only worth £17 million per annum. Ironically those responsible for maintaining the woods see little of this benefit themselves.

Many private woodland owners find it difficult to compete with the public and voluntary sectors that are subsidised or grant aided, in order to provide facilities for visitors without charge.

Woodland owners need to be encouraged and assisted in taking advantage of the growing interest in outdoor sports, activities and healthy living activities. The Forestry Commission are developing an "Active Forest" project promoting such activities in their woods, and the Dartmoor Forest Project will specifically develop outdoor activities and education in the high moor plantations. It is hoped that in future other owners may be able to benefit as well.

Woodlands have increasingly grown in importance as a site for sculpture or art installations, and are often integral to the overall artistic experience. The special status of Dartmoor woodlands, provide exceptional opportunities for a wide range of visual and performing artists. The arts are a major driver for tourism and cultural development throughout the region.

While visitors are happy to support local farmers by buying local agricultural products, they are less aware of the benefits of purchasing local timber. Woodland interpretation has moved on from the days of the wildlife information board, and there is a need to engage visitors in a wider range of issues such as using locally grown timber, woodland skills and habitat management. Best practice needs to be promoted.

Access improvement and development may well form part of farm tourism projects supported through the Rural Enterprise Scheme or other ERDP measures. Under the proposed EWGS, grant aid may be available for access and interpretation works at up to 50% of costs, through the Woodland Improvement Grant.

3.5 Woodland Regeneration and control of invasives

Encouraging woodland regeneration is essential in achieving sustainable woodland management. In ASNWs and other broadleaf woodlands, it is important to encourage natural regeneration, and action is required to improve the age structure within many woods. This may involve a range of silvicultural options from group selection to coppicing depending on site conditions.

There has been a general trend to allow areas of traditional oak coppice to grow on to high forest. Most oak woodlands have a slowly reducing number of stems per hectare as larger standard trees dominate the canopy. Present management guidelines are not clear as to the most suitable silvicultural options for Dartmoor oak woods.

At the present time there are no available guidelines for advice as to when and where recoppicing may be considered as a suitable form of regeneration. Similarly there are no local guidelines on how to regenerate oak through group selection or shelterwood systems.

There are few examples of successful oak regeneration on Dartmoor, and favoured methods are time consuming and expensive.

Some conifer plantations on more sheltered sites may be suited to regeneration through group selection or shelterwood systems. Continuous cover forestry is helpful in maintaining landscape screening or shelter on certain sites. This is seen as a welcome additional improvement to forest restructuring, and in time will lead to a new habitat type on the moor. Continuous cover is not seen as being appropriate, or practical, over all areas.

Species such as Nightjars (Woodland HAP Objective 9c) require significant areas of open ground habitat, and these require careful planning when considering restructuring plantations.

Grazing from sheep, cattle or deer restricts natural regeneration of broadleaf and conifer species, and can severely damage coppice regrowth. All woodland requires carefull assesment of grazing pressure before management objectives can be set.

Pest Managment

Woodland regeneration depends on achieving a balance of grazing pressure from deer, occasionally rabbits and other mammals, and damage to young trees from grey squirrels. Pest management is an essential part of sustaining semi natural woodland of all types, including areas of minimal intervention. It is important that it is given high priority at all times.

There is evidence to suggest that increased browsing pressure in ancient woods is reducing biodiversity. Deer numbers are now so high that efforts to regenerate hazel coppice on Dartmoor have only been successful where deer are excluded by fencing. Muntjac, which can cause extensive damage, have recently become established in the Teign valley.

Control is most effective when undertaken throughout valley systems on a co-ordinated basis. Recent pilot initiatives by the NPA appear to have been successful. Support and encouragement to develop local management groups will be essential to address the issues of fraying, browsing and bark stripping.

Woodland fencing may be required around some or all of a wood in order to promote natural regeneration or coppice regrowth. This should be assessed as part of a farm environment plan in applications for entry or higher level stewardship.

Control of Invasive Species

Woodland regeneration can be severely restricted by invasive rhododendron and laurel, or regeneration of undesirable tree species may occur. Control or eradication of invasives is expensive, particularly on Dartmoor where terrain and access preclude the use of machines for removal, so eradication has to be seen within the context of overall biodiversity improvement.

At the present time there is some disagreement as to the relative level of threat to woodland habitat from invasive species. While it is widely recognised that woodland biodiversity can be greatly improved through the removal of Rhododendron ponticum or Laurel, there is less agreement as to the urgency of controlling Sycamore or Beech regeneration.

There are specific Dartmoor woodlands where Sycamore has started to dominate the canopy, and is reducing biodiversity in localised areas. Beech is more widespread in valley bottoms and can be a long term threat to biodiversity. In many parts of Dartmoor, Sitka Spruce, Western Hemlock and Scots Pine regenerate from seed in enormous numbers. Many conifer plantations can be regenerated without replanting, but in many broadleaf woodlands and PAWS sites, widespread conifer regeneration is detrimental. There is also widespread regeneration of Sitka Spruce on the high moorland, adjacent to plantations. This will require careful cutting where it is insufficiently grazed off.

Woodland Owners should also be aware of the need to control Japanese Knotweed, Himalayan Balsam and Giant Hogweed, especially near watercourses. Japanese Knotweed spreads rapidly within woodlands often originating from road side colonies.

It is proposed that landowners be given assistance and encouragement to remove <u>all</u> invasive species where they clearly threaten biodiversity.

High targets have been set in the respective action plans for removal of the main invasive species

- To keep core areas of Ancient Woodlands as free as possible of all invasives, including Beech and Sycamore, by 2010.
- To remove Rhododendron ponticum and Laurel from all ASNWs by 2020
- To remove Rhododendron ponticum and Laurel from all PAWS where it threatens relict vegetation by 2020
- To reduce the area of Rhododendron ponticum and Laurel from all other broadleaf woods by 2020
- To reduce the area of Rhododendron ponticum and Laurel in all conifer plantations by 2020
- To review the overall threat to habitats caused by conifer regeneration, and remove from primary habitats especially upland heathland

Landowners and managers have been aware of their detrimental effects for many years, and a concerted effort is now required to remove them from the Dartmoor all together before the populations reaches the extremes experienced on Exmoor and in other protected landscapes.

3.6 Archaeology in woodlands

Good progress has been made in recent years through consultation with Forest Enterprise to protect features from trees or forestry operations. It is hoped that the DPA/FE/DNP working party will continue to operate. Nevertheless there are insufficient resources for ongoing monitoring of known sites. Owners and managers are often unaware of the presence and fragility of archaeological features or risks to many smaller unscheduled archaeological features within their woodlands; consequently many such features remain unprotected.

There are particular concerns regarding old industrial archaeological features such as mining, many of which are of national importance. These are common in many Dartmoor woodlands. Additional protection and conservation work is urgently required.

There is also a need to protect landscapes of archaeological/historical value in their entirety, which will have implications in the planning of new woods and secondary restructuring.

Improvements in the standards of woodland management, and the adaptation of best practice should continue to be sought.

Work in recent years to remove conifers from close to archaeological sites in Forest Enterprise woods has been extended to create visual links between sites. Further improvements will be possible as plantations mature.

3.7 Communication

With possibly over 500 woodland owners on Dartmoor and large numbers of woodland workers and other stakeholders, it is important to be able to exchange information and views between all groups. This will be greatly assisted by the DNPA Ancient Woodland Project which will hopefully have sufficent funding to start in the spring of 2005, when it will be ble to help promote the new defra and FC grants.

There is significant potential to develop the National Park Website with a series of pages aimed at forestry and woodland stakeholders. Links through to Dartmoor or South Devon Woodmeet would provide notice board and interactive facilities. Links through to community and educational sites would all help to improve understanding. Information could also be made available to arboriculturalists on general tree care and veteran trees in particular.

Woodmeet in Cornwall has already shown that local web sites are used by over 50% of those involved in woodland trade. This has to be resourced in order to keep the site up to date and e-mail notices circulated. South Devon Woodmeet is due to be launched in March 2005. Provision will need to be made to fund Woodmeet beyond 2008.

3.8 Climate Change

Warmer winters and less rain falling over shorter periods may lead to a degradation of biodiversity in upland oak woodland, in particular their bryophytes and ferns. Higher levels of atmospheric CO2 may lead to increases in tree growth rates, but these may possibly be balanced out by new pathogens, increased deer and rabbit numbers, and more frequent storm damage.

At present, the Forestry Commission is undertaking climate research in the south west region, and relevant findings need to be widely disseminated as and when they become available. Other local studies of phenology already indicate a wide range of changes in flora and fauna behaviour linked to climate change.

Where trees are being grown principally for commercial timber, growers may need to review their seed provenance. In all other situations it is felt that there is more than sufficient diversity within the existing gene pool for adaptation to take place without any further enrichment.

Much of this strategy focuses on the need to protect ASNWs, and what can practically be achieved within the next 5 years. Current opinion recommends that ancient woodlands be enlarged and linked together through native planting or natural regeneration. This will increase the size and variation of the available genetic pool, giving woodlands greater capacity to adapt to climate change. This is one area where we know that short term action is required and will be effective in the future.

It is recognised that climate change is largely a consequence of fossil fuel usage. Any action to promote wood as a sustainable fuel, either as firewood, wood-heat or for wood energy production will be beneficial.

3.9 Protection of Ancient Woodlands

The ancient semi-natural woodlands contribute to the wildness and character of the National Park. Covering 2750 hectares, these woods make up 27% of all Dartmoor woodlands.

The Woodland HAP has 4 objectives which apply to ASNWs and progress is being made towards the following targets:

i) Maintaining the existing 2,750ha of ASNW (i.e. No loss of any semi-natural woodland on the DNPA section 3 conservation map)
ii) All 2,750 ha to come under favourable management, which promotes sustainable natural regeneration, including minimal intervention where appropriate by 2010.
iii) Applying species action plans on identified sites and promote appropriate management at sites where wild daffodil occurs.
iv) Applying species action plans for mosses, lichen and ferns.

95% of all SSSI woodlands have now been brought into a favourable condition, as defined by English nature. This is a key objective which has already been achieved for the Dartmoor BAP. Some sites fall into the target definition of "unfavourable recovering" because of the long term nature of habitat restoration, but attention can now be focussed on the remaining 5%.

Many areas of ASNW will be best kept with as little human interference as possible, and should be managed as areas of non intervention or minimal intervention. It is important however that these areas are clearly identified and not simply a favourable consequence of benign neglect. At present very few ancient woodlands have a long term regeneration plan and only 30% are under any form of management agreement.

The Forestry Commission have recently drawn attention for the need to reduce the loss of ASNWs. Care will need to be taken to ensure that the minimum area of woodland is damaged when constructing access tracks. On sensitive sites, other ways of extracting timber may be considered such as using horses or mini forwarders.

3.10 Plantations on Ancient Woodland Sites (PAWS)

There are 773 hectares of conifer plantations on English Natures register of ancient woodland sites within the national park. From the 1920s onwards private landowners were encouraged to replace traditional oak coppice with fast growing conifers. Today these are some of the finest conifer stands in the country, producing timber of a size and quality which are difficult to obtain from imported sources.

Despite the success of forestry on these sites, it is now recognised that many semi-natural species have survived, and in many cases the original habitat can be restored over time, where restoration policies are implemented at an early stage. Such is the wildlife importance of ASNWs at both local and international level that restoration of these sites is now viewed as a priority.

It is recognised that a greater proportion of the original flora survives in younger, first rotation, plantations than in older plantations where plants may only have survived on the edges. Some ASNWs were still being converted to softwood as recently as 1985. PAWS are far from uniform. While the best sites are highly productive and have good access, there are many isolated poor quality plantations with little long term timber value.

UKWAS has produced an evaluation system to enable owners/ managers to identify

i) Priority areas for restoration
ii) Areas where environmental values can be enhanced
iii) Other areas where biodiversity interests can be maintained within plantations.

This could be used as the basis for assessing priority areas for conversion. The FC have also produced an assessment guide for PAWS in their Practice Guide (No 12). The UKWAS guidelines are currently under review, and targets and priorities may be

changed over the next few months. A simpler set of guidelines for PAWS management and restoration are currently under development by the Woodland Trust. These are principally to help woodland owners.

There is a conservation objective (Objective 3) within the Woodland HAP to start converting 110 ha of PAWS by 2005. This figure is broadly in line with the UKWAS guidelines, and the BAP target has already been agreed with local stakeholders. Extending these targets will only apply to sites where owner objectives are compatible with full or partial restoration, and conversion will continue to be seen as being entirely voluntary.

Over 14 hectares of conversion had been successfully completed by 2004. Plans are in hand for restoration of a further 15 hectares in 2004/05. There is also a Woodland HAP objective to identify a further 40 ha of PAWS for conversion by 2005. The National Trust, Woodland Trust and DNPA are all committed to supporting a programme of local PAWS restoration.

UKWAS targets for PAWS conversion also consider factors such as sustainable timber production and employment. These will be a useful guide when setting future BAP targets and will help to assess the wider impact of conversion on Dartmoor as a whole.

While conversion of PAWS will take place gradually, it is important to take immediate action in almost all PAWS to protect relict and residual vegetation. Conifers need to be thinned or removed in order to conserve broadleaf trees, coppice stools or areas of relict ground vegetation This can be undertaken during normal forestry thinning or felling operations but needs to be incorporated into management plans and work specifications. In many PAWS where thinning has been delayed, urgent action is now required.

There are many PAWS on Dartmoor which already combine sustainable timber production with the conservation of relict ancient woodland features. It may be possible to further improve their wildlife value through linking adjoining areas of ASNW as part of long term plantation restructuring. Expert advice will need to be given during consultation.

3.11 Other Broadleaf Woodlands

There are 4500 ha of broadleaf woodland on Dartmoor, which have either been planted or have established themselves from natural regeneration. These include shelterbelts, broadleaf plantations and many woods originally established in mixture with conifers. They play an important role in the landscape, and in many cases extend or link areas of ancient woodland.

Issues include :

- Neglect
- Low timber values due to poor or no access
- Over mature Beech shelterbelts in a state of collapse.
- Grazing.
- Awareness of habitat importance of wet woodlands.

Woodland owners choose to neglect their woods for a variety of reasons which include cost, difficulty of access, public relations, lack of information and fear of red tape. These barriers to motivation and action need to be studied in more detail so as to obtain a more objective and detailed picture as to why previous initiatives have only been partly successful. Information leaflets on woodland management tend to be either very general or highly prescriptive. Grant applications are also perceived as being complex and requiring expert knowledge (see appendix glossary note)

Woodland HAP objective 1 is hoping to bring 1000ha of other semi-natural woodland under 'favourable management' by 2010. Where woodlands already have a good structure and are free from exotic species, this may be achieved through minimal intervention or non interference. Elsewhere owners will be encouraged to take advantage of new grant incentives.

3.12 Conifer Plantations (other than PAWS)

There are over 3900 hectares of conifer plantation within Dartmoor, and in its management plan the NPA aims:

- To secure the best possible integration of conifer plantations into the landscape;
- To conserve and enhance the quality and wildlife interest of woods in the landscape;

Restructuring

The Woodland HAP Objective 11 requires all plantations to meet the UK Forestry Standard by 2010, with specific reference to the creation and management of open spaces for wildlife. Many plantations already meet these standards, but there is very little reporting or monitoring to show just how much work is going on at present.

Many younger plantations however are no longer being thinned and there are insufficient opportunities to remove trees from the edge of clearings, or to create new open areas.

Woodland HAP objective 9 requires all plantations over 5ha to have an FC approved management plan by 2010, to encourage age and species diversity within plantations. This will provide suitable habitat for birds of prey, crossbills and nightjars. In the present economic climate, this will be a difficult target to reach.

Factors such as low softwood prices and mechanised harvesting also reduce the number of plantations being thinned. This is significantly reducing native ground flora and shrub layer recolonisation, and the potential for future recreational uses is also reduced. It is vital to support action to stimulate local markets for small diameter conifers.

The Environment Agency are keen to improve water quality of streams and watercourses through the removal of overshadowing conifers. This has been recommended practice for 30 years, and it is now seen as a priority that dense shading conifers are removed from stream sides. Sufficient canopy space should be created to allow broadleaf vegetation to colonise. There is less urgency to remove trees in cases where the conifers are large or scattered and a broadleaved shrub layer has already developed along the stream.

Conifers within the landscape

To date restructuring of plantations has significantly improved their visual appearance, and has enhanced water courses and other habitats. The Forest Enterprise and private growers have already taken significant areas of conifer out of production.

The Moorland HAP Objective 1 has a target to recreate 50 ha of moorland from afforested land by 2005, and to seek further opportunities for moorland restoration by 2010. Progress to date has been very successful.

At present there are no proposals for additional changes to the conifer plantation on semi natural moorland sites, though concerns continue to be expressed in relation to their visual and environmental impact. Under the existing policy framework, the opportunities for further conifer withdrawal are limited, and may require the establishment elsewhere of new and equivalent plantations in mitigation.

In the past this has proved complicated, and it appears that the policy framework itself may need updating.

The present regional framework for forestry is under review, and will be considering the environmental impact of plantations on different habitats on a regional basis.

In reviewing the policy framework it will be important to consider the long term economic and social implications of further conifer withdrawal, as the Forest Enterprise plantations are key to maintaining a forestry contracting capacity on Dartmoor
At Soussons plantation, rather than remove trees completely, work has focussed on allowing Birch and Willow to regenerate on plantation edges, creating new areas of semi natural woodland.

Areas within Fernworthy and Bellever forests are being managed by Forest Enterprise under a continuous cover regime, with no clear felling. These form part of a national study to assess the feasibility of continuous cover techniques and their environmental and landscape impact.

Further policy discussions on the future of the upland plantations will need to take a very broad and informed view of all the relevant options.

3.13 New Woodlands

The Woodland HAP target is to create 75 hectares of new native woodland over the next 10 years, which either extend or link existing areas of ancient semi-natural woodland. Over 53% of this has already been established. The Woodland HAP also seeks to establish up to 75 hectares of new native woodland elsewhere in the park, and to date 80% of this target has been achieved.

The Woodland HAP objective 10, requires that no further plantations are established on important semi-natural habitats. (Some exceptions may be considered for small scale woodland planting, where sites are already degraded and the landscape and wildlife gains clearly outweigh any possible habitat loss.)

Changes in agricultural support payments have led to a reduction in grazing on some areas of common and farm land. Some of these are being colonised by scrub which in time will become native woodland, with the potential to extend this natural process and occasionally link existing ancient woodlands. It is anticipated that these areas will be extensive on some parts of the moorland edge.

Community based tree projects, such as the Woodland Trust and Moor Trees, are helping to achieve woodland creation targets. Their projects are of a very high environmental quality and can involve large numbers of volunteers. The work of Moor Trees, for instance, has helped landowners to establish 4.5 ha of native woodland through their free advisory service and provision of trees and volunteers.

The planting grant structure will tend to direct new planting to areas of improved agricultural land of lower ecological interest. While there are BAP targets for planting new native woodlands, landowners should not be discouraged from establishing hard or softwood plantations on suitable sites for quality timber production.

Whatever the objectives of management, it is hoped that all new woodlands will meet higher standards of planning and maintenance than in the past. Specific guidelines for locating the most suitable land for new woodlands have been drawn up and can be found in Action Plan 4.1 on page 25.

3.14 Non Woodland Trees

Trees in hedgerows, parks and gardens make a vital contribution to the Dartmoor landscape, wildlife and environment. A wide range of measures are necessary to ensure the conservation of this resource.

Within the Dartmoor BAP there is an action plan which, amongst other things, seeks "to maintain the overall numbers of isolated veteran and hedgerow trees at least at the present level, through ensuring a balanced age structure."

This will be a major challenge for the Environmental Stewardship schemes to ensure that hedgerow management protects veterans and promotes the growth of new trees.

Many Dartmoor land owners and residents value their trees and employ skilled arborists to manage them. Improved communication and co-operation between practitioners could help to raise awareness and achieve strategic objectives.

It is now unusual for a Tree Preservation Order to be served on large areas of woodland as these are quite adequately protected by the Forestry Act and other legislation. Existing TPOs are regularly reviewed by the NPA, and they remain an effective tool for protecting trees particularly on development sites.

Veteran and historic trees are increasingly recognised for their social and educational importance, as well as their environmental value. The Woodland HAP Objective 5 'seeks to retain veteran trees and to ensure long term existence of such trees, especially in parkland'. This will require the identification of potential future veterans, and support for pollarding and other protection work. The lack of young and medium age pollards may require targeted action in the future.

Veteran trees are also found within woodlands and in PAWS where urgent action may be needed to remove over-shading conifers.

Veteran trees in woodlands can receive Woodland Management Grant under the new EWGS, or support through higher level stewardship. Oak coppice stools are often very old with a lichen and bryophyte flora not found on the younger stems. Many of these should be treated as veterans and re-coppiced in order to maintain their structure.

3.15 Orchards

In 1960 there were some 780 orchards within the park. By 1997 321 of these had been lost completely and only 46 were being managed. Only remnants of these traditional features now remain, and these are often of great wildlife and landscape interest.

While measures to raise awareness of orchards have been successful, the actual area of orchard restoration has been small.

New Defra support for orchards through the higher level stewardship scheme will assist many owners to restore surviving orchards on a much larger scale.

3.16 Woodland owned by the National Park Authority

Over many years the National Park Authority has bought or acquired woodlands for strategic or nature conservation reasons. The park now owns 130 hectares of broadleaf woods, and has management agreements covering a further 410 hectares. These agreements require review in light of the increased protection which woodlands now enjoy and the changes to the support mechanisms. Many of these woods have been restored by the NPA, and/or public access has been secured where possible.

These woods have achieved certification under the UK Woodland Assurance Scheme.

The woodlands could be more frequently used as demonstration sites of best practice and as training facilities for woodland owners and workers. This could cover any combination of management topics from timber harvesting or biodiversity to archaeological conservation or pest control.

Dartmoor National Park Authority may also look at whether some of the fully restored woods might be sold, with protective covenants, and the sale proceeds used to purchase new woodlands which urgently require restoration.

3.17 Support for Woodland Owners

A key component of this strategy will be to co-ordinate a range of support measures for all woodland owners which aim to maintain woodland capital values in the long term. This will require owners working in partnership with each other, local timber users and in some cases with local communities in order to access additional grant funding.

Owner and wood user groups have greater potential than individuals to access funding, support and information. Woodmeet is a simple and effective mechanism to bring common interest groups together.

Many owners choose to manage their woods specifically for conservation objectives. Indeed some have been acquired specifically for that purpose. More support may be

available in future from the voluntary sector, or through partnership with community projects, for example through use of the New Opportunity Fund or lottery grants.

3.18 Support for the Forest Industry

Dartmoor National Park is in partnership with South Devon and the Tamar Valley Areas of Outstanding Natural Beauty to develop a local wood marketing project to promote the use of local timber and to assist producers and processors in the area. The "Working the Woods" project will include the setting up of local Woodmeet groups to improve communication between wood producers, processors and users.

Many skilled forest workers and timber processors have left the industry in recent years. There is a need to develop employment opportunities, and develop skills across the sector. With falling profits and staff numbers, the industry has struggled to cope with developments in areas such as quality standards, health and safety, environmental protection, management for biodiversity, and embracing new technology.

This strategy should assist the industry in maintaining a critical mass on Dartmoor, ensuring continuity of employment for contractors, reasonable access to timber and new market opportunities. These are essential for sustainable woodland management and long term habitat maintenance.

Existing projects and new initiatives need to form part of a co-ordinated strategy which would apply to a much larger area than just Dartmoor. Closer co-operation with the South West Forest Project is proposed.

4. Action Plans

The Action plans are arranged in 15 subject areas relating to woodland and non-woodland trees Actions are detailed for the period up to and including 2010. Some targets are already set for 2015 though we feel that most targets will need to be reviewed after 5 years, as so many action points depend on short term funding arrangements.

Action Plans 4.1 to 4.5 are cross cutting measures relevant to all or many types of woodland.
Action Plans 4.7 to 4.13 are concerned with resource issues, and are type specific.
Action Plans 4.14 and 4.15 are issues directly related to people

Priorities for action over the five year period will help achieve :

- **A core network of valued and protected ancient semi natural woodlands which are in favourable condition.**
- **A vision to significantly increase the area of semi natural woodland in the park through a combination of natural regeneration, new native woodland planting and conversion of plantations on ancient woodland sites.**
- **Action to provide buffer areas and linkage between ancient woodlands through strategic management of broadleaf and conifer plantations.**
- **A greater understanding of the issues and interests required to assess the future role of conifers on sensitive areas of semi natural moorland.**
- **A viable forest industry within the Park.**
- **Further opportunities for education and interpretation**
- **Wildlife, landscape and archaeological conservation**
- **The protection and establishment of individual trees and orchards**

Photograph of natural regeneration on upland stream side

4.1 Action Plan for New Woodlands

Action will establish new woodlands on appropriate sites which help to achieve strategic objectives.

Action towards the Dartmoor BAP
Woodland HAP Objective 2
Create 75ha of new native woodland over 10 years focussing on linking and enlarging existing ancient semi-natural woodland, using natural regeneration where possible.
Create 75ha of additional new native woodland elsewhere over 10 years
Woodland HAP Objective 10
Ensure that no further plantations are created at the expense of important semi-natural habitats such as oakwood, upland heath, species rich grassland or scrub.

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
Establish 50 ha of new native woodland	Land adjoining or linking ASNWs Restore woodland valley landscapes through new natural network project	DNPA, Defra & Ancient Woodland Project in liaison with landowners and project partners.	EWGS & HLS Some additional funding required Aggregate levy and landfill grants.	2010 Outline project by Summer 2005 Submit bid by mid 2006
New woodlands are of appropriate scale, location and quality	Planting to follow new guidelines (see page 25) All info on DNPA woodland website	DNPA, FC & Defra	Through HLS & EWGS	2005 onwards
Higher quality new woodlands that achieve stated objectives	Ensure that standards of planning, design and maintenance are improved.	FC, DNPA,	Through HLS & EWGS	2005 onwards
Better social links and more community involvement	Promote existing and proposed projects DNPA web site & community links.	DNPA, FC, Moor Trees, ITF, DWT, etc	EWGS, Community environmental funds.	Ongoing

The following General Guidelines have been drawn up with DNPA to advise on the preferred location of new plantations.

New woods will not be planted on important existing semi-natural habitat, and in most cases will be restricted to improved agricultural sites. This is likely to be a compliance requirement for EWGS.

Size and design of new woods will need to match local patterns, and should not significantly change the proportion of woodland in existing landscapes. Under the proposed EWGS, new woods must "take into consideration the cultural and historic character of the surrounding countryside".

It is essential that the integrity of historic landscapes is not adversely affected by inappropriate or piecemeal planting. Closer consultation with regard to archaeological and landscape features is necessary, in addition to prior archaeological field survey.

In general new planting should be avoided within areas of ancient fields close to moorland, commons and isolated settlements. It may be appropriate to extend valley woodlands up onto higher ground where they will form a natural visual feature, but they will need to conform to the topography and the extent of the existing tree cover. Existing field patterns, boundaries, trackways and other features must be maintained.

Example:

Photo showing ancient field pattern where planting would disrupt the landscape

New planting will be encouraged within river valley systems where woods already dominate the landscape. These may vary in scale from large projects in the major valleys such as the Dart or the Teign, with smaller areas being more appropriate in minor river valleys. Care must be taken not to obliterate views or to reduce the quality of the overall landscape.

Example:

Photo showing areas where new planting would compliment existing landscape.

Many landscapes in the east of the park are characterised by small scattered woodlands across undulating terrain. Great care needs to be taken here to ensure that any proposed woods are of an appropriate size and location in relation to other landscape features.

There are many suitable sites to plant larger areas of woodland at lower elevation on the periphery of the park, and in areas where agricultural improvement has been most widespread.

Areas of new woodland that adjoin ASNW's should be native in character or contain a high proportion of native species. Species which might colonise or adversely affect the ASNW should be avoided. Wherever possible natural regeneration should be encouraged to make full use of local genetic stock. Forestry Commission Bulletin 112 guidelines should be followed to create a 'near natural' appearance and future structure.

Owners should be encouraged to design woods which link or extend areas of existing woodland, and where appropriate larger projects should link isolated valley woodland systems together.

New woodlands should demonstrate a high quality of design to meet present and future objectives of management. Particular concern has been raised regarding the standard of maintenance of newly planted trees. New planting proposals should also include details of the proposed maintenance schedule, and a commitment to carry them through.

In recent years the ability to establish broadleaf woodlands with conifer nurses seems to have been lost. This technique was once common on Dartmoor but relied on good markets for small thinnings, low labour costs and high levels of management. Until these conditions return in some form, conifer nurses will always tend to overtop and shade out the broadleaves.

4.2 Action for Woodland Regeneration

Action will ensure Dartmoor woodlands maintain their ability to regenerate, and valuable trees are not at risk from damage.
That pest management does not compromise biodiversity or recreation objectives.

Outcomes	**Target**	**Organisation**	**Funding**
Levels of natural regeneration are adequate to sustain the woodland resource.	To develop cost effective co-operative methods of pest control and reducing grazing in order to achieve agreed silvicultural and biodiversity objectives Improve woodland fencing through Environmental Stewardship. Inform owners of the need for pest management, and engage key stakeholders Provide info on pest control and stalking services via DNPA website.	DNPA, Defra, FC, EN, Woodmeet, deer liaison group, local control groups	HLS, EWGS, DNPA, EN Additional funding required
Good public relations, generating wide support for deer and squirrel control to ensure that wildlife objectives are met.	Agree publicity and communication protocols. Promote need for pest management. Use DNPA web site. Assist FC in monitoring and research control measures.	DNPA, FC, Woodmeet, Local control groups	
Improved market for local wild venison	Investigate local food link support	DNPA, FC, Woodmeet, local control groups, Countryside Agency	ERDP
Achieve regeneration in all woodlands through greater use of natural regeneration	Encourage continuous cover forestry on suitable sites. Review FE Continuous Cover project (Dartmoor linked to 12 other UK sites) Promote regeneration in oak woodlands through use of demonstration sites and publicity.	FE & FTA DNPA, FC and Defra Ancient Woodland Project & EN	FC FC, EN
Achieve oak regeneration through coppicing as examples of traditional management and habitat conservation.	Determine a realistic target for active oak coppice management across Dartmoor.	FC, DNPA, EN Ancient Woodland Project	EWGS

4.3 Action Plan for Education

Action will ensure that the forest industry recruits and retains skilled staff, new education initiatives supported, and greater awareness of woodland management issues.

Action towards Dartmoor BAP
Woodland HAP Objective 12

Encourage public understanding and appreciation of the wildlife resource, where this does not conflict with its conservation.
Seek opportunities to promote good woodland management practice and public enjoyment of woods.

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
Good woodland management more widely recognised	One demonstration event /walk/talk each year in DNPA woods, & other woods, for owners & industry.	DNPA, EN, Silvanus Trust, Forestry Trust for Education, WT & NT	Timber Trade, educational trusts	
Forestry training to be available and adequately funded	Promote existing training opportunities Explore grant aid and training subsidy. Link with other regional initiatives Provide web links from woodland page. Opportunities for farmers to diversify.	DNPA, Silvanus Trust, Woodmeet South West Forest Owner and contractor groups.	DES, ERDP, RDA, DTi & European social fund.	2005 onwards
Woodland accreditation schemes to be developed so that woods are approved for training and educational uses	Develop register of woodland owners who can host education and training events (insurance and risk assessment in place) Provide info on DNPA website + schools links.	DNPA	EWGS, HLS	2005 onwards
Woodland industry is better able to access new technology and skills.	Encourage educational links at all levels, with particular emphasis on vocational training and technology & knowledge transfer	Woodmeet, owner and contractor groups, FE, colleges etc.	Explore options for funding	2005 onwards
New educational activities encouraged	Support Forest Schools and other projects involving alternative uses of woodland.	DNPA, Silvanus Trust, FC.	EN	2006
Forest industry to comply with UK Forestry Standards	Assist owners and contractors to meet health & safety and training standards. Provide information & links on web site.	DNPA, Woodmeet and other tree and woodland groups	FC, insurers, forest managers	2010

4.4 Action for Access and Recreation

Action towards Dartmoor BAP
Woodland HAP Objective 12

Encourage public understanding and appreciation of the wildlife resource, where this does not conflict with its conservation.

Seek opportunities to promote good woodland management practice and public enjoyment of woods.

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
Access infrastructure improved	Improvement to statutory and non statutory rights of way, gates, stiles etc, information boards and way marking	FC, DNPA, Defra Owners	HLS, EWGS, community project funding.	2005 onwards
Quality of woodland recreation activities & experience improved	Provide & share advice on best practice & planning issues. Support FC Active Woods Campaign and Moor Forest Project	DNPA, Defra, FC, Woodmeet, Owners and managers	FE, HLS, ERDP, DNPA, Private investment	2005 onwards
Visitors and residents actively supporting woodland management through purchase of local products	Develop local product links	DNPA, Working the Woods project	New funding required Some support possible through EWGS and ERDP	2005 onwards
More visitors and residents attending events and activities	More effective publicity and info on DNPA website and links. Moor Forest Project	DNPA, EN, WT		2005 onwards
Sensitive sites to be better protected from disturbance	Information for ASNW and SSSI owners	FC, DNPA		Review through EWGS and monitoring
One new woodland recreation facility or one new major access route created	Promote woodland recreation as potential farm diversification	NPA, Defra, FC	ERDP Environmental Stewardship & EWGS	Achieve by 2010

4.5 Action plan for archaeology in woodlands

Action will ensure higher levels of protection of features, improved monitoring and greater awareness of their importance.

Outcomes	Target	Organisation	Funding	Time
For scheduled and unscheduled sites within woodlands to obtain higher levels of protection.	Undertake consultation through EWGS applications and UKWAS consultation as appropriate. Provide info on web page. Negotiate further withdrawal of conifers from sites at maturity.	DNPA / English Heritage		Ongoing new format from 2005
For sites to be monitored more frequently and improve information.	Encourage more owners to allow surveys as part of EWGS .	DNPA/ English Heritage, Defra	HLS, EWGS, English Heritage	Review opportunities through EWGS and sources of additional support
More conservation and remedial work to be undertaken on woodland sites	Explore potential for funding work through EWGS (max 50%) and HLS	DNPA/ English Heritage, Defra	HLS, EWGS, English Heritage. Top up funding required	2005/2006
Greater protection for woodland features of archaeological importance (Boundaries, charcoal hearths etc)	Raise awareness of need for protection and management as part of woodland management	FC, DNPA/ English Heritage, Defra	EWGS & HLS	

4.6 Action for Climate Change

Action will be taken to protect vulnerable habitats from possible damage and to reduce carbon emissions.

Outcomes	Target	Organisation	Funding	Time
Greater protection of ASNWs from adverse climate effects.	Linking ancient woods and creating buffer areas of semi natural vegetation. To have completed at least 4 linking projects.	DNPA, WT, MT, landowners.	DNPA , HLS & EWGS	Review in 2010
Improve future decision making	Collate and distribute relevant national and local research information. Raise awareness of changes in local phenology records.	FC,EN, EA, DNPA Woodmeet and web feedback. University links.	FC, EN, EA, DNPA Additional support required	Review in 2010
Reduce carbon emissions	Promote wood as a renewable fuel for heat and energy.	DNPA, FTA, FC, Working the Woods	RDA	

4.7 Action Plan for Ancient Semi-natural Woodlands

Action will improve the overall biodiversity of ASNW's though encouraging regeneration and removal of invasive species.

Action towards Dartmoor BAP
Woodland HAP Objective 1
Maintain the existing 2,700ha of ASNW including oakwood
Seek no loss of semi natural woodland included on the section 3 conservation map.
Woodland HAP Objective 4
Diversify the age and species composition of upland oakwoods to restore natural conditions, through favourable management in accordance with UK Forestry Standard.
All 2700 ha of ASNW to come under favourable management which promotes natural regeneration and minimal intervention where appropriate by 2010

These are major objectives for the National Park, who are launching a specific Ancient Woodlands Project in order to accelerate progress. Funding will soon be available for a 5 year advisory project. Additional support will also be required for a number of the agreed outcomes.

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
All ASNW's designated as SSSI to be in a favourable condition by 2010 and those outside SSSIs by 2015.	Launch Dartmoor Ancient Woodland Project Draft management plans for 250 ha per year. To monitor areas of management and minimal intervention and to promote best practice.	DNPA through Ancient Woodland Project & Working the Woods Projects and local consultants	EN, FC DNPA	5 year project from 2005
Achieve more natural regeneration and regrowth .	Control stock grazing Continue to support co-ordinated pest management measures Encouraging selective felling and re-coppicing in suitable areas	Defra, FC, DNPA, Deer Initiative Ancient Woodland Project & Working the Woods Projects	HLS, EWGS EN & WTW partnership	Review progress in 2010
Remove invasive species from at least 10 sites per year	Obtain additional financial support for eradication schemes.	FC, Defra ,EN, EA, DNPA	FC, HLS,EN, EA, DNPA Additional support required	All invasives cleared by 2020
No reduction in overall area of ASNW	Ensure ASNWs are all identified and owners are aware of importance. Review information boards and leaflets Provide owners with locally specific guidelines on habitat management Encourage owners to enter EWGS or manage through HLS	DNPA through Ancient Woodland Project & Working the Woods Projects	EN, FC, Defra, DNPA & WTW partnership	

4.8 Action Plan for PAWS (Plantations on Ancient Woodland Sites)

Action will ensure that areas of PAWS are restored or retain their relict and remnant vegetation in good condition.

Action towards Dartmoor BAP
Woodland HAP Objective 3
Initiate restoration of PAWS to broadleaves where conservation is prime objective of management, 110 ha by 2005
Identify other PAWS with good potential for restoration and prioritise 40 ha where management objectives are compatible with restoration to broadleaf woodland by 2005

It is clear that there is still much to learn about the management of PAWS, which sites should be re-converted to ancient woodland and which methods to use. While there are a number of unsuccessful plantations which will make good potential candidates for conversion, there are others for which conversion will have major economic and social impacts. Urgent action is required in many PAWS to conserve areas of relict vegetation , under threat from lack of conifer thinning.

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
Relict vegetation in improved condition on all sites where present	No forestry operations in PAWS to be approved without additional management of relict vegetation. Distribute local management guidelines and info on DNPA website.	DNPA, FC, Defra, Woodland Owners	Through EWGS, Ancient Woodland project and HLS	Action on all sites by 2010
Convert PAWS where NPA priorities match with owner objectives	Achieve BAP target. Target UKWAS priority woodlands. Calculate level of funding required for conversion of target areas, & obtain funds	DNPA, FC, Defra, Woodland Owners, Woodland Trust	EN, FC, HLS DNPA Charitable donations.	Maintain BAP target timetable 2010
Biodiversity of all PAWS sites improved	Assist owners/managers with restructuring plans and thinning operations. Remove main invasive species.	DNPA, FC, EN, Defra, consultants.	EWGS	Action in all PAWS by 2010
A long term local strategy is developed for management and conversion	Research into economic & social impact of conversion.	FC, FTA	RDA	Complete by 2010
Greater understanding of PAWS issues	Hold demonstration days at converted sites for owners & managers.	DNPA, FC, WT, NT, EN	FC, EN	Annually
Agreed future programme for conversion	Agree priority woods for future conversion and seek required funding.	DNPA, FC, WT, EN	various	2010

4.9 Action plan for other broadleaf woodlands

Action will ensure that broadleaf woodlands are better managed, there is more extensive woodland regeneration and fewer invasive species.

Action towards Dartmoor BAP

Woodland HAP Objective 1

Maintain 1000 ha of other semi natural woodland

Seek no loss of semi natural woodland included on the section 3 conservation map.

Woodland HAP Objective 4

Diversify the age and species composition of upland oakwoods to restore natural conditions, through favourable management in accordance with UK Forestry Standard.

1000 ha of other broadleaf woodland to come under favourable management by 2010

Woodland HAP Objective 8

Identify the most important wet woods for biodiversity and ensure that these are protected and managed appropriately

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
1000ha to be in an improved state of management by 2010	Promote EWGS and work towards Forestry Standard Provide owners with simple Dartmoor specific management guidelines and information on habitat management	FC, Defra, DNPA through Ancient Woodland Project + Woodmeet group	FC, HLS, DNPA Working the Woods partnership	2010
Main invasive species removed from at least 5 sites per year	Undertake removal from 25 sites by 2010 and set annual targets for complete removal by 2020 Develop quicker and cheaper control methods	FC,EN, EA, Defra, DNPA, MT.	FC, HLS, EN, EA, DNPA Obtain additional financial support for eradication schemes.	All invasives cleared by 2020
Native gene pool protected	Encourage natural regeneration FC/DNPA to insist on provenance for new native woods. Set up two local community tree nurseries	DNPA, local nurseries, community groups	Pump prime funding to be sought	2010
Conservation of wet woodlands	Raise awareness and promote appropriate management through literature, site visits etc Ensure wet woodlands are represented in Dartmoor SSSI's	DNPA, EN, Defra, DWT,	Existing budgets	Review with Dartmoor BAP interim review 2006
Areas of hazel coppice restored	Promote use of hazel, encourage restoration and deer control/protection	DNPA, EN, Defra, WTW, Deer Groups	HLS & EWGS	Ongoing

4.10 Action plan for Coniferous Plantations

Action will ensure that conifer plantations are better managed and integrated into the landscape, have greater biodiversity and improve water quality.

Action towards Dartmoor BAP

Moorland HAP Objective 1

Recreate 50ha of moorland by 2005 on former sites which have been improv ed for agriculture or afforested.

Woodland HAP Objective 9

All plantations over 5ha to be actively managed under a management plan approved by the FC by 2010 .Encourage age and species diversity within plantations

Maintain a stable population of Nightjars c. 50 pairs

Woodland HAP Objective 11

All plantations to be actively managaed in accordance with the UK Forestry Standard by 2010 (which includes guideleines on the creation and maintenance of open space for wildlife.

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
All plantation over 5 ha to have an FC approved management plan (HAP objective 9)	Re start active management in all plantations, subject to timber demand	FC, DNPA, FTA, RFS, Defra, EN.	EWGS	2010
Improve biodiversity	Promote restructuring best practice Provide owners with management guidelines to create wildlife diversity in smaller plantations Assist owners to gain UKWAS certification. Integrate HAP targets with landscape objectives	FC, DNPA, FCA, RFS, Defra, EN.	Agency + Working the Woods EWGS, HLF	Co-ordination in place for 2005 roll out
Remove major invasive species	All plantations to comply by 2020	FC,EN, EA, DNPA	FC, EN, EA, DNPA Obtain additional financial support for eradication schemes	Review EWGS statistics for 2010, and set annual targets
Improve water quality for Freshwater HAP by removing young conifers from stream sides and watercourses.	All plantations to comply by 2010	FE, FC, DNPA, FTA, Environment Agency.	EWGS	Review 2010
Fewer conifers in sensitive landscapes 150 ha of restored moorland	Restore agreed areas of moorland where conifers are withdrawn (part Fernworthy)	FE, FTA, RFS and DNPA	FC, EN, HLF,	Ongoing
Agreed policy for future action	To develop new policy framework based on shared vision for moorland forests	FC, FE, DNPA, EN. FTA.		2008

4.11 Action plan for non woodland trees

Action will improve protection of trees in hedgerows, veteran trees and trees at risk.

Action towards Dartmoor BAP

Woodland HAP Objective 5

Retain veteran trees and ensure the long term existence of such trees , especially in Parkland

Field boundary and isolated tree HAP Objective 3

Maintain overall numbers of isolated veteran & hedgerow trees at least at current levels, through ensuring a balanced aged structure

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
Better managed and protected hedgerow trees.	To monitor effect of hedgerow management on existing hedgerow trees and future volunteers	DNPA, Defra	Environmental Stewardship	ESA & stewardship review
Wider recognition of the historic and social importance of ancient trees.	Educational and promotional events. Web site	DNPA and Ancient Tree Network		
More veteran trees being protected and receiving management if required..	Obtain financial support for grant aid for remedial works and monitoring tree health.	DNPA & Defra	Funding through either EWGS or HLS with DNPA	Investigate funding sources by summer 2005
Veteran trees being adequately surveyed and monitored	Collate information	DNPA & Defra		2005 onwards
More veteran candidates for the future	Candidate veterans to be identified and managed appropriately (Surgery or pollarding)	DNPA & Dartmoor arborists	Private sector, Defra	Pilot by 2007
Review effectiveness of TPO's, conservation areas and other protection measures.	Sample monitor	DNPA		Ongoing
70% of Parishes to have a warden	Broaden and support network of tree wardens. Improve training	DNPA BTCV, Tree Council	Use similar funding packages to that used by South Hams & Plymouth City	Funding to be in place by 2006
Higher standards of tree surgery and understanding of veteran tree management.	Hold Dartmoor practitioner meetings Extend network to non member arborists and owners Arborists to share information on important and veteran trees.	DNPA, Arboricultural association etc.		

4.12 Action plan for orchards

Outcomes	Target	Organisation	Funding	Time
Double number of orchards under management Bring 46 orchards under management	Raise awareness of restoration through HLS.	Defra	HLS	Defra to devise timescale by end of 2005
Wider understanding of traditional orchards for their wildlife , landscape and historical importance.	DNPA to involve Orchard Link. Involve Tree Warden Network in Orchard conservation. + web page	Orchard Link DNPA	As part of fund raising for tree wardens and veteran trees.	Ongoing
Establish 1 new community orchard with traditional species	Explore potential for community orchards and other mechanisms for social engagement	Orchard Link, DNPA, Moor Trees, Tree Wardens		Target date 2007
Increase production of Dartmoor cider and apple juice	Ensure food link projects include local apples. Liaise with projects in North & South Devon	DNPA, Orchard Link, Countryside Agency, Defra	Countryside Agency ERDP	Ongoing

4.13 Action for NPA Woodlands

Action will ensure that UKWAS certification is maintiained, invasive speicies are removed and the future role of woodlands is reviewed.

Outcomes	Target	Organisation	Funding	Time
Standards of management improved	Maintain UKWAS Certification Hold demonstration events/ walks / talks	DNPA	DNPA & EWGS	Ongoing
Remove main invasive species by 2010	Obtain additional financial support for eradication schemes. Include conifers where appropriate	FC,EN, EA, DNPA	FC, EN, EA, DNPA Additional support required	Review EWGS statistics for 2010
Increased understanding of how archaeological features and biodiversity are best managed.	To demonstrate best practice in management of archaeological & wildlife features through events & web based information	DNPA	DNPA	Ongoing
DNPA woodland to play a lead role in achieving Woodland Strategy, through good practice and demonstration.	Review management agreements and options for future ownership of woodlands Promote best practice on web	DNPA and owners of freeholds and management agreements		Complete by 2007

4.14 Action for woodland owners

Action will ensure that woodland owners are able to work within a partnership which enables DNPA, BAP targets and UK Forestry Standards to be achieved, while enabling individuals to achieve their own objectives of management.

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
Increase in active membership of existing owner organisations	Promote organisations and recruitment Coordinate with Woodmeet	Working the Woods, FCA, RFS, DWT,	Working the Woods Partnership	Agree programme by Sept 2005
Communication between owners improved	Establish Woodmeet and interactive DNPA woodland home page. Research into why owners do not manage their woods.	Working the Woods	Working the Woods Partnership	Sept 2005
Increase biodiversity and archaeological survey and conservation works	Encourage owners to submit UKWAS style site reports	DNPA & Ancient woodland project	Within EWGS and other measures	2005-
New woodland enterprises set up or existing enterprises developed.	Farmers who own woodlands who wish to diversify, also existing woodland enterprises	Defra, DNPA, RDA	ERDP & RES Dartmoor Sustainability development fund, rural renaissance.	Monitor number by 2010

4.15 Action Plan for Forest Industry

Action will be taken to manage Dartmoor Woodlands for the outstanding quality of their wildlife and landscape. This will require a skilled, well equipped and well paid workforce, supporting local markets with moorland timber, and generating profits for growers.
Action will also be taken to encourage and develop specific markets which depend on the sustainable supply of Dartmoor timber, and which cannot be substituted with cheaper supplies from elsewhere. The products will need to reflect the high environmental quality of the woodlands.

Outcomes	**Target**	**Organisation**	**Funding**	**Time**
New markets to be established either on or close to the park.	Support Woodwealth Project Support wood heat and local firewood initiatives.	Working the Woods Projects, DNPA, FC,	Support partnership investment options. ERDP	Ongoing.
More coppicing, thinning & group selection in broadleaf woodland	Promote firewood sales & local firewood merchants	Working the Woods Projects, DNPA, FC,		2006
Dartmoor timber to be synonymous with sustainable production and high quality environmental standards	Promote Dartmoor as a centre of excellence for oak framing. Greater support from planning authority Web page links Ensure markets are compatible with wildlife and landscape objectives	Working the Woods Projects, DNPA, FC, EN, Countryside Agency	To be investigated	From Jan 2005 onwards through WTW partnership.
Maintain critical mass of skills and employment in forestry and timber processing on Dartmoor .	Encourage forestry workers to enlist on Dartmoor register of craftsmen. Explore and promote mechanisms for supporting new and existing staff. Maintain investment in equipment and infrastructure Explore options for setting up operator and machinery ring for woodland contractors	DNPA, FE, FC, EN, Woodmeet, FCA, FTA. Woodland Renaissance	Funding options to be researched as widely as possible.	Ongoing
Integration of Dartmoor projects with regional initiatives	Closer co-operation with South West Forest, Woodland Renaissance, RDA etc.	DNPA, Woodmeet, Owner groups etc.	Partnership budget in place	Show evidence of cooperation in annual report
Craft industry to increase turnover and employment	Increase coppice resource. Improve training opportunities. Assist outlets for coppice products, promote woodland culture.	DNPA, Woodmeet, Community groups	Partnership budget in place	Review area of actively managed coppice by 2010
Regular events to boost trading links on and off the moor	Set up Woodmeet groups and support local events Explore feasibility for Wood fairs & Foresters markets. Use DNPA web site.	DNPA, Working the Woods project	Partnership budget in place	

4.16 Funding of proposals: Helping to make things happen.

This strategy has been produced at a time when the principal agricultural and forestry support grant are undergoing radical change.

Many woods belong to farmers who are presently within the Dartmoor ESA. From spring 2005 they will become eligible to enter the Environmental Stewardship Scheme. This can be to either the Entry Level or the Higher Level Schemes. Woodland owners will be grant aided to achieve "agreed outcomes" such as progress towards BAP targets. Funding will be available for a wide range of management tasks relating to biodiversity. Where these are of sufficient size and complexity as to warrant an application to the Forestry Commission for EWGS, this will form part of the overall HLS scheme for the farm. Higher level stewardship will be the entry route for many woodland owners to the English Woodland Grant Scheme.

Woodland owners who do not farm, or have existing WGS agreements can apply for the England Woodland Grant Scheme directly.

Forestry Commission priorities under the EWGS are likely to be as follows:

a. Protection of ASNWs
b. Restoration of PAWS
c. Improvements to ASNWs
d. Improvements to OSNWs
e. Creation of new semi natural woodlands

The proposed English Woodland Grant Scheme will potentially provide up to 50% funding for a number of useful woodland operations including access provision, removal of invasive species, wildlife and possibly archaeological monitoring.

There will also be some funding available for the production of woodland assessment plans (WAG) and woodland planning grants (WPG). These will pay up to 80% of the cost of site monitoring at least every 5 years when the EWGS is renewed.

In general terms the government no longer intends to direct public funding towards commercial timber production. Partnerships between DNPA, FE, woodland owners and local timber processors can however make a strong case for support for developing local employment in local processing and value adding. This may involve accessing regional funding, through schemes such as rural renaissance and woodland renaissance, or grants within the ERDP.

DNPA will assist in fund raising towards the creation of new semi natural woodlands and improved access. This may include an application for Heritage Lottery Fund, and would be a partnership bid with the voluntary sector, FE, Community Groups and private landowners.

Partnership funding arrangements are likely to become more commonplace for woodland work. This is likely to be significantly enhanced by the changes in Forest Enterprise objectives, which will require the FE to attract external funding to achieve

non timber outcomes. There are environmental funds which can only be accessed in partnership with local community groups such as New Opportunity Funds.
Grants for environmental work are still available from Land Fill tax credits and the Aggregate Levy, both of which are easier to access through partnerships.

Information and access to all these opportunities could be made through the DNPA woodland website.

4.17 Monitoring Progress

There is much to be achieved within a short period of time, and it is proposed that a local woodland and tree forum be established on Dartmoor to review the progress of this strategy and to update and modify it in relation to local and regional changes. It will also assist in bringing together partnerships for funding bids, and in building links with other regional initiatives. The woodland and tree forum would be drawn from the membership of the Dartmoor Woodmeet group. This will give Woodmeet a wider strategic role, as well as avoiding any duplication. Woodmeet includes industry representatives, conservation organisations, woodland owners and interested members of the public. The first chairman of the forum should be appointed by the National Park Authority and to help organise the first meeting. The forum should meet annually and report back to the National Park Authority.

The number and diversity of initiatives running on Dartmoor at any one time is now so great that most individuals and organisations find it difficult to take an overall view. A wide range of social, economic and environmental projects affect trees and woodlands, and a local woodland and tree forum would be able to exchange project information so as to improve communication and clarity of vision.

The policy and grant framework for trees and woodland related issues is increasingly viewed on a regional basis. Individual projects have to demonstrate their relevance to the region as a whole, and how they complement similar initiatives elsewhere. A Dartmoor tree and woodland forum would be able to liaise and co-operate with other projects, and would be well placed to keep Dartmoor at the forefront of regional strategic development.

Appendix

Glossary of new Woodland Initiatives

The **Dartmoor Ancient Woodland Project** will start in 2005 and assist owners of ASNW's to prepare management plans, to promote the new English Woodland Grant Scheme, and to ensure that BAP targets are met.

Working the Woods – Linking People and Trees
A joint project between Dartmoor National Park, South Devon and the Tamar Valley areas of outstanding natural beauty. It aims to increase woodland management and new planting through the promotion of local timber products and raising public awareness. The project will develop a series of **Woodmeet groups** across the county. These have already been successful in Cornwall, where they have brought together woodland owners, contractors, wood processors and end users.

The **Woodwealth Project** is currently researching the use of wood from Dartmoor for an embedded power generation plant, with an integrated sawmilling facility. This will develop a volume market for low grade timber within a short distance of the plant. The project is also looking at supplying timber for local building using new construction techniques. Both initiatives would run alongside visitor and tourism projects.

Woodland Renaissance
The Regional Development Agency has awarded funding to support forestry projects which help to build a sustainable industry for the region.

The Moor Forest Project
This project between Forest Enterprise and Dartmoor National Park, will link routes between forests on the high moor, and promote active recreation. It particularly aims to develop opportunities for cycling and horse riding, and other forest based activities. The plantations on the high moor are well suited to accommodating larger numbers of active visitors, when the weather is not at its best.
There will also be improvements in information for visitors, and support for educational opportunities.

Glossary Note: Forestry Standards.

The UK Forestry Standards are the UK governments system for guiding and monitoring forestry, and ensuring the sustainable management of all forests and woodlands in the UK. The standard is linked international protocols for sustainable forestry.

The **UK Woodland Assurance Standard (UKWAS)** is a **voluntary** certification standard for the independent certification of forest management in the UK. It has been developed, and is managed by a

partnership of forestry, social and environmental organisations. Woodlands that satisfy there requirements are being managed to a national and internationally recognised standard.

To achieve a product label, an audited chain of custody must exist for wood between the certified forest and the final wood product. Both forest management audits and chain of custody audits are carried out by accredited certification agencies, such as the Forest Stewardship Council (FSC). UKWAS standards are recognised as the required standard of forest management in the UK by the Forest Stewardship Council.

Woodland owners applying for the English Woodland Grant Scheme will be expected to meet the UK Forest Standard, as a condition for grant aid from the Forestry Commission.

The standards laid down by UKWAS are more onerous, but can provide useful management guidelines for owners of SSSI's, PAWS and other sensitive sites. UKWAS standards should remain voluntary at all times.

List of Abbreviations used in tables

Arb Assoc.	Arboricultural Association
ASNW	Ancient semi-natural Woodland
BAP	Biodiversity Action Plan
CLBA	Country Landowners and Business Association
Defra	Department of Environment, Farming and Rural affairs
DNPA	Dartmoor National Park Authority
EA	Environment Agency
EN	English Nature
ERDP	English rural Development Programme
ESA	Environmentally Sensitive Area
EWGS	English Woodland Grant Scheme
FC	Forestry Commission
FC	Forest Enterprise
FCA	Forestry Contracting Association
FTA	Forestry and Timber Association
Go SW	Government Office South West
HAP	Habitat Action Plan
HLS	Higher level Stewardship
MT	Moor Trees
ITF	International Tree Foundation
OSNW	Other Semi Natural Woodland
PAWS	Plantations on Ancient Woodland Sites
RDA	Regional Development Agency
RFS	Royal Forestry Society
RES	Rural Enterprise Scheme
SAC	Special area of Conservation
SAP	Species Action Plan
SSSI	Site of Special Scientific Interest
TPO	Tree Preservation Order
UKWAS	UK Woodland Assurance Scheme

Appendix

List of Consultees

In addition to the many helpful staff at Dartmoor National Park Authority, Countryside Associates would like to thank the following organisations and individuals for their comments and contributions to this strategy.

Name	Organisation
Brian Muelaner	National Trust
Gavin Dollard	Country Landowners and Business Association
James Mason	The Woodland Trust
Christopher Gregory	Duchy of Cornwall
Peregrine Leigh	South West Water
Evelyn Stacey	South West Lakes Trust
Paul Gompertz	Devon Wildlife Trust
Neil Marcer	Dartmoor Bird Watching and Preservation Society
Adam Griffen	Moor Trees
Jennifer Dunster	RSPB
Peter Chapman	West Devon Borough Council
Robin Toogood	South Hams District Council
Paul Smith	Teignbridge District Council
Jim Skelton	South West Forest Project
Jez Ralph	Silvanus Trust
Mark Prior	Forestry Commission
Chris Marrow	Forest Enterprise
Rod Leslie	Forestry Enterprise
Philip Page	English Nature
Andrew Crabb	English Heritage
Geoff Bateman	Environment Agency
Peter Stevens	Defra
Chris Roberts	Forestry and Timber Association
Tim Selman	Tamar Valley AONB
Sue Blaker	Silvanus Trust
Robert White	Forestry & Timber Association
Jaqui Orange	Tamar Valley AONB
Simon Bates	English Nature
Neil Macenzie	Forestry Commission
Simon Masters	Woodwealth Project
Paul Padfield	BTCV