

H4 Veteran Trees and Traditional Orchards

HABITAT ACTION PLAN

1. Habitats Covered

- 1.1 Veteran trees are those which have passed through cycles of die-back and regeneration; as a result they typically support a range of characteristic features, including large amounts of dead wood (in the crown or around the base of the tree), rot holes, sap runs, loose bark and bracket fungi. Different species of tree acquire these features at different ages, for example oaks usually takes several hundred years to become veterans, whereas short-lived trees such as birch may develop veteran characteristics at less than a hundred years of age.
- 1.2 Both native and non-native species can achieve veteran status, sweet chestnut being a familiar example of a non-native veteran tree. It is not the case that all veteran trees have been left to their own devices; many have been pollarded in the past, a process which often rejuvenates the tree and extends its life.
- 1.3 Traditionally-managed orchards are often considered as a type of wood-pasture, having widely-spaced fruit trees growing in permanent pasture grazed by sheep or cattle. Fruit trees have a relatively short life-span in comparison to species such as oak or yew; apple trees survive for only 100 years at most, although pear trees sometimes live for over 300 years. Nevertheless, fruit trees acquire many of the veteran characteristics, such as dead wood and rot holes, at a much younger age than more long-lived tree species.
- 1.4 Traditional orchards typically contain a range of standard fruit trees, comprising mainly apples but also with smaller numbers of pear, plum, damson and cherry, and sometimes also nut-trees such as walnut and almond. In contrast, modern bush orchards have densely-planted trees, usually of a single type of fruit, which are subject to heavy pesticide use and are grubbed up and replaced at a relatively young age. Modern orchards support very few of the notable lichen and invertebrate species which are a feature of traditional orchards, as many of these species require fruit trees to be allowed to complete their natural cycle, including the latter decay stages when dead wood is abundant.
- 1.5 This Habitat Action Plan covers all veteran trees and traditionally-managed orchards that occur in Monmouthshire, excluding the Brecon Beacons National Park.

2. Current Status

Veteran trees and traditionally-managed orchards are important historical and cultural symbols of the British countryside. Pub names and place names frequently make reference to individual trees which pre-date most if not all of the buildings in a town or village, while old orchards can be the source of long-forgotten and valuable fruit varieties. The longevity of veteran trees and orchards endows them with not only cultural significance but also considerable biodiversity value, as they support a specialised range of associated plant and animal species that do not occur in other habitats. The biodiversity resource associated with veteran trees and old orchards has, however, diminished markedly in recent decades, with ancient trees being lost to development or suffering from inappropriate management, and orchards grubbed up in the face of continued agricultural intensification.

2.1 Veteran trees

2.1.1 Veteran trees are important wildlife habitats in an international context. Britain has a greater abundance of veteran trees than any other part of western Europe, and lowland wood-pasture and parkland, in which veteran trees are a key element, is a UK BAP Priority Habitat and features on the WAG's "Section 74" List of Species and Habitats of Principal Importance for Conservation of Biological Diversity. Local Authorities can assist the preservation of veteran trees by issuing Tree Preservation Orders (TPOs) and designating individual trees as Sites of Importance for Nature Conservation (SINCs). Veteran trees can be designated as SINCs under the Guidelines for the Selection of Wildlife Sites in South Wales (SWWSP 2004). In addition, veteran trees are often included within SSSI boundaries, where they occur as part of a mosaic with other habitats of conservation interest.

2.1.2 Monmouthshire boasts a large number of veteran trees compared to most other Welsh counties. They are particularly well-known from wood-pasture and large parklands, of which the county has several notable examples, including Llanover, Wyelands and Saint Pierre Park. Veteran trees are not a particular feature of closed-canopy woodlands, although many veterans that previously grew in open situations have since been surrounded by trees as a result of planting or natural succession (for example, at Wentwood Forest). Other important habitats for veteran trees include churchyards, village greens, urban areas (where they may occur as street trees), field boundaries (often as 'standards' in ancient hedgerows) and riversides (notably willow pollards).

2.1.3 Many different groups of animals and plants are dependent on veteran trees for their survival. The most characteristic species are those which depend on dead wood, including many rare species of fungi and invertebrates, particularly beetles and flies. The rare longhorn beetle *Pyrrhidium sanguineum* is one such species that has been recorded in Monmouthshire. Veteran trees also host important communities of epiphytic lichens, mosses and liverworts, and their hollow trunks and other crevices are used by roosting bats and nesting birds such as barn owl and kestrel. Veteran trees occurring in parkland and wood-pasture habitats often constitute an important feeding resource for the endangered greater and lesser horseshoe bats, which favour habitat mosaics with an abundance of insects.

2.2 Traditional Orchards

2.2.1 Fruit tree cultivation in Wales has been practised for many centuries; there is circumstantial evidence that apples were being cultivated as far back as the 6th Century AD. Traditionally, orchards were found throughout Wales, although Monmouthshire had more orchards than other Welsh counties since the warmer summers in south-east Wales are more favourable for fruit production than those of the cooler and cloudier north and west. Orchards prospered until the mid twentieth century, but since then there has been a rapid decline in orchard area in England and Wales. In 1970 there were 65,200 ha of orchards in the UK, but by 1997 the figure was 22,400 ha, a decline of 66%. A study across Greater Gwent reported an 86% loss of orchards up to 1993, and declining condition of the remaining orchards. It is likely that most of these Greater Gwent orchards were in Monmouthshire. Today, Monmouthshire orchards are used mainly for cider apple production, a good example being the large orchard at Llantilio Crossenny.

2.2.2 Many traditional apple and pear varieties have been replaced with modern ones, although old varieties still survive locally; many of these have never been formally described and are absent from national collections. In recent years there has been a renewed interest in these traditional fruit varieties, accompanied by the formation of organisations such as the Welsh Perry and Cider Society, which has a strong presence in Monmouthshire and promotes local apple and pear varieties such as the Monmouth Green and Breakwell's Seedling.

2.2.3 Traditional Orchards are listed as a UK Priority habitat and are recognised as a habitat of Principle Importance for Conservation in Wales (NERC Section 42)). TPO regulations were strengthened in 1999 in favour of fruit trees, and may be used to protect trees in relict orchards that are no longer

cultivated for fruit production. Traditional orchards may also be conserved using grants from the Tir Gofal Agri-Environment scheme.

- 2.2.4 In addition to species-rich pastures and old fruit trees, traditional orchards often contain other habitats of interest, including ponds and ancient hedgerows. In combination, these habitats can harbour significant wildlife interest in areas of otherwise intensively-managed farmland, being particularly important for birds such as bullfinch and hawfinch, foraging bats and mistletoe, which is parasitic particularly on apple trees and locally common in Monmouthshire. Permanent pasture in old orchards often supports plants and waxcap fungi that are reliant on old grasslands, and the blossom of fruit trees is an important source of pollen and nectar for spring-flying insects. The dead wood habitats of traditional orchards are of particular significance for invertebrates and fungi, some of which are characteristic of fruit trees and not often found in other dead wood habitats.

3. Current factors affecting the habitats

Veteran trees and traditional orchards continue to be lost or degraded. The most damaging causes are (in rank order of importance):

3.1. Veteran trees

- 3.1.1 Loss of veteran trees to roads and housing. Even if veteran trees are preserved in development schemes, they may subsequently die due to damage to their root systems.
- 3.1.2 Continued agricultural intensification often leads to the loss of veteran trees. Trees retained in farmland are often damaged or killed by deep ploughing close to the trunk, poaching by livestock, fertiliser and herbicide applications, and drainage resulting in drought-stress.
- 3.1.3 Shading-out by trees in new woods. This includes both plantations, mainly of conifers, and natural woodland succession of former pasture due to the loss of traditional grazing practices. Even if veteran trees survive being overtopped by younger trees excessive shading often leads to the loss of rare invertebrates, epiphytic lichens and bryophytes.
- 3.1.4 Rapid removal of conifers during thinning operations leads to changes in microclimate adversely affecting epiphytic flora.
- 3.1.5 Inappropriate management, particularly the removal of dead wood and tree surgery being performed in the wrong season and using unsuitable methods.
- 3.1.6 Lack of appreciation of veteran trees and fear of falling wood resulting in removal of trees.
- 3.1.7 Decline of pollarding.
- 3.1.8 Removal of trees on farms for use as firewood.

- 3.1.9 Natural causes, including drought, storms, flooding and lightning, all of which are perhaps likely to occur more regularly in the future due to climate change.

3.2. Orchards

- 3.2.1 Neglect of traditional orchards no longer managed.
- 3.2.2 Loss of orchards to other agricultural land uses and small-scale housing development, both in rural areas and on the edge of towns (e.g. Abergavenny).
- 3.2.3 Overgrazing and associated nutrient-enrichment of pasture habitat within orchards, leading to a decline of botanical interest.
- 3.2.4 Use of pesticides, resulting in loss of associated invertebrate species and a decline in the food resource of birds and bats.
- 3.2.5 Tidying of orchards, including rapid removal of dying trees and fallen timber, resulting in loss of deadwood habitat.
- 3.2.6 Loss of skills associated with traditional orchard management, leading to a demise of traditional practices.
- 3.2.7 Honey fungus and other diseases / pathogens etc.

4. Current action

4.1. Veteran trees

- 4.1.1 Several SSSIs in Monmouthshire have a number of veteran trees within their boundaries, notable examples being Penhow Woods and the ancient woodlands of the Wye Valley.
- 4.1.2 A number of GWT reserves contain veteran trees.
- 4.1.3 GWT co-ordinated the 2005-2006 Gwent Veteran Tree Survey, with funding from the CCW and MCC's LA21 grant scheme. The scheme involved 40 volunteer surveyors each surveying an area of Greater Gwent for veteran trees.
- 4.1.4 Local Authorities can assist the conservation of veteran trees by issuing TPOs, although these cannot be applied to trees that are 'dead, dying or dangerous'.

4.2. Orchards

- 4.2.1 The CCW has promoted the conservation of traditional Welsh orchards in its publications Orchard and Parkland Scheme Handbook and Traditional Orchards. Since 2000 the Tir Gofal Agri-Environment scheme, administered by the CCW, has provided grant aid for the establishment and maintenance of traditional orchards.

4.2.2 Since 1999 TPO regulations have been strengthened in favour of fruit trees. TPOs are not normally instated in ongoing commercial orchards, but they may be used to protect trees in relict orchards that are no longer cultivated for fruit production.

4.2.3 National organisations such as *Common Ground* promote the establishment of community orchards, including the planting of new orchards and the maintenance of old ones.

4.2.4 The *Welsh Perry and Cider Society* is an independent body of producers and enthusiasts, many of whom are based in Monmouthshire. The society surveys local orchards for old varieties of cider apple and perry pear, taking cuttings of any which are found. The society also promotes the planting of these traditional apple and pear varieties, for example at a conservation orchard at Tynewydd Farm, Llanarth.

5. Proposed Targets

5.1 Veteran trees

5.1.1 No preventable loss of ancient veteran trees.

5.1.2 Improve the condition of veteran trees in Monmouthshire to increase longevity.

5.1.3 Create a resource of veteran trees for the future.

5.2 Traditional Orchards

5.2.1 Maintain the current extent of traditional orchards in Monmouthshire.

5.2.2 Improve the condition of traditional orchards by introducing favourable management.

5.2.3 Restore 15ha of traditional orchard by 2010.

5.2.4 Create 10ha of orchard using locally traditional fruit varieties by 2010.

6. Proposed actions and key partners for veteran trees and traditional orchards

Action	Key Partners		Timescale
	Lead	Partners	
1. Policy and legislation			
1.1 Ensure policies and strategies do not adversely affect wildlife associated with the habitats.	MCC	CCW, WAG	Ongoing
1.2 Ensure Veteran Trees and Traditional Orchards are fully considered when assessing any	MCC	CCW, GWT	Ongoing

development, which may impact upon the habitats.			
1.3 When there is no alternative ensure that appropriate mitigation or compensation measures for Veteran Trees and Traditional Orchards are implemented during development.	MCC	WAG, CCW, GWT	Ongoing
1.4 Where appropriate, ensure opportunities for enhancing Veteran Trees and Traditional Orchards are used during the planning process.	MCC	GWT	Ongoing
2. Funding / Resources			
2.1 Grant aid and incentive schemes such as Tir Gofal, Better Woodlands for Wales and MCC Biodiversity Grants should be used to encourage owners to manage Veteran Trees and Traditional Orchards sensitively.	WAG, MCC, FCW	CCW	Ongoing
3. Site safeguard and protection			
3.1 Seek to designate the best orchards and habitats containing veteran trees as SSSIs or LNRs.	CCW, MCC	GWT, LBAP Partnership	Ongoing
3.2 Seek to designate traditionally-managed orchards and individual veteran trees as SINC.	MCC	GWT	Ongoing
3.3 Seek to instigate a site acquisition policy for key traditional orchard sites which would most benefit from nature reserve management.	GWT, MCC, CCW	LBAP Partnership	
3.4 Promote role of Tree Wardens in monitoring trees in orchards and veteran trees.	MCC	Members of the public	By end 2008
4. Habitat and site management			
4.1 The best sites should be protected by SSSI management agreements.	CCW	MCS, GWT, Plantlife, Butterfly Conservation	Ongoing
4.2 Advice should be given to SINC owners on the value of and appropriate management for their veteran trees and traditional orchards.	MCC	GWT	Ongoing

4.3 Encourage community action to survey, plan for and manage wildlife habitats.	MCC, Community Councils	GWT, MCC Area Management	
4.4 Ensure land-owners understand the importance of sympathetic management of veteran trees. This includes not ploughing or applying fertilisers, herbicides and chemicals close to veteran trees, not pruning the trees without consulting a specialist, and leaving dead wood in situ where possible.	GWT, MCC	LBAP Partnership	
4.5 Ensure that conifer removal is sympathetic to ancient veteran trees to prevent rapid change in local environment.	FCW, Woodland Trust		
5. Habitat creation / restoration			
5.1 Initiate the expansion of the veteran tree resource in the short to medium-term, through appropriate management of trees that are potential veterans of the future, e.g. pollarding, where appropriate.	GWT, MCC	LBAP Partnership	
5.2 Initiate the expansion of the veteran tree resource in the long-term, using natural regeneration, seed stock from the site or local provenance seed to produce on-site replacement tree stock.	GWT, MCC	LBAP Partnership	
5.3 Seek to establish a network of community orchards, using tree-planting grants, to enhance wildlife interest and ensure the survival of traditional fruit varieties.	MCC, GWT,	LBAP Partnership, Welsh Perry and Cider Society	
5.4 Provide guidance for planting new orchards for wildlife interest, and the conversion of modern bush orchards to traditional orchards.	GWT, CCW	MCC	
5.5 Maintain and expand the viable populations of all traditional fruit varieties associated with Monmouthshire.	Welsh Perry and Cider Society	MCC	Ongoing

5.6 Initiate the maintenance and restoration of species-rich pasture in orchards, using Tir Gofal grants where possible.	GWT, MMG, CCW	MCC	
6. Research and monitoring			
6.1 Compile an accurate inventory of the location and extent (ha) of each traditionally-managed orchard.	MCC, SEWBRcC	CCW, GWT	
6.2 Determine the importance of each traditional orchard by surveying to find habitat quality of trees and species diversity of pasture.	CCW	MCC, GWT	
6.3 Continue to identify additional veteran trees and potential veterans of the future.	GWT, MCC	Members of the public	Ongoing
6.4 Survey selected veteran trees and orchards for specific entomological and lower plant interest.	CCW, GWT, SEWBRcC	Independent naturalists	
7. Communication - advisory			
7.1 Promote information leaflets for land owners to highlight the conservation importance of traditional orchards and veteran trees.	MCC, GWT	LBAP Partnership	
7.2 Disseminate information about the importance of managing decaying wood as a wildlife habitat.	MCC, GWT	LBAP Partnership	
7.3 Produce advisory notes/management plans for churchyards to include veteran tree management.	MCC, GWT	LBAP Partnership	Ongoing
8. Communication - publicity			
8.1 Raise awareness and understanding of the multiple values of trees and woodlands amongst woodland owners, managers, contractors and the general public.	FCW, Coed Cymru	LBAP Partnership	Ongoing
8.2 Continue publicity, including posters and press releases that include information on the requirements of veteran trees.	GWT	MCC	Ongoing
8.3 Initiate events to raise awareness of the biodiversity value	MCC, GWT, MMG	LBAP Partnership	

of traditional orchards, including local fruit varieties.			
8.4 Participate in the promotion of annual Apple Day events.	MCC	GWT	

7. Links with other plans

The plan should be considered in conjunction with any future plans prepared for habitats which include veteran trees or orchards, such as wood-pasture and parkland, the built environment, rivers and streams, ancient woodland and farmland. The plan can also be used alongside the hazel dormouse, greater butterfly orchid and silver-washed fritillary action plans. Any future action plan for a species associated with veteran trees and orchards, such as bats, barn owls, invertebrates and epiphytic lichens, should also link to this plan.

8. Abbreviations

CCW	Countryside Council for Wales
DEFRA	Department for Environment, Food and Rural Affairs
FCW	Forestry Commission Wales
GWT	Gwent Wildlife Trust
MAFF	Ministry of Agriculture, Fisheries and Food
MCC	Monmouthshire County Council
MMG	Monmouthshire Meadows Group
SEWBRcC	South East Wales Biodiversity Records Centre
SWWSP	South Wales Wildlife Sites Partnership
WAG	Welsh Assembly Government

9. Data sources

Information regarding hectareage of orchards in the UK in 1970 and 1997 was taken from MAFF (now incorporated into DEFRA) statistics.

Information regarding the loss of orchard area in Gwent was taken from a study commissioned by the CCW in 1993.