



TRADITIONAL ORCHARDS

1. INTRODUCTION

Orchards are collections of cultivated fruit trees such as apples, pears, plums; nut-bearing shrubs such as walnuts, almonds and hazelnuts can also be present in some sites. Warwickshire is not as rich in traditional orchards as its neighbouring counties of Gloucestershire and Worcestershire but it retains a valuable resource of this habitat, especially within Stratford-on-Avon District.

There are distinct differences between modern commercial orchards and non-commercial “traditional” orchards. The former are generally managed intensively and are made up of younger trees that have a relatively short productive life, perhaps only 20-25 years. They are usually of more limited wildlife interest and may be subject to heavy pesticide usage. Traditional orchards may have originally been commercial orchards but are now no longer managed intensively. Others are small orchards originally planted to produce fruit for local consumption or for the production of cider and perry (pear wine). They are usually dominated by older, less intensively managed ‘standard’ trees (branches springing above the reach of grazing animals) planted at relatively lower densities, which allows livestock grazing beneath the orchard canopy.



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Traditional orchards can have significant ecological value. The spring blossom is vital for insects such as bees, butterflies and hoverflies and can vastly increase the carrying capacity of a landscape for these (which can benefit the pollination of other habitats and crops and boost beneficial insect predators of pests such as aphids). The flower buds, leaf buds and fruit can be important for birds such as bullfinch, and winter thrushes such as fieldfare and redwing. Older trees can support holes suitable for nesting birds and may even attract the nesting of lesser-spotted woodpeckers. The dead wood (e.g. heart rot) or mature wood of older trees can be important for ‘saproxylic’ invertebrates such as the red-belted clearwing moth *Synanthredon myopaeformis* (rare in our area, (Joy, 2001)) and the noble chafer *Gnorimus nobilis* (not currently known from our area but recorded from nearby parts of Worcestershire), though the insect fauna is poorly recorded in our area. A diverse fungus flora can also be associated with old or dead trees. The foliage is important for insectivorous birds, also phytophagous insects such as the scarce pinion-spotted pug *Eupithecia insigniata*. Traditional orchards are also an important local habitat for mistletoe, which supports a number of scarce insects. The underlying grassland can be relatively unimproved and species-rich where fertilizer usage has not been heavy.

Traditional orchards are also important reservoirs of genetic diversity in supporting locally distinctive varieties of fruit which are increasingly rare. Local examples include the Wyken Pippin apple and Warwickshire Drooper Plum.

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| 2. OUR OBJECTIVES & TARGETS | Target |
| A. To identify all ecologically important orchards, and their ownership (including freehold or leasehold status). | by 2007 |
| B. To ensure all ecologically important orchards are protected by appropriate designations (e.g. SINC or SSSIs or LNRs). | by 2009 |
| C. To maintain the extent and improve the condition of ecologically and horticulturally (rare varieties) important orchards. | by 2010 |
| D. To restore 15ha of old orchard | by 2010 |
| E. To increase the extent of the habitat by creating 10ha of new standard orchards of locally traditional fruit varieties on land of low existing conservation value. | by 2010 |
| F. To promote the importance of traditional orchards for wildlife, to promote good conservation management practice and to share knowledge. | 2006-2015 |
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ASSOCIATED HABITAT PLANS

- Lowland Grassland (all types)
- Wood Pasture, Old Parkland & Veteran Trees

ASSOCIATED SPECIES PLANS

- Song Thrush
- Bats

3. NATIONAL BAP OBJECTIVES & TARGETS

Traditional Orchards became a UK Biodiversity Action Plan priority habitat as part of the BAP review completed in 2007.

4. CURRENT STATUS

The area of orchards in Warwickshire was not recorded in UK National Digital Archive (1996) but the Warwickshire Habitat Biodiversity Audit - Phase 1 (1996-2000) identifies 131ha of orchard in Warwickshire, Coventry and Solihull. Almost all of this is in Stratford-on-Avon District (117ha), with small areas also recorded in North Warwickshire Borough (7ha), Warwick District (6ha) and Solihull Metropolitan Borough (1ha).

4.1 Legal and Policy Status

DEFRA targeted traditional orchards as an important habitat in its Countryside Stewardship Scheme. The conservation and restoration of traditional orchards is included in the targeting of the new Environmental Stewardship Higher Level Scheme (HLS) within all the Joint Character Areas (JCAs) in Warwickshire. These sites have been liable to pressure for residential development, particularly where orchards are seen to be part of the curtilage of existing buildings and therefore classified as 'brownfield' sites.

4.2 Current Factors Affecting The Habitat

- **Insensitive management:**
 - many sites are now used as horse paddocks. Horses can cause considerable damage when allowed to graze in old orchards; the palatable bark can be stripped in a matter of weeks causing death to the tree.
 - dying trees are often removed promptly, depriving organisms that rely on dead wood.
 - many orchards are commonly located adjacent to farms, this means that they are often used (& traditionally used in the past) as shelter for over-wintered livestock that receive supplementary feed. This can lead to nutrient enrichment of the grassland beneath the fruit trees, damaging botanical diversity and the health of the trees.
- **Destruction for “agricultural improvement”** - old orchards are often seen as being unproductive and are ripped out for more intensive agricultural use.
- **Development** – some of the remaining traditional orchards are located within or on the edge of villages, particularly in the south of Warwickshire. In some cases they now form part of the curtilage of a dwelling. As such they may be subject to proposals for residential development on the basis that they fall within the definition of “brownfield land”. They may also be subject to proposals for development ancillary to existing dwellings, e.g. garages, domestic extensions, swimming pools etc. While rural planning policies are now generally successful in preventing speculative residential development on traditional orchard sites, there may be some cumulative impact on the quality of the habitat through small-scale householder-type developments.
- **Neglect or loss through natural processes** - fruit trees generally have a short life in comparison with other tree species. Plums rarely live beyond 50 years, apples 80-100 years and pears (especially perry pears) 100-150 years. Therefore, unless replacements are established to replace lost trees, a traditional orchard is unlikely to survive beyond 100-150 years.
- **Isolation of sites** - the loss of orchards over the last 40 years means that sites have become increasingly isolated from one another.

5. CURRENT LOCAL ACTION

- Survey work and designation - traditional orchards are generally poorly recorded and few sites have received designation especially at levels that provide site protection.
- Established management - traditional varieties of fruit are becoming better appreciated among the general public resulting in owners of small orchards placing more value on old fruit trees. The Countryside Stewardship Scheme (CSS) has encouraged better management of sites through the 10 year duration of the agreements.
- Creation/restoration of traditional orchards - new community orchards are increasingly being created in urban areas. The National Trust and other major landowners have created and / or restored a number of traditional orchards adjacent to their properties, e.g. at Upton House and Packwood House, both owned by the National Trust.
- Education - there are good opportunities for educational access to traditional orchards through the Environmental Stewardship Schemes, particularly for sites within easy access of urban areas. There are sites near Coleshill in the north and Stratford-on-Avon in the south. Specific requests can be routed through the Worcester office of DEFRA/RDS and Warwickshire FWAG at Moreton Morrell.
- Planning Procedures - current wildlife and habitat interests are taken into account when planning authorities are assessing proposals for development and when they are identifying land for development through local development frameworks. However the lack of survey data on many traditional orchards may mean that their contribution to biodiversity is not fully appreciated.
- Advice provision - available from a number of organisations and groups e.g. Warwickshire Museum and Warwickshire Wildlife Trust for various species and management aspects, Butterfly Conservation for butterflies and moths, Natural England for SSSIs, FWAG and DEFRA for conservation schemes such as Environmental Stewardship. Advice and information is also available from the National Orchard Forum and through local orchard groups.
- Sites where unusual cultivars are preserved , such as the Warwickshire Drooper (a plum), Wyken Pippin (an apple) and Shakespeare Pear include Marston Green Orchard and Park, Hill Close Gardens in Warwick and Garden Organic at Ryton.
- The Big Tree Hunt of Warwickshire, Coventry & Solihull is attempting to gather information on unusual cultivars and important local fruit tree collections

6. PROPOSED LOCAL ACTIONS (some dates amended – Core Steering Group – Feb 2008)

ACTION	Lead	Partners	By	Meets objective
Policy & Legislation				
PL1. Ensure that all relevant habitat policy is included in Local Planning Documents (see ODPM Planning Policy Statement PPS9)	LBAPSG	LAs	2006-2015	C, E
PL2. Ensure that any site meeting the relevant criteria is considered for designation as an SSSI.	NE	FWAG LO HBA GO LA Strust LBAPSG NT WWT WM WSP	2006-2015	B
PL3. Review status of traditional orchards and designate as SINCs (or LNRs) where appropriate.	WSP	WWT LAs NE	2007	B
Site / Species Safeguard & Management				
SM1. Promote conservation, restoration and creation of traditional orchards via the Environmental Stewardship Higher Level Scheme, with a view to increasing the area of orchards managed under agri-environment schemes.	NE	FWAG LOs	2010	C, D, E
SM2. Promote uptake of the Higher Level Scheme within Environmental Stewardship when existing Countryside Stewardship agreements covering traditional orchards expire.	NE	FWAG LOs	2014	C, D, E
SM3. Document and conserve viable populations of all extant fruit varieties traditionally associated with Warwickshire.	STrust	NE FWAG NT GO	2008	C
SM4. Use outcomes of review of orchards designations (PL2 & 3 above) to target conservation action at most valuable sites.	WSP	WWT LAs FWAG NE	2008	A, C
SM5. Actively recommend measures to increase the extent of connectivity and maintain options to expand area of habitat.	LBAPSG	WCC LAs WWT NE	2008-2015	D, E

Advisory				
A1. Collate / review existing advice on conservation / enhancement of traditional orchards to identify what is most useful in the sub-regional context.	FWAG	NT LAs NE WWT	2006	F
A2. Provide appropriate, targeted advice to owners of traditional orchards.	FWAG	LAs WWT NE GO	2006	C, F
Research & Monitoring				
RM1. Interrogate existing information in HBA to identify key sites/areas for orchard biodiversity.	HBA	WM EA WWT NE	2006	A, B
RM2. Identify key shortfalls in existing information on the biodiversity of orchards and consequent survey needs.	WBRC	WWT NE	2007	A, B
RM3. Undertake appropriate survey to meet key information needs re orchard biodiversity.	WBRC	WWT LAs NE	2009	A, B, C
RM4. Monitor effectiveness of HLS agreements in meeting objectives for orchard conservation / restoration / creation.	NE	FWAG LOs	2015	C, D, E
RM5. If / when orchards are threatened with destruction mount emergency surveys to 'rescue' any rare fruit varieties present.	FWAG	LAs LOs	2006- 2015	D
Communication & Publicity				
CP1. Promote the biodiversity value of traditional orchards to landowners and the conservation community by organising at least one 'technical' event per year.	FWAG	WWT LOs NE	2007	F
CP2. Promote the biodiversity value of traditional orchards to the wider public by organising at least one 'popular' event per year, e.g. around Apple Days	GO	WWT NE FWAG STrust	2007	F
CP3. Encourage communities to highlight the biodiversity value of traditional orchards in Parish Plans.	LBAPSG	LAs	2006- 2015	F

Abbreviations: NE – Natural England, FWAG – Farming & Wildlife Advisory Group, HBA – Habitat Biodiversity Audit, GO – Garden Organic, Ryton, LA – Local Authority, LBAPSG – Local Biodiversity Action Plan Steering Group, LO – Landowner, NT – National Trust, Strust – Shakespeare Trust, WBRC – Warwickshire Biological Record Centre, WM – Warwickshire Museum, WSP – Wildlife Sites Project, WWT – Warwickshire Wildlife Trust.

7. REFERENCES (also see **Bibliography** web page)

UK National Digital Archive of Datasets, Crops, Farmers & Workers, Livestock, County Summaries (1996) – Reference: CRDA/4/DS/1/3/1

Natural England, the Environment Agency and the Warwickshire Wildlife Trust (1996-2000): *The Warwickshire Habitat Biodiversity Audit* (HBA) – Phase 1 Unpublished.

Joy, J. (2001). *West Midlands: Regional Action Plan*. Butterfly Conservation

8. FURTHER INFORMATION (see separate **Links** web page for links to web sites)

UK Biodiversity Action Plan for Noble Chafer (*Gnorimus nobilis*) no.326

People's Trust for Endangered Species– *Summer 2006 - Noble Chafer Beetle Survey*. PTES wants to hear from people who have old orchard trees and/or any records of this elusive beetle which only develops as a larva in decaying fruit trees. Tel. 0207 498 4533 or email: laura@ptes.org for colour photo of the beetle.

Common Ground - champions community orchards - Gold Hill House, 21 High Street, Shaftesbury, Dorset SP7 8JE . Tel. 01747 850820 or e-mail: info@commonground.org.uk

National Orchard Forum - champions traditional orchards. Contact :

- *Staffordshire Orchards Initiative* - Mike Deegan at the Staffordshire Wildlife Trust, The Wolseley Centre, Wolseley Bridge, Stafford ST17 0WT
- *Worcester Orchard Workers* - Wade Muggleton at The Countryside Centre, Wildwood Drive, Worcester WR5 2LG. Tel: 01905 766493

'Garden Organic' (*formerly known as HDRA*), Ryton, Coventry, Warks. CV8 3LG - dedicated to researching and promoting organic gardening, farming and food. Tel. 024 7630 3517 or email: enquiry@gardenorganic.org.uk

Latimer, J. (2005) *Orchards. Through the Eyes of an Artist*. Langford Press, Peterborough.

9. CONTACT