

TRADITIONAL ORCHARDS

LOCAL HABITAT ACTION PLAN FOR CAMBRIDGESHIRE AND PETERBOROUGH

Last Updated: December 2008

1 NATIONAL CURRENT STATUS

Traditional orchards are composed of 5 or more standard fruit trees at spacings of approximately 150 per hectare. There are usually many varieties of fruit trees in a given block leading to an extended period of flowering and fruiting, which benefits both insects in pollination and birds and mammals who feed on the fruit.

The grassland beneath old orchards may be species rich unimproved grassland. In many areas of the country there is a tradition of grazing these swards. The combination of old individual trees, within grassland, create a habitat with similarities to wood pasture.

Trees within old orchards can be over 60 years old. Fruit trees decay more quickly than most British hardwoods and provide very many deadwood habitats. Crevices and hollows provide nesting sites for birds such as spotted flycatchers and roosts for many species of bat. The non-acid bark supports a wide variety of mosses. The bark chemistry of apples is variable, with some cultivars hosting many more mosses than others. The bark of plums is acid, and they are poor hosts for mosses, but much better for lichens.

The hedges surrounding orchards, not only protect the fruit trees from frost and wind damage, but also provide additional habitats for wildlife. The best hedges for orchard wildlife are comprised of mixed native species with an untended margin at the base. These provide an additional nectar source of value to invertebrates.

Modern orchards are planted with many more (2,200) trees to the hectare. They have a very limited number of varieties and are grubbed up after 12 - 15 years. They are grafted onto dwarfing rootstock and are pruned heavily each year. A sterile strip of bare earth is maintained under the trees and during the summer months may be sprayed every 7 days. Hedges tend to be single species such as hybrid alder. Certain BAP species such as Linnet and Bullfinch are found in higher number in modern orchards.

It is estimated that there was approx 28,000 hectares of traditional orchard remaining in England in 2005 (English Nature, 2005 Review of priority habitats).

2 CAMBRIDGESHIRE CURRENT STATUS

Cambridgeshire orchards differ from many of the more traditional orchard areas in that there is no tradition of Cider or Perry making. They also differ in that standard trees with tall stems are not the norm, even in the oldest orchards. The local practice has been to stop the main stem at a low level to encourage the formation of open-centre trees with a low crown.

The orchards locally are of more recent origin being less than 150 years old. The grassland sward is botanically poor and has not generally been grazed, but it does

provide excellent habitat for small mammals. The perimeter hedges have often been made up of single species poplar, alder or hawthorn.

The traditional main fruit growing areas of Cambridgeshire are in the Wisbech area, the fen edge from Bluntisham through to Cottenham, Melbourn and Meldreth, and on the chalk around Foxton.

Traditional orchards consisted of varieties of apple, both eating and cooking including Allington Pippin, Histon Favourite, Barnack Beauty and Emneth Early; and Plum, which were sold for dessert fruit, and for the jam industry, including Cambridge Gage, Pershore, Burbank and Prince of Wales. The Wisbech area was noted for culinary apples, particularly Bramley's Seedling, which can make very large trees that are capable of living to a great age. Many veteran Bramley trees survive in traditional orchards on the silt fens. Many veteran Bramleys are still in production in commercial orchards, managed in a traditional manner.

3 LOSS OF ORCHARDS IN CAMBRIDGESHIRE

- In 1950, 4950 hectares of orchard were recorded in Cambridge, Huntingdon, Isle of Ely and Soke of Peterborough - a historic area traditionally associated with the City and Diocese of Peterborough. By 2003, 959 hectares were recorded in Cambridgeshire (MAFF/DEFRA June Census).
- Between 1970 and 1985 80% of orchards had been lost in 2 surveyed areas of the county. This decline has continued (A Survey of Landscape Change in Cambridgeshire, 1995).
- A survey of Cambridgeshire orchard sites mapped on the Millennium Edition OS Explorer maps was carried out in 2005. 25% of the mapped sites were no longer orchard and 14% of the sites had been reduced to very small orchard remnants. (The Condition of Orchards in Cambridgeshire, 2005)

4 CURRENT FACTORS AFFECTING LOSS IN CAMBRIDGESHIRE

- Many orchards are on the edges of villages. This has left them vulnerable to development and to other changes of use.
- Plums were a bulking agent for many types of jam, such as strawberry and raspberry. During the 1970s it became illegal to use fruit other than those marked on the label. Also Britain's entry in to the EEC heralded the arrival of European varieties onto the supermarket shelves. Imports increased by 90% from 1973-1983.
- The economics of growing wheat, which was subsidised until recently, over unsubsidised fruit proved too powerful for most farmers. Grubbing out grants were available until 1988 through MAFF.
- Many of the remaining traditional orchards have been unmanaged for many years and are falling into a state of dereliction.

5 CURRENT ACTION

5.1 Legal Protection

Planning Policy Statement 9 on Biodiversity and Geological Conservation

There is a range of national, regional and local planning policies that, along with other legislation, set out requirements for biodiversity conservation. Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (ODPM, 2005) is the key national planning policy document for biodiversity in England. It sets out the key principles that regional planning bodies and local planning authorities should adhere to in order to ensure that biodiversity is fully considered in the development of planning policy and determination of planning applications. The seven policies within the Environment chapter of the Regional Spatial Strategy for the East of England (GO-East, May 2008) set out the requirements for proper consideration to be given to the potential effects of development on the natural, built and historic environment of the East of England. At the local level, the planning policy documents of local planning authorities should take account of BAP and HAP targets and priorities, setting overarching policies for the protection and enhancement of biodiversity.

Tree Preservation Orders

The Town and Country Planning Regulations 1999 make it possible to place a Tree Preservation Order on fruit trees where it is in the interest of amenity to do so. They cannot be used to control tree work in ongoing commercial orchards.

Local Nature Reserves

LNRs are designated by Local Authorities, in consultation with English Nature. (Section 21 of the National Parks & Access to the Countryside Act 1949). The criteria for designation emphasises that sites selected as LNRs must be of special interest in the local area, or be of reasonable natural interest, and of high value in the area, for the informal enjoyment of nature by the public.

County Wildlife Sites (CWS)

The County Wildlife Site status is a non-statutory designation. CWS are recognised by Local Authorities in Cambridgeshire and Peterborough and listed within their local development documents. All Local Authorities in the county have developed policies that give CWSs some protection. Criteria for the selection of orchard CWSs have been developed, and orchard sites are being proposed to become CWSs.

UK priority HAP

The biodiversity value of traditional orchards has been recognised on a national level, and traditional orchards have become a BAP priority habitat.

5.2 Financial Assistance

Management

Current agri-environment schemes pay for an agreed programme of traditional orchard management, including pruning of old trees, replacement trees and fencing. In some circumstances, grants are also available to create “new” traditional orchards. Traditional orchards covered by such schemes include sites at Wisbech St Mary, Over and Harston.

5.3 Publicity

Public interest has been generated in traditional orchards, and their associated fruit varieties, by national and local organisations such as Common Ground and the East of England Apples and Orchards Project. Local Apple Days and other fruit days are growing in popularity. Wider publicity of agri-environment schemes is also generating interest in orchard restoration

The number and variety of events organised to celebrate National Apple Day have grown over the last 10 years. Local shops, farmers markets and even supermarkets promote local varieties.

5.4 Research

The wildlife value of old orchards has long been undersurveyed. Recent research by bodies such as Natural England and the Wyre Forest Orchards Group indicates that traditional orchards were previously undervalued in terms of their contribution to biodiversity. These habitats can be very rich in invertebrates.

Old/established orchards have an association with tree sparrows, another BAP species. Important populations were found in the Wisbech St. Mary area; during the nesting period, invertebrates are a key food for the young tree sparrows. Further research into this would be useful.

6 OBJECTIVES AND LONG TERM TARGETS

Objectives

- Assess and monitor condition of remaining traditional orchards
- Halt the loss of traditional orchards in Cambridgeshire and Peterborough
- Achieve favourable or recovering condition on existing traditional orchard resource
- Restore existing traditional orchards and establish new plantings of traditional form
- Raise awareness of traditional orchards and their biodiversity value

Traditional Orchard Targets

1. Assess quantity and condition of all remaining traditional orchards by 2010

2. Maintain the current extent of remaining orchards in Cambridgeshire and Peterborough (estimated to be 1000 ha, according to DEFRA as quoted in Phase 1 survey report 2005).
3. Achieve favourable or recovering condition of xx ha for traditional orchards in Cambridgeshire & Peterborough. (to set an area target or % we need Phase 2 Survey results)
4. Restore 2 ha from neglected/derelict orchards per annum through adequate management under HLS schemes
5. Expand traditional orchard area by 2 ha per annum on or adjacent to land known to have been the site of orchards in the past or on land adjacent to existing traditional orchards
6. Increase knowledge and appreciation of the value of old orchards: both in their contribution to biodiversity, and to landscape and culture.
7. Conserve genetic biodiversity of orchard trees by distributing 500 local variety fruit trees in the county.

7. Traditional Orchard ACTIONS with Targets

Habitat Action Plan for Cambridgeshire and Peterborough

BAP objective	BAP TARGET	PROGRESS TO 2006	ACTION	LEAD PARTNER	PRIORITY / DATE	RESOURCES
Assess and monitor	1. Assess quantity and condition of all remaining traditional orchards	Phase 1 Survey finished 2005, Phase 2 survey being carried out during 06-08	1.1 Identify and survey all traditional orchards by 2010, enter information on GIS	COG, Natural England (GIS)	High/2007 (Phase 2) 2010 (Phase 3)	Volunteers, Specialists Travel expenses, maps Database for information GIS facilities NE Financial resources will be needed for Phase 3 survey for consultants, 2009 onwards
		Information from survey can feed into this Needs clarification with national traditional Orchard BAP to use consistent format	1.2 compile database on each orchard identifying the fruit varieties within them, and biodiversity inventory	COG	2010	Make sure confidential information is not generally accessible

		Most work on this done with Phase 1 survey, area figures are still needed.	1.3 Undertake comparative study of amounts of traditional orchards past and present	COG	medium	Mapping, Nigel Russell/Natural England We will need to secure funds for GIS work to be done
			1.4 Identify orchards considered most at risk of removal and irreversible decline and draw up priority action plan	COG	High	Phase 2 and 3 survey work
			1.5 Develop criteria for orchard County Wildlife Sites (CWSs)	COG, CWS partnership	High/2009	Orchard group to suggest criteria in cooperation with CWS partnership
			1.6 Use survey data to designate orchards as CWSs	COG, CWS partnership	High/ 2010	See 1.5
		A regional tree warden event was organised in September 2006 by HDC and ECDC	1.7 Promote the role of tree wardens in monitoring orchards and develop and distribute guidance material to help wardens in their monitoring roles.	HDC, ECDC (do other districts have tree warden schemes we know of?)	medium	HDC and ECDC tree warden work find out about tree warden work in SCDC and FDC and Cambridge City

<p>Halt the loss of traditional orchards</p>	<p>2. Maintain the current extent of remaining orchards in Cambridgeshire and Peterborough (estimated to be 1000 ha, according to DEFRA as quoted in Phase 1 survey report 2005).</p>	<p>* Regional Biodiversity Forum suggested a reference to orchards to be included in the RSS</p> <p>* LDFs can make reference to orchards in Site Specific Allocations, Supplementary Planning Documents, Area Action Plans, Adopted Proposal Maps, Annual Monitoring Reports (from PPS 9 a guide to good practice)</p> <p>* Letter was sent to Fenland planner in May 2006 to include policy on orchards in LDF</p> <p>* SCDC Biodiversity Strategy (to become SPD) includes actions on orchards</p>	<p>2.1 Ensure the relevant habitat policy is included and implemented in the Regional Spatial Strategy and Local Development Frameworks</p>	<p>RBF, district LAs</p>	<p>2008, ongoing</p>	<p>Input in consultations, keep up the profile of traditional orchards</p>
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		Leaflet for planners and councillors TPO example from Breckland Council, saving a small number of orchard trees from development	2.2 Encourage Local Authorities to use existing TPO and LNR legislation, where appropriate, to protect the remaining area of orchard	District LAs (for TPOs) NE (for LNRs)	Leaflet/2007, Action ongoing	
		Leaflet for planners and councillors	2.3 Encourage Local Authorities to use Section 106 and planning conditions to protect existing orchards.	Disctrict LAs	Leaflet/2007, Action ongoing	* Request Arboricultural Survey and a management plan for the orchard * orchard to be handed over by developer to a trust
			2.4 Flag up orchards in Green Infrastructure Strategy and promote publicly accessible orchards	Natural England/Nigel Russell	high/2009	Money for brochure of publicly accessible orchards needed.
			2.5 Encourage modern commercial orchards with older trees in them to retain these, rather than replacing them	COG	High/2010	We could produce a leaflet for orchard owners
Achieve favourable or recovering condition on existing traditional orchard resource	3. Achieve favourable or recovering condition of xx ha for traditional orchards (target area from Phase 2 survey)	The idea is to combine this group with orchard owners in Norfolk with a focus on commercial scale trad. orchards rather than back garden trees	3.1 Establish a local traditional orchard owners group which runs regular training courses and events	EAAOP, FWAG	2009/2010	Apply for Biodiversity Partnership grant in Cambridgeshire and Norfolk

Restore existing orchards and establish new plantings	4. Restore 2 ha from neglected and remnant traditional orchards per annum	* Nigel Russell organised event in May 2006 informing about HLF grant schemes * Survey outcome to guide where action is targeted	4.1 Increase the area of traditional orchards in agri-environment-schemes from neglected and remnant orchards by 2ha per annum	COG, Natural England	2010	Nigel Russell is advising orchard owners
		* Nigel Russell organised event in May 2006 informing about HLF grant schemes * Some management advice and case study of Wisbech St. Mary orchard covered in Farmers' Biodiversity Pack	4.2 Produce guidance notes for owners of old orchards listing sources of grant aid and management advice "Best Management Techniques – between conservation and production"	COG, Natural England	?	DEFRA Technical Information Notes (TINs) on traditional orchards have been published – local specifics for our region are still useful to highlight
Restore existing orchards and establish new plantings	5. Expand traditional orchard area by 2 ha per annum on or adjacent to land known to have been the site of orchards in the past or on land adjacent to existing traditional orchards	Leaflet for Local Authorities Cambourne: Community Orchard as part of development scheme	5.1 Encourage Local Authorities to use Section 106 and planning conditions to create new orchards.	District LAs	Leaflet/2007, Action ongoing	

		<p>* Experience of setting up community orchards in Little Downham, Harston Community Orchard</p> <p>* Proposed community orchard at Crown Lakes, Peterborough, under 1 ha</p> <p>* New community orchard in Great Shelford</p>	5.2 Produce guidance on the creation of community and schools orchards and possible grant support	COG	2010	find funding for project work
Raise awareness for traditional orchards and their biodiversity value	6. Increase knowledge and appreciation of the value of old orchards: both in their contribution to biodiversity, and to landscape and culture	<p>Currently Apple Days/fruit festivals are held in</p> <ul style="list-style-type: none"> • Ely • Cambridge Botanic Gardens • Thorney • Bluntisham • Wisbech St. Mary/David Wheatley 	6.1 Continue participation in the promotion of Apple Days, plum festivals etc. and develop other orchard/fruit events (5 annually)	COG, EEAOP	ongoing	Districts organise events EEAOP organises events
			6.2 Compile database of local fruit growers and produce leaflet to promote orchards and local fruit	EEAOP, COG	2007	Student compiled database
		Find out what's going on with WATCH leaders from WT	6.3 Promote an appreciation of the importance of orchards within schools/education system through links with WATCH leaders and develop training materials	COG, WT	Medium ongoing	Find funding for project officer

	7. Conserve genetic biodiversity of orchard trees by distributing 500 local variety fruit trees in the county	During winter 2006/07 116 trees were sold to community schemes, and 240 trees overall	7.1 Propagate, distribute and make available to the general public and advise on planting and care of 500 local variety fruit trees per annum	EEAOP	Annually/ ongoing	EEAOP runs business side, selling local variety trees
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COG: Cambridgeshire Orchard Group
 CWS: County Wildlife Sites
 EEAOP: East of England Apples and Orchards Project
 ECDC: East Cambridgeshire District Council
 FDC: Fenland District Council
 FWAG: Farming and Wildlife Advisory Group
 HDC: Huntingdonshire District Council
 LA: Local Authority
 LNR: Local Nature Reserve
 NE: Natural England
 RBF: Regional Biodiversity Forum
 SCDC: South Cambridgeshire District Council
 TPO: Tree Protection Order
 WT: Wildlife Trust
 ?: unknown

8 LINKS TO OTHER PLANS

There are links to the other Trees and Woodlands Action Plans and to the national Tree Sparrow SAP.

9 REVIEW OF ACTION PLAN

Arrange monitoring and review of these targets annually, using the Biodiversity Action Reporting System and reset targets and responsibilities for the following three years accordingly.

10 REFERENCES

Cambridgeshire County Council 1994 - A Survey of Landscape Change in Cambridgeshire

Cambridgeshire and Peterborough Biodiversity Partnership/East of England Apples and Orchard Project 2005 – The Condition of Orchards in Cambridgeshire, Phase 1 Orchard Survey, available on www.cambridgeshire.gov.uk/environment/countryside/natureconservation/action/partnership/members/Orchards+Group.htm

Common Ground 1989 - Orchards A Guide to Local Conservation
English Nature 2005 - Review of Priority Habitats: Proposed new priority type - Traditional Orchards

Common Ground 2000 - The Common Ground Book of Orchards

Common Ground 2008 Community Orchards Handbook, available from www.english-in-particular.info/orchards/o-corch.html

DEFRA 2005 – Entry Level Stewardship Handbook

DEFRA 2005 – Higher Level Stewardship Handbook

DEFRA (2007) Technical Information Notes on Traditional Orchards:

- TIN012 - Traditional orchards: a summary,
- TIN013 - Traditional orchards: site and tree selection
- TIN014 - Traditional orchards: planting and establishing fruit trees
- TIN015 - Traditional orchards: an introduction to pruning
- TIN016 - Traditional orchards: formative pruning of young trees
- TIN017 - Traditional orchards: maintenance pruning
- TIN018 - Traditional orchards: restoration and management of mature and neglected orchards

TIN019 - Traditional orchards: fruit tree health

TIN020 - Traditional orchards: orchards and wildlife

TIN021 - Traditional orchards: glossary

available on <http://naturalengland.communisis.com/NaturalEnglandShop/> (→ search for TIN)

Farming of Conservation Journal October 1995 and January 1996

MAFF News Release 15 September 1999 - Saving Old Orchards

MAFF/DEFRA Agricultural and Horticultural Census 1950-2005

RSPB Press Release 16 October 1998 - Fruitless Search for Orchard Wildlife

Sustain 2008 Protecting Our Orchard Heritage – A good practice Guide for managing orchard projects, available from www.sustainweb.org/page.php?id=122

Worcestershire Traditional Orchard Habitat Action Plan

11 LIST OF INDIVIDUALS AND ORGANISATIONS CONSULTED

Anglian Water Services Ltd
Arboricultural Association
Beetle specialists
Bird specialists
Biodiversity Partnership Co-ordinator
Buglife
Butterfly Conservation Society
Cambridge City Council
Cambridge Preservation Society
Cambridgeshire Bat Group
Cambridgeshire and Peterborough Biological Records Centre
Cambridgeshire County Council
Cambridgeshire Orchard Group
Countryside Restoration Trust
East Cambridgeshire District Council
East of England Apples and Orchards Projects
Environment Agency
Farming & Wildlife Advisory Group
Fenland District Council
Flies specialists
Flowering Plant specialists
Forestry Commission
Froglife
Fungi specialists
Grafham Conservation Group
Huntingdonshire District Council
Huntingdonshire Fauna and Flora Society
Langdyke Trust
Middle Level Commissioners
Moss specialist
Moth specialists
Natural England
Nene Park Trust
Opportunity Peterborough
Peterborough City Council

RSPB - East Anglia
South Cambridgeshire District Council
The National Trust
The Wildlife Trust
The Woodland Trust