SUFFFOLK TRADITIONAL ORCHARD GROUP

Advice Note 5 (STOGAN5)

LIVE COLLECTIONS OF ORCHARD FRUIT VARIETIES IN SUFFOLK

May 2012

CONTENTS

.

The Suffolk cobnut variety "*Cosford*", named after the parish in which it is said to have originated.

INTRODUCTION

The description of the Priority Habitat 'Traditional Orchard' recognized in the UK in July 2007 is unique. It is the first time that a UK conservation effort is directed, in addition to our native flora and fauna, to the historic, traditional crop diversity. It has been widely recognized that one aspect of conservation is by creating a managed growing collection of local and regional traditional varieties of orchard fruit that can be used for study, reference and as a source of propagation material for new planting and to replace veteran orchard trees in existing orchards. The present source of these varieties lies with national collections, nurseries that retain mother trees for scion wood, local collections, private individuals, and old orchard themselves.

This Advice Note does not aim to cover every aspect of Suffolk's orchard tradition that needs to be conserved and preserved – most of that has still to be discovered. This is **version 4** and will be succeeded by updated versions as more accurate information comes to hand.

National Collections
DEFRA's National Fruit Collection (NFC) at Brogdale in Kent was created between 1950 and the 1970's from an original collection made by the RHS over many years. This was added to widely in the 1960's by requests from the NFC and by voluntary donation of scion wood from all over Europe and the rest of the world. Until 2006, the staff comprised specialist pomologists interested in traditional as well as modern diversity; since then its management has been passed to a Reading University team whose interest is in DNA analysis, cryo-preservation and the genetics of plant breeding. Wide concern has been expressed at this development, even though DEFRA has so far stated that the intention is to retain growing trees. It is the largest such collection in the world.

The NFC collection contains 2 trees of each of 3,000+ varieties. This comprises over 2,000 apples including some for cider, 350 pears, including some for perry, 300 plums, and many cherries, quince, cobnuts etc. The accession of local UK varieties has ceased, indeed all accession may have ceased. Brogdale is still a potential source of scion wood for propagation of almost any variety in the collection, as is RHS Wisley.

Some databases now estimate that over 10,000 apple varieties have been recorded, and local groups in the UK have recorded hundreds of local varieties not in the NFC. Somerset and Gloucestershire groups are particularly active in apples and there is a Three County collection of perry pears at Great Malvern. Plums are a "Cinderella" collection being under researched and static. Cherries have had some more recent attention, largely demonstrating that some varieties are in the collection under a number of different names.

A particular problem lies with NFC's long standing accession policy. If an accessioned variety is sent in with a particular name and fails to agree with a written description in the literature, or the literature has no accurate enough description to confirm the identification, the plants are de-accessioned, i.e. discarded entirely. There is no recognition of the variety even if the original accession was from a clearly cultivated grafted orchard tree and was there for the purpose of producing a crop. Its name may, or may not, have been confirmed by past references, but it would clearly have been an intentional propagation. As a consequence, over the years many orchard varieties of apples have been de-registered

("*de-frocked*", as one pomologist termed it) effectively losing their identity. This discard policy seems illogical, and has resulted in a number of local orchard groups creating their own collections, with their own accession policy.

A second problem with the NFC accession policy was that when several accessions turned out to be "the same", perhaps with different synonyms, just one was selected for growing in the collection and the others discarded because space was at a premium. This principle is unassailable for clones, but the principle was applied to varieties with the same name but with some variation and therefore not clones. The NFC term for these variations was a "population" and included close relatives, similar varieties and seedling forms. Thankfully, NFC kept the records of accession and discards and it is possible now to see where this had been done from their archive.

An extreme example of this was in the cherry plums (called myrobalans in the NFC) where only two July ripe varieties (**Burrell's Red** and **Yellow Cherry Plum**) was kept out of many that were sent to them, including some varieties ripe two months later. A further example was with the **Greengage**, many clones of which are self-sterile. Greengage orchards with a mixture of clones would have been more productive than those of just one clone. Today, the NFC is a source of greengage graft wood, but only supplies the one retained clone.

It isn't reasonable to expect the NFC to collect every local variety of UK tree fruit when there are so many; there is insufficient space or funding. So if they are to be retained and made available that has to be done at a local level.

The following policy has been developed for Suffolk, but if the principles are sound they could be applied to any locality or region.

THE TRADITIONAL ORCHARD

The term "traditional" orchard, is used in the sense that it is planted and managed in a locally traditional manner, without insecticide or herbicide sprays (which have at least a 200 year old tradition of their own), and with as much regard for landscape and wildlife habitat value as for its fruit or nut crop (the meaning used by DEFRA and NE for the UK Priority Habitat, Traditional Orchard, defined in July 2007).

SUFFOLK ORCHARD FRUIT VARIETIES

The varieties of fruit and nuts grown in orchards can be said to fall into three categories;

- Cat 1 **Varieties that originated, i.e. were bred, selected or discovered, in Suffolk.** Most of these were named in the late 18th to mid-20th century. Prior to this, names were less obvious, not recorded or less memorable (e.g. the large leaved red apple of Gerrard).

- Cat 2 **Varieties that are widely grown but whose origins are elsewhere** including a range of very ancient varieties whose origins are unknown.

- Cat 3 **An unknown number of varieties that are, or were, obviously propagated for their crop, by being grafted or grown in rows, but which do not fit any known, recorded or described variety.** Almost all counties have these; many may be local, but others may be widely grown, but unrecognized as such.

Several orchard fruits were widely propagated by seed, and were therefore not propagated clones of a single individual. This can result in a wide diversity of shapes, colours, seasons and forms, or, in other cases closely related but basically similar individuals making up a population with some genetic diversity. Suffolk's cherry plums fall into this first group; damsons, bullace and some greengages across England tend to fall into the second, and there is some evidence that some cherries may have been seedlings.

A very rough current estimate for Suffolk puts Cat 1 at 50 varieties, Cat 2 at another 50 and Cat 3 guessed at 30, i.e. a total of 130. It is not expected that all these need, must, or should be, on a single site. They represent several very different traditional orchard types.

Suffolk origination varieties – Category 1

The East Of England Apples and Orchards Project, a charity with based in Norfolk that promotes, propagates and sell trees of local origination varieties of top fruit has scoured the literature and records the following varieties as of Suffolk origin. Data and descriptions below are paraphrased from EEAOP, with my comments or additions in italics and brackets. By comparison with some other counties (for example Norfolk, Hertfordshire and Gloucestershire, relatively few varieties originated in Suffolk, probably because there were no major Victorian and Edwardian fruit tree nurserymen (the peak era for breeding and selection) and Suffolk has no specialist cider or perry industry which generated a plethora of local forms.

Apples

Red Miller's Seedling, dessert, pre 1948, pick late Aug, use Aug – Sept
A red 'sport' of the Berkshire apple Miller's Seedling, which arose in the garden of Mr. Wheldon, of Sudbury, sometime before 1948. A small conical fruit that is easily bruised, with crisp, very juicy sweet flesh.

Suffolk Pink, dessert, c.1990, pick Sept, use Sept – Oct
Pale yellow skinned with a delicate pinkish blush. (*Found growing in orchards at Braiseworth in 1980's by Dan Neuteboom.*)

St Edmund's Russet, dessert, pre-1875, pick Sept, use Sept – Oct.
Raised by Mr Richard Harvey of Bury St Edmunds. A sweet, juicy and rich russet with a pear like quality. Also called St. Edmund's Pippin; it has good resistance to scab, canker and mildew.

Honey Pippin, dessert, introduced 1955, pick Sept, use Sept – Nov
A Cox-like variety submitted to the National Fruit Collection in 1981 by Justin Brooke of Wickhambrook Nurseries. Better disease resistance than true Cox. Pearmain shaped. Sweet, juicy, crisp almost yellow flesh.

Clopton Red, dessert, raised 1946, introduced 1961, pick Sept, use Oct – Nov
A seedling that does not look like a Cox's Orange Pippin raised by Justin Brooke of Wickhambrook Nurseries. A medium sized heavy cropper. Bright red flush. A sweet juicy apple with a delicate aromatic flavour.

Maxton, discovered 1939, dessert, pick Oct, use Nov – Jan
Discovered as a sport of Laxton's Superb in an orchard at Assington in 1939. Sent for trial in the National Fruit collection in 1961. Known in Holland in the 1960s as **Suffolk Superb**. Sweet, juicy flesh, redder than Laxton's Superb. Good canker and mildew resistance.

Maclean's Favourite, dessert,c.1820, pick Oct, use Nov – Jan
Raised by Dr. Allan Maclean of Sudbury around 1820. Parentage unknown. Yellow flesh, sweet and rich in flavour. A late keeping dessert variety.

Lady Henniker, dual use, c.1845, pick Oct, use Nov – Jan
Raised from a seedling found in discarded cider must at Thornham Hall. Introduced by head gardener Mr. Perkins in 1873. RHS First Class Certificate 1875. A popular garden variety in 19c. Oblong and angled, often large. Cooks to a puree, (*but a good eater).*

Lord Stradbroke, culinary,c.1900, pick Oct, use Oct – Dec/Feb
Found, or raised, by Lord Stradbroke's head gardener, Mr Fenn, at Henham Hall, near Wangford, in about 1900. RHS Award of Merit in 1905. Also called **Fenn's Wonder** and **Fenn's Seedling**. Large, maroon, prominently ribbed and crowned. (*Also a good eater).*

Catherine, culinary, pre 1900, pick Oct, use Dec – Feb.
A late-flowering, long-keeping cooking apple from the garden of the former public house the 'Live And Let Live' in Combs, near Stowmarket. Sweet, and keeps shape when cooked. Received at the National Fruit Collection in 1977 when the tree was already believed to be a century old.

Old Blake, culinary, pre 1900, pick and use Oct - Feb/Mar
A late-keeping yellowish green cooking apple still grown at Blundeston near Lowestoft. It is believed to have arisen at the Old Forge in the 1800s. Pinkish flesh when cooked with low acidity.

Several other Suffolk origin varieties are known or suspected:

Sturmer Pippin, a long keeping dessert, from early 19th C. Although Sturmer is in Essex (almost an Essex enclave within Suffolk) the origination is said by local people to have been Suffolk.

inter Wonder is a modern dessert apple discovered amongst a row of Suntan at Braiseworth some twenty years ago.

An apple called **Langton Green**, presumably from Langton Green, is grown in gardens in Eye.

There may be others. EEAOP lists the following "lost" apples varieties of Suffolk, which have not been recorded for many years. These have generally researched from lists of fruit shown at horticultural shows such as the RHS.

Beauty of Livermere, 1896, season unknown
A medium sized deep red coloured conical apple from Bury St Edmunds. Flesh also tinged red.

Bradbury, 1934, season unknown
Probably originated in Suffolk. A medium sized green-skinned apple with brown stripes. Still in existence in 1946.

Emerline, 1900, "second early season" (*i.e. Aug/Sept*)
A small apple exhibited at the RHS in 1900 from Lowestoft.

Livermere Favourite, 1896, late season
A medium greenish-yellow skinned ribbed, rectangular apple possibly raised by Mr. Tallack of Bury St. Edmunds. Awarded an RHS Award of Merit in 1896. It has stripes of dark red and a greasy skin. The flesh is firm, greenish white, slightly acidic and fairly crisp and tender.

Ruby, 1899, mid-season
No description but arose in Ipswich.

Plums

Greengage, dessert, origin unknown, pick/use Aug – Sept
In the eighteenth century Thomas Gage of Hengrave Hall, near Bury St. Edmunds, received a shipment of fruit from France that included the "gage" (*called in France **Reine-Claude***). His gardener forgot its proper name so renamed it Green Gage after Thomas. (*By that time the variety was probably already grown in England as **Verdoch**, which came to England from Italy as **Verdocchio**. Delicious, but not a heavy cropper here and largely replaced by Cambridge Gage, which is probably a seedling of Greengage*)

Coe's Golden Drop, dessert, pre 1800, pick/use Sept.
Raised by nurseryman Jervaise Coe at Bury St. Edmunds in the late 1700s, possibly as a cross between a Green Gage and the plum White Magnum Bonum. Large amber fruit, (*with a short "neck"*) spotted with red flecks. (*A difficult fruit to grow which does best in a warmer climate, flowers early in the years when few other plums are in flower to pollinate).*

St. Martin, culinary, c.1800, pick/use Sept
Introduced by Jervaise Coe at Bury St. Edmunds about 1800. Parentage unknown. Also called **Coe's Late Red**. Small, deep red in colour and with a white bloom.

Cherry plums (*Prunus cersifera*)

These seem to be a Suffolk speciality although isolating which were planted as crops, which are grown out plum rootstocks, and which are old or new hedge plantings is probably never going to be resolved fully. Suffolk has many big old trees. (I don't understand "although isolating" Gen)

Several varieties were selected and sold by Burrell's Nursery of Bury St Edmunds. The NFC still grows one called **Burrell's Red Myrobalan** (myrobalan is the German name for the cherry plum) sent to RHS Wisley by R J Burrell in 1924. This fruits in late July, and may be the same as **Burrell's Early Red**, still found in old farm orchards. The nursery also sold a **Burrell's Late Red** and a **Burrell's Yellow**.

Cherry plums in Suffolk are widely grown (?) and extremely variable, some fruit into late September; colours range from almost black (e.g. *Prunus cerasifera nigra* and *pissardi* and, on a large and ancient green leaved pollard at Dairy Farm, Thrandeston), through to purple, red, orange and yellow. Several orchards in Suffolk have very large old cherry plum trees, planted in rows, and orchard hedges often contain cherry plums, as well as damsons, presumably as additional crops. (Cherry plums, *Prunus cerasifera*, are still grown in eastern Europe, and several Ukrainian varieties have recently been introduced into the UK. The German name myrobalan is commonly confused with Mirabelle, which are a quite distinct group of small sweet, usually yellow, plums, *Prunus domestica,* which prefer better climates than that of the UK.).

Jervaise Coe, an 18th C nurseryman in Bury St Edmunds was responsible for introducing several plums and gages which are no longer grown, and may have been lost.

Cherries

Polstead Black, dessert, origin unknown, pick/use late July. A small black skinned sweet cherry local to Polstead. Recorded as being sold on Sudbury market in the 1940s. Red fleshed and very juicy.

Cherries are, or were, grown commercially in several regions of England including Kent, Devon, Hertfordshire, and the south Suffolk/north Essex border along the Stour. The limited literature on English cherries does not accurately describe cherry varieties, and there were many local names. Some work carried out on the cherries in the NFC in the 1980's and 90's suggest that varieties were known by a range of synonyms and that a proportion of those accessioned from England appeared identical to widely cultivated forms, reducing the number of unique varieties considerably.

Those grown in Suffolk and Essex have never been studied in depth and have been thought to be common varieties grown elsewhere. However, retired orchard workers have recently suggested a range of some five names, **Churchill, Colchester Black, Sandbury White, Sandbury Black, Glastonbury, Riddlestone's Black** and **Riddlestone's Green Stem** (none of which are recorded elsewhere, although from the names only the last two may have local origins!).

Michael Gardener of Romford, Essex, is a collector and grower of local and traditional cherries and gages, and has searched south Suffolk for old varieties to propagate. His information is largely anecdotal, but extensive, and he is very willing to share his knowledge, his contacts and his collection.

Cherries in Suffolk were grown as large trees, some very large indeed. Many of the trees were pole grafted, that is grafted at about 2m above ground level to a single stem sapling already growing on the intended site. This is characteristic also of north Kent, and the areas north and south of the Stour, for cherries, and the Welsh Marches and "the three counties" for perry pears, and scattering of sites from Somerset to Warwickshire for some cider apple orchards. Two orchards in South Suffolk have cherries and pears that were pole grafted mixed with other cherries and pears that were grafted just above ground level.

Nuts

Cosford, has given its name to a cobnut known in the 18th century and widely grown throughout the world. It seems likely that it was widely grown perhaps for centuries previously and was simply given that name because it was remembered there. Many cobnut and filbert varieties are thought to be very ancient. STOG surveyors have recorded many isolated groups of cobnuts, often the last remnant of an old orchard site.

Although there is still much to discover it seems that cobnuts in Suffolk were mostly grown as stools with 5 to 9 large stems, sometimes pruned back to make cropping easier, and other suckers removed annually. This contrasts with the Kent method of a short single "leg" with an open branches kept manageable by "bratting", snapping off the young shoot annually to encourage young wood.

There are records of commercial walnut plantations in southern south Suffolk (one still exists in Essex, south of the Stour), and a walnut plantation (of 13 trees) was recorded at Beyton in 2010.

Widely grown fruit varieties whose origins are elsewhere – Category 2

This list is likely to be extensive, and is still in the process of being prepared. The following is a tentative short list.

Apples and pears

A record of all the samples of apples and pears, quince (and a few late plums) brought in for identification at Apple Days in October 2007, 2008, and 2009, from Suffolk locations, at Redgrave, and at Foxburrow, Melton, each year, is shown below. Varieties that were from obviously single garden trees have been omitted. This list isn't sufficient to make a judgement on the varieties typical of old orchard apples of Suffolk, but future years should refine the list.

Table - see p. 9

Fruit	CV Ident	No
Apple	Bramley's Seedling all forms	46
Apple	Newton Wonder	22
Apple	Laxton's Superb	15
Apple	Spartan	14
Apple	Charles Ross prob	13
Apple	Howgate Wonder	13
Apple	Dr Harvey	12
Apple	Golden Delicious	12
Apple	Laxton's Fortune	12
Apple	Blenheim Orange	11
Apple	James Grieve	10
Apple	Allington's Pippin	9
Apple	Jupiter	9
Apple	Discovery	8
Apple	Gravenstein (prob)	7
Apple	Lane's Prince Albert	7
Apple	Ribston Pippin	7
Apple	Warner's King	7
Apple	Cox's Orange pippin	6
Apple	Ashmead's Kernal	5
Apple	Lady Henniker	5
Apple	Mere de Menage	5
Apple	Monarch	5
Apple	*seedling or rootstock*	*5*
Apple	Arthur Turner	4
Apple	Catshead	4
Apple	D'Arcy Spice	4
Apple	Egremont Russet	4
Apple	Emneth Early	4
Apple	Golden Noble	4
Apple	Lord Derby	4
Apple	St Edmunds Russet	4
Apple	Sunset	4
Apple	*wilding/seedling*	*4*
Apple	Worcester Pearmain	4
Apple	Adams Pearmain	3
Apple	*Cox type unident*	3
Apple	Grenadier	3
Apple	Norfolk Beauty	3
Apple	Tydemans Late Red	3
Apple	Bismark	2
Apple	Court Pendu Plat	2
Apple	George Cave	2
Apple	Granny Smith	2
Apple	Greensleeves (prob)	2
Apple	Grey Pippin	2
Apple	*hedge wilding*	2
Apple	Keswick Codling	2
Apple	Lord Stradbroke	2
Apple	Nutmeg Pippin (prob)	2
Apple	Orleans Reinette	2
Apple	Reinnette du Canada, & Gris	2
Apple	*sheep's nose type*	2

Fruit	CV Ident	No
Apple	American Mother	1
Apple	Autumn Pearmain	1
Apple	Belle de Boskoop	1
Apple	Braeburn	1
Apple	Cox's Pomona (poss)	1
Apple	Dewdeney's seedling (prob.)	1
Apple	Dumelow's Seedling	1
Apple	Emperor Alexander	1
Apple	Gala ?? poor spec	1
Apple	Herring's Pippin	1
Apple	Idared	1
Apple	Jonathan	1
Apple	Kentish Filbasket	1
Apple	King's Acre Pippin	1
Apple	Laxton's Epicure	1
Apple	Leeder's Perfection	1
Apple	Malling Kent	1
Apple	Maltster	1
Apple	McKintosh	1
Apple	Newton Pippin	1
Apple	Nonpariel	1
Apple	Norfolk Honey Russet (prob)	1
Apple	Tower of Glamis	1
Apple	Wyken Pippin	1
Apple	uniden	58
Fig	Brown Turkey	1
Medlar	Nottingham (prob)	2
Orn Crab	Golden Hornet	1
Orn Crab	John Downie	1
Orn Crab	*unidentified*	1
Pear	Beurre Hardy	5
Pear	Conference	5
Pear	*Bergamot type*	3
Pear	Concorde	3
Pear	Doyenne du Comice	3
Pear	Louise Bonne of Jersey	3
Pear	Fertility	2
Pear	Huyshe's Victoria	2
Pear	Alexandre Lambre (poss)	1
Pear	Black Worcester	1
Pear	Robin	1
Pear	Uvedale St Germain	1
Pear	Winter Nelis	1
Pear	Catillac	3
Pear	*unidentified*	5
Pear (Asian)	Nishi (prob)	1
Plum/G/D	Aylesbury D type	1
Plum/G/D	Monarch	1
Plum/G/D	Shepherd's Bullace	1
Plum/G/D	Shropshire P type	1
Quince	Portugal	2
Quince	*Apple type*	1
Quince	*Chaenomeles cathayensis*	1
Quince	Meech's Prolific prob	1
Quince	*Pseudocydonia chinensis*	1

Plums

No annual plum event is held in Suffolk (as happens in Gloucestershire and Huntingdonshire). However, STOG has organized a Plum Day on 18th August 2012 at Orchard Barn, Ringshall Ip14 2LY. Plums were widely distributed by nurserymen within Suffolk, especially those introduced to the market by Rivers of Sawbridgeworth (19th C), and Laxtons of Bedford (early 20th C).

Some may have originated with these companies. These include:

Greengages and other local gage forms including those that fall into the **St Julien** group, originally widely grown throughout Europe and eaten fresh, and dried for winter storage, and still found in old hedges. Also seedlings of Cambridge Gage (known to have been occasionally propagated from seed) which yield slightly different forms to the parent.

Yellow Egg, as it is known in Suffolk, the Pershore of the west country, was, and perhaps still is, universally common in Suffolk. The STOG surveyors have now recorded several plum orchards in the Sandlings.

Unknown, unidentified and unrecognized varieties – Category 3

Apples

At Apple Days in the county, varieties are frequently brought for identification which do not appear to agree with any known description. This seems to be particularly true for the old clayland farm orchards. These **may** be known local varieties elsewhere in the country (or in Europe). Some will have originated from a "wild"/feral tree selected by a keen local farmer, gardener or nurseryman, and may have originated a long time ago, but were never satisfactorily described in print.

Primary school children were known to have been taught to graft in the 1920's and 30's, and are known to have used their skill to propagate local fruit trees (and some retain that skill even today).

Excluded from the table of apples above are an additional 21 samples from local orchards (not including obviously poor specimens). These were not identified despite being kept for detailed appraisal, and of these 15 were not recognized by a group of experienced apple identifiers. A proportion will be known somewhere, leaving the rest as still unknown. All these are propagated trees in orchards, and were clearly kept for their crop.

Pears

The claylands also has been the source of many unknown pears, almost all from large trees on wild pear rootstocks, or on their own roots. Some of these trees are giants and old, but clearly planted and once components of an orchard.

A number are "apple pears", also called in England, Bergamots, and also many appear to be culinary, long-keeping, hard "winter" pears. Some of these pears are very large, and of the old **St Germain** form. Two have been identified and even these with reservation, one as **English Bergamot,** the other as **Winter Orange,** this last found a number of times.

Another group of pears are the large trees with clusters of very small sweet fruit, and known colloquially in south Norfolk and north Suffolk as “swarmer pears”! Several have been cherished for their early sweet fruit, eaten raw. (One such has been propagated recently and passed round the village of Yaxham, Norfolk, possibly the sort of local distribution that was more common in the past).

Plums

Plums are common in old farmhouse hedges and on old orchard sites, and it has been assumed that these are either grown out or suckered rootstocks (especially the cherry plums), or seedlings, and while this is certainly so for most there are some large trees that have not been identified. No doubt this will be due to lack of knowledge for some, but that may not be true for all.

Right across Suffolk a small yellow “wild” plum that looks a little like a Mirabelle is found in hedges.

PLANTING A LOCAL FRUIT COLLECTION

Planting any top fruit collection is a long term commitment. The NFC at Brogdale, Kent is planted on modern dwarfing rootstocks, apples on M9 and pears on Quince A, two plants of each variety, in herbicide treated strips in lines 2m to 3.5m apart (depending on the species and varietal vigour), with a grass walkway between the rows, and managed using pruning for crop production, and commercial sprays. Belgian and Dutch fruit collections are similar. It is re-propagated about every 30 years; on more vigorous rootstocks this would be far less frequent.

Other national collections (for example in Sweden, Austria, and some private collections in the west country) make efforts to create a traditional orchard landscape, in effect a recreated “traditional orchard”.

In Norfolk the County Council has supported East of England Apples and Orchards Project (EEAOP) in marketing Norfolk local origination varieties mostly onto semi-dwarfing rootstocks, to gardeners, parks and amenity land projects, by part funding the planting. This has, in effect, created numerous small collections of just these varieties, scattered across the county in private and public hands. EEAOP also sells other East Anglian local origination varieties on dwarfing rootstocks, but recently has propagated to advance order onto vigorous rootstocks.

Funding is available to farms and other land registered with DEFRA’s Rural Land Register for the creation of a “Traditional Orchard” under Higher Level Stewardship This grant has been taken up widely, to the extent that there is a now a shortage of the large growing propagation rootstocks specified by Natural England.

For the purpose of information and discussion the Appendix below is the planting plan for a 5acre “regional” collection orchard in a farm holding in HLS. Mayfields, at Foulsham in Norfolk, is owned by the Countryside Restoration Trust (of Barton, Cambridgeshire) and tenanted by Sarah Jenkins, who farms sheep.

It was prepared with extensive consultation with the tenant, the owners, NE and orchard conservation specialists.

APPENDIX 1
Project plan for a traditional regional orchard fruit collection

The following is the project plan for a 5acre East Anglian orchard collection proposed for a small grassland farm in Norfolk, owned by an independent farming conservation trust and tenanted by a sheep farmer that also trains sheepdogs and shepherds. The plan is given here as an example of the thinking behind the project

The purpose of the planting is to:

1 **Create a standard tree orchard landscape planted and managed in a traditional manner as recognized within the JNCC 2007 Traditional Orchard Priority Habitat broad description.**

2 **To provide a reference collection of traditionally grown orchard fruit and nuts for East Anglia** to include both commercial, traditional farmhouse and garden orchard fruit. The National Collection at Brogdale does not include, and currently has no plans to include, additional local varieties (although a proposal has been made to offer space to do that to local groups for an annual fee).

3 To use the site for training and education in every sense of the word and to promote an understanding of the traditional orchard concept in the region.

The planting and management policy proposed is as follows:

1. **To plant a collection of traditional cultivars and varieties of fruit and nut species grown in Norfolk, but to also include other East Anglian cultivars.** East Anglia, indeed any region, can be said to have grown varieties that did well in the climate, were locally appreciated, or were saleable, some of which were of local origin, either by being discovered as wildings or accidental seedlings or by being selected with intent. This collection proposes to plant:
   a. **Species and varieties of Norfolk and regional origin.**
   b. **Species and varieties traditionally or widely grown in Norfolk and the region.**
   c. **Species and varieties that have not been identified but been found to have been grown and propagated locally** (because they are presumed to have been valued) and cannot be, or have not yet been, named.
2. **To graft to large growing, vigorous traditional rootstocks where possible**, and where not possible to plant on less vigorous stocks and to re-propagate to traditional large stocks. (In the last two years these stocks have been in short supply). (Dwarfing stock are also “traditional” in that they have been with us for centuries, and an area without grazing for these is planned later, and will be needed for the establishment of cobnuts, but this will not be a large area). In general apples will be on MM111, M25, M2, or their own roots, pear on “wild pear” (but Quince A for some varieties which grow vigorously on quince), plums on their own roots, St Julien A, Myrobalan or Brompton, cherries on F1/2 or seedling P. avium, quince and all nuts on their own roots in time.
3. **To plant 5m apart and 6m between rows, *as a minimum spacing*,** and remove trees or re-propagate as required to allow the trees to grow to their full size (se below).
4. **To select pruning and overall horticultural management regimes** that permit the rention of some dead wood and the acceptance of lower than commercially viable yields and qualities to emulate the most diverse traditional orchards of the region - this could mean a no-pruning policy.

5. **To fence the orchard** with 1m high (80cm plus at least one top wire) stock fence allowing a 4.5m perimeter track on three sides, for visitors, students and access.
6. **To construct a small field shelter/equipment store.**
7. **To plant a new 260m hedge** (three sides are already hedged beyond the planned perimeter fence) comprising regionally grown, and hopefully of regional provenance, native species mixed with traditional hedge crops (such as bullace, damsons, cherry plums etc., also of local, or at least regional, provenance)
8. **To maintain a sheep grazed grass sward with no cultivated bare ground**. To graze with a downland sheep breed except in autumn (except immediately after planting). Southdown sheep are planned elsewhere on this holding.
   This area of Norfolk has a substantial roe and red deer population, and well protected standard trees are essential for this reason alone.
9. **To protect the trees from grazing animals with adequate protection.**
10. **To label all trees** with name, graft wood origin, rootstock type, and propagation history (and keep a separate paper, and digital, record).
11. **To make the collection available** to specialists, enthusiasts, local and national, and the general public, by the operation of training, educational, seasonal and "apple day" type events, and conferences in the orchard, and at the Centre building.
12. **To set up an experienced management group and a team of volunteers** to manage and maintain the collection.
13. **To supply crops for display as apple day events, and sell surplus fruit** crops (if any!) at the centre, via volunteers and for juicing

Capacity, spacing, protection, support and long term policy

It is not intended to plant all the potential tree spaces immediately. Using 5m spacing and 6m between rows 78m x 262m (2.1ha) could provide up to 12 rows each with 50 trees, or 600 individuals. The spacing for pears and cherries and some plums on seedling stocks will need greater spacing, and it is anticipated that there could be about 360 individual trees in time. It may take many years to fill all the potential sites. The **initial** proposed list is 250 individual trees, and the HLS agreement will fund the first 100.

Within 15 years some trees may become too crowded with touching canopies. The policy at that time will be decided then, rather than commit to a rigid extraction policy such as alternate removal. Experience from other standard tree collections (in the UK, and especially elsewhere in Europe) that consists of many different species and varieties with different growth rates and planted over a period of some years, suggests that decisions can only be made as required and that wider spacing is often wasteful and unnecessary.

The total number of fruit cultivars that originated in East Anglia is probably in excess of 300, but a considerable additional number are, or were, widely grown in the region but are of unknown origin or from elsewhere, but are typical of the region or a county. In Suffolk and Norfolk Bramley's Seedling, originating in Nottinghamshire, is the most widely grown old apple tree. In Suffolk, Mere de Ménage and Catshead, both of unknown origin, are two of widely found old trees, whereas the plum Coe's Golden Drop, originating in Bury St Edmunds, seems to favour a better climate than Suffolk, and so far has never been brought in for identification.

For maidens and standard trees the initial support and protection from grazing sheep and rabbits will be a single 65mm x 1.8m MRP wood post supporting a 1.5m Tubex. The post will be labelled with a long term laminated printed plastic label with name, scion origin and rootstock. The young tree will usually be unsupported within the tube. In time – after 4 to 8 years – the post and tube will be replaced as it fills and splits with either a four- or three-post enclosure with 1.2m stock fence (as proscribed under Environmental Stewardship for sheep protection).

Cobnuts, planted as whips and grown in coppice form or multi-stemmed will require four post protection from the start. Quince usually require the same.

Fruit in the hedge will already be between two stock fence lines and 1.5m from the fencing and will require rabbit spiral-and-cane or rabbit spiral-stake-and-tie depending on size of plant.

Paul Read
May 2012

Suffolk Traditional Orchard Group
www.suffolkbiodiversity.org

Supported by The National Lottery® through the Heritage Lottery Fund
heritage lottery fund