

NEWSLETTER

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For our many new members, some history...

In July 2007, the JNCC (Joint Nature Conservation Committee, the Adviser to Conservation. Government on Nature recognised that some orchards are significant wildlife habitats and defined the Traditional Orchard as a UK Priority Habitat, only the second biotic (man-made) priority habitat after Hay Meadows. This came about after several years of increasing lobbying and pressure from small orchard organisations of enthusiasts and ecologists, many in the west country but including some of us in Suffolk. Across Europe, that recognition had been made many decades earlier. Natural England defined a Traditional Orchard as trees on vigorous rootstocks in natural ground flora, with no use of herbicide or pesticide.

Update on Suffolk's Traditional Orchard Survey

We have conducted two training sessions so far, one at Suffolk Wildlife Trust's Foxburrow Farm near Woodbridge, and the other at Thornham Walks. Paul Read, our orchard expert, leads the training, with help from Diane Ling (FWAG) and Gen Broad (Suffolk Biodiversity Partnership).

47 surveyors have signed up to date, the majority of them are parish. Tree Wardens surveying their own parish while a small number of enthusiastic people are taking on additional parishes. In total, 70 out of Suffolk's 470 parishes have a surveyor's name against them.

Work has started in Mid-Suffolk with help from their Tree Officer, Alice Martin, where we believe the majority of Suffolk's old farm orchards existed.



Trainee orchard surveyors learning about grafts at Thornham Hall walled orchard June 2009. Photo: Paul Read

The next training events are to be held over the summer and autumn, in the south, west and east of the county. If you are interested in volunteering for the survey, please contact Gen Broad.

The project is funded through NE's Countdown 2010 Biodiversity Action Fund, and administered by the National Trust. The summer 2009 'Orchard Matters', Newsletter of the Conserving and Restoring Traditional Orchards, England Project can be downloaded here.



Here is the first (we think!) SBP newsletter article, on an orchard ecology course, in June 2009 edited by Gen Broad, then Suffolk's Biodiversity Officer.

Suffolk Biodiversity Partnership (SBP) was created about 2008/9 to promote Suffolk's ecological and wildlife richness, and a committee within SBP was set up to study and promote Priority Habitats on farms in Suffolk. In those early years, Suffolk's orchards were studied and mapped by volunteers managed by Suffolk Traditional Orchard Survey, a small ad hoc team of SBP.

The first funding commenced from 2008 to 2009. Our ambition was to manage our own survey and funds and the process of acquiring grant aid led to the creation of **Suffolk Traditional Orchard Group** as an unincorporated association and an application in 2011 for three years of funding of £50K from the Heritage Lottery Fund. That project, "New and Old Orchards for Suffolk", with our partners Suffolk Biodiversity Information Service (SBIS), extended the surveying. It led to the online publication of Advice Notes in a section of SBIS's website devoted to STOG and to plantings of new community orchards as Traditional Orchards. Our first Newsletter was in 2010, the first STOG Grafting course in Feb 2011, and the STOG Buying Scheme in 2012.

STOG's members (about 100 at that time) were also familiar with the orchards in other East Anglian counties and beyond and with other active amateur and professional orchard enthusiasts, frequently combining to run fruit identification programmes at Apple Days and other events across the region, and with national organisations such as Natural England, Ancient Tree Forum, and of course local Tree Wardens. A link with the University of East Anglia's Landscape History studies led, in 2017 to 2021, to Orchards East (OE), another Heritage Fund project (for £500K), led by UEA and managed by two cochairs, Professor Tom Williamson (UEA Dept of Landscape History) and Paul Read (chair

STOG Newsletter

We propose to send out four newsletters each year, and would welcome contributions, experiences, short articles of interest on orchard fruit matters, events, orchard biodiversity propagation and management.

of STOG) to extend the orchard surveying, training, community orchard planting and biodiversity studies across the six counties of greater East Anglia, bringing together many other county orchard groups and enthusiasts. With its editor Gen Broad, and original STOG membership, the STOG newsletter became the basis of the Orchards East Newsletter, doubling its circulation to around 550. This collaborative project was built on the work of the existing Suffolk Traditional Orchards Group, Hertfordshire Orchard Initiative. Cambridge Orchard Group, and Bedford and Luton Orchard Group, and adding East of England Apples & Orchard Project and the new Essex Orchard Group. The project used the 2nd ed OS 25" to the mile maps of the 1890s-1920s and other maps. It worked with volunteers, orchard owners, but most importantly, the six local environmental record centres (LERCs), and Peoples' Trust for Endangered Species' traditional orchard specialists.

This complete sequence of orchard study newsletters, from the informal Suffolk's Traditional Orchard Survey through Orchards East, were edited by Gen Broad; Nos 1 to 24, for SBP, STOS, STOG and OE Newsletters, from 2012 to 2021 are available for download from Suffolk Biological Information Service's website see www.suffolkbis.org.uk.

Orchards East Forum was set up as a legacy of Orchards East, as a volunteer-run group formed in 2021 with representatives of orchard interest organisations across the six counties, with a combined Orchards East and

Orchards East Forum website Orchards East (orchardseastforum.org) It is a discussion group with no constitution (as yet) that aims to bring together the organisations and principal individuals involved with orchards in the six eastern counties; it meets online about six times a year and is co-chaired by Neil Reeve, chair of East of England Apples & Orchard Project (EEAOP) and Paul Read of STOG.

STOG is also a member organisation of Orchard Network, Orchard Network - People's Trust for Endangered Species (ptes.org), a national organisation covering the whole of the British Isles with specific interests in all aspects of orchards including community orchards as traditional orchards, orchard biodiversity, teaching, training and skills. STOG currently leads on a grant aidfunded research ONCA project on our native crab apple, Malus sylvestris, which will be the subject of the next STOG newsletter. All the newsletters of the project are available on the ON website at Crab Apple project | UK Orchard Network

STOG is also represented on the Register of Local Cultivars (RLC) committee of fruit identification experts, chaired by FruitID and U of Reading School of Agriculture that provides validation to new names given to fruit cultivars that can be identified as unique by a DNA fingerprinting process, a facility available to the public now in its 8th year. This is only available, so far, for apples, pears and cherries.

STOG Membership

STOG Membership is free. It just requires an email address that the newsletter and details of courses, events, visits can be sent to.

Contact: paul@home-farm.myzen.co.uk
or emma.aldous@suffolk.gov.uk

STOG Activities Planned for 2023-2024

Covid interrupted the Orchard East project and considerably affected the return of other STOG projects and activities as several events and locations we had utilised for years closed and did not re-start or are no longer available. These are our initial plans for the coming year.

The Food Museum 21st Oct 2023 and Food Week



Apple Week at the Food Museum, Stowmarket, Suffolk, Saturday, 21 October – Sunday, 29 October 2023. See www.foodmuseum.org.uk/events/apple-week

This is a week of apple pressing, juice making, baking workshops and apple-themed activities for all the family.

Saturday, 21 October, National Apple Day

Suffolk Traditional Orchard Group: Will display over 100 varieties of autumn fruit, general orchard advice and free fruit identification (particularly apples). If you have fruit for identification, bring at least three, preferably five, of each variety, with their stalks attached. If they are hard to identify and need further research, you will have to leave them

- with your contact details.
- Monica Askay, food historian: Will be available with apple recipes, old and new, apples to taste and a book to view.
- Suffolk Tree Wardens Network: Will be running family activities celebrating apples and trees.

Admission details see <u>Admissions - Food</u> <u>Museum</u>. Normal admission on Apple Day.

Throughout the week, Saturday, 21 October – Sunday, 29 October 2023.

- Apple Tastings: There will be apple and juice tastings from apples grown in local orchards and apple-based foods made in the museum kitchen all week.
- Craft Activities: The Museum's Print



Team will create apple-themed posters and decorations, which will be available for children to colour in the Bone Building all week.

• Apple Juice Pressing Workshops, daily in the Farm Barn, 10.30 – 12.30 & 13.30 – 15.30. Booking essential. Make your own juice from locally grown apples using the museum's hand-cranked apple press, guided through cleaning, crushing, pressing, bottling, pasteurising, and labelling and take a bottle home. If you have apples in your garden, you may bring these along to press during the workshop. Suitable for ages 5+ and



- children under 12 must be accompanied by an adult. For prices, see details at www.foodmuseum.org.uk/events/applejuice-pressing-workshops
- Apple Cake Baking Workshops, Tuesday, 24 October, Thursday, 26 October, Saturday 28 October, 11.00 – 12.00.
 Booking essential. Using locally grown apples and learning about the best apples to cook to make a cake. For more details and prices, see www.foodmuseum.org.uk/events/apple-cake-baking-workshops
- Apple Week Toddler Time, Wednesday, 25 October, 10.00 – 11.00. A special apple-themed Toddler Time for under 5's and their parents with apple-based crafts and treats. Available for Food Museum members only. Find out more at www.foodmuseum.org.uk/events/ toddler-time
- Apple Week Forest School, Friday,
 27 October, 10.30 14.30. Booking
 essential. A special Apple Week edition,
 suitable for ages 6–11, see details at
 www.foodmuseum.org.uk/events/forest-school

Grafting courses during winter 2024

Since 2009, STOG has run a grafting course, or two, each February/March, but following the Covid lockdown, two of the locations we used regularly closed for hire, and we are still considering sites for use in future. We have also run some Chip Budding courses in August and will consider continuing next year; this technique is practised mainly by commercial nurseries. Grafting courses are in great demand, and we are looking for a more permanent home. We provide the rootstock and scion wood in both courses, but students may bring their own scion wood.

The next edition of this Newsletter will carry dates of grafting courses in late winter 2024 and full details of the course and contacts.

Compiling a list of Suffolk's community orchards

A list of Priority Habitat Traditional Orchards in Suffolk was published, listing 620 sites. Most were considered farm orchards. A second list was prepared during the Orchards East project, with fewer orchards, but almost all were on farms again. We do not know how many community-managed orchards there are, although planting these has recently been very popular, and we don't know which have been planted as Traditional Orchards. We know that those we have helped with are all Traditional trees on vigorous rootstocks in natural grassland. There are 479 civil parishes in Suffolk, and while not every parish has an orchard, a few have two! Over the next year, we aim to try and check every parish.

ONCA Project... or "Will the real *Malus* sylvestris please stand up!"

Malus sylvestris, our native crab apple, is common in Suffolk... or is it? Recent research suggests most, even almost all, "wild crab apples" in England are just apples or hybrids and that the native crab is extremely rare. One piece of research states definitively that every tree they accessed from horticulturists selling crab apples, almost all grown from seed stated to be from genuine native crab apple trees, wasn't either. Unfortunately, no research proposes how we tell the difference without DNA fingerprinting every tree. And even then, a computer program must interpret the DNA data to assess the probability of being a pure M sylvestris. The Orchard Network Crab Apple project (ONCA) is trying to make sense of this situation. It is managed by Paul Read and Peoples' Trust for Endangered Species and funded by a City of London fund, City Bridge Trust (C of L owns land around London, Burham Beeches, Epping Forest, etc., which support many "crab apples" and their ecologist and rangers are active in this project). The project is in its second year, with most fieldwork almost finished. If anyone is interested, two previously released Newsletters are available on the ON website and downloadable at Crab Apple project | UK Orchard Network. If, after reading these, anyone has a continuing interest, please contact me at paul@home-farm.myzen.co.uk.

Publishing the OE Orchard Biodiversity Project Report

Covid-19 provided an untidy end to Orchard East with some parts of the project, notably the OE orchard biodiversity segment, unfinished. Even though the project was extended until after lockdown ended, some reports and studies are still in progress in 2023. The Interim Report of Orchards East's Survey of Orchard Biodiversity 2019-20 was released in July 2021. State-of-the-Orchards_2021-07-01-125023.pdf (orchardseast.s3-eu-west-1.amazonaws.com), The Biodiversity Project Report is part two of the project, and that report is expected in late 2023.

Disentangling mirabelles, myrobalans and cherry plums for a new Advice Note?

Plums are complex. Comprising as many as eight (maybe many more) different Prunus species from across Europe, Asia and North America, and a long-established and cultivated European hybrid, *Prunus domestica* perhaps of several species that has yet to be satisfactorily identified. To add to this old confusion is the muddle of terms used by growers, horticulturalists, cooks and botanists.

Most botanists consider Myrabelles, such as the famed M de Nancy of liqueur, spirit and tart fame, as *Prunus domestica var* syriaca (even though it doesn't grow in Syria)

and similar trees grow in hedges in eastern England. Cherry plums, the earliest white flower in hedges in England, are not a native but are Prunus cerasifera from the Caucasus and have been here for two centuries, but are called Myrobalan by nurserymen when used as a rootstock for almost any "plum" from the 19th C onwards. Recent 21st C, importation of new (to us) plum varieties from central Europe and Russia are called Mirabelles. However, some are many times the size of M de Nancy and are considered by botanists to be crosses between an assortment of P. domestica and P. cerasifera, the cherry plum, and welcome here as the very first large plums to crop in late spring.

At least one improvement we can make is to explain some of this and indicate the characteristics that help identify these plums as a new Advice Note!

Below is a picture of Myrabelle "Orchard Barn", growing in an orchard at Home Farm, Thrandeston, taken on 21 March 2023. It's in full bloom and one of the earliest trees to bloom on a cold and frosty morning with no pollinators to be seen. There was no fruit on the tree this year at all. This variety, propagated from a single large old tree in a Suffolk farm orchard, hasn't been validated as unique but does not appear to match a known Myrabelle cultivar, or at least one known to us, so we give it a temporary name in inverted commas. Without a DNA fingerprinting technique for plums, we cannot be sure that it hasn't already been described and named but has the characteristics of Prunus domestica syriaca.

To its left is a yellow-fruited cherry plum tree (*Prunus cerasifera*) that has much smaller flowers.



Is the 2023 apple crop the worst ever?

A report on the apple crop of 2023: orchards at Home Farm, Thrandeston

This year's apple crop, at least in East Anglia, maybe our worst crop for decades and is almost certainly due, at least in part, to the record-high temperatures and drought here in the summer of 2022. And, possibly, only possibly, assisted by two swift cold weeks late last autumn, followed by a mild Christmas and another cold week in late winter. There is no doubt about the lack of some apples. Many varieties that grow here in Thrandeston, particularly those ripe and ready for picking around October, had few or no flowers in spring. Varieties like Blenheim Orange, Lady Henniker, D'Arcy Spice, Norfolk Beefing, Dr Harvey, and many others had no flowers, so they had no crop. A Golden Delicious has just one fruit! That wasn't due to a frost in May when it was in bloom, as there wasn't a frost. The flower buds didn't form, and there were no flowers! It may not have been for lack of chill hours last winter; it was cold, then mild, then cold again, but all the earlier ripening apple cultivars have generally been excellent, r Beauty of Bath, Lady Hollendale, Miller's Seedling, both Red and ordinary, George Cave and Baker Delicious could be our best yet.

Some later cropping apples like Ida Red, Sturmer, Crawley Beauty and Catshead, which we leave until November or even December to pick, are cropping normally. Like the early cropping cultivars, it is clear that they were not affected. A few exceptions exist in the late autumn varieties, and some are expected to produce poor crops. However, Laxton Superb and Pitmaston Pineapple will likely have their best yield yet!

The word around is that the winters are too mild. Last February, an article in the Guardian stated, "Climate breakdown could cause British apples to die out!". "There are not enough 'chilling hours' for the trees to lie dormant in winter and conserve energy for growing fruit", "Perfect chilling hours for apples are those below 6C but above freezing, and most traditional apple trees need about 1,000 chilling hours". Yes, indeed, but that's probably not an explanation for this year's odd cropping. The Guardian goes on: "we need to replace our varieties with crops from warmer climates that need less chill hours".

Clearly, it is right to trial some of the warmer climate apple cultivars. The range of apples that require fewer chill hours is extensive and includes varieties like Anna and Dorsett Gold that crop well in the subtropical conditions of the Bahamas. But too few chill hours cannot explain this year's problem crop. Chill hours were not in short supply, so was it last summer's record heat and drought? Plums have done quite well, while pears seem down but within the normal range. Both came through the same hot summer drought and the two short cold spells in late autumn and early spring. They flowered in March/April when almost no pollinators were seen, and some pear flowers were seriously frosted.

Doing well!



This tree is apple Crawley Beauty, it has a fine crop. When ready to pick in November the apples will be bright red flush on a shining yellow ground colour. To be cooked or eaten until April 2024. So no problem.



This tree is Nutmeg Pippin, a good crop, of brown, russet fruit to be eaten October to Christmas! No problem.

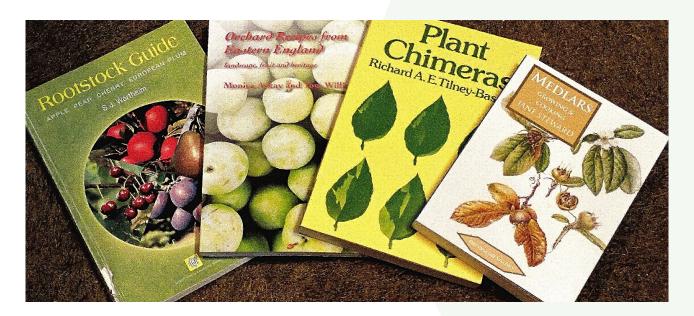


This is the apple Dunwich Heath. Good crop this year. The original tree on the wind- swept cliff-top at Dunwich rarely crops. Unusual strong apple flavour and soft flesh, in late September.

Not so well



This is apple D'Arcy Spice. This year it had no flowers, so no crop. Normally we pick it in October and eat from Jan to April. A disaster... normally a consistent cropper.



Recently available books

Rootstock Guide Apple, Pear, Cherry European Plum, S J Wertheim, Fruit Research Station,
Wilhelminadorp, Netherlands 1998.

Although written 25 years ago, this is the most complete and detailed description of many rootstock types, all or almost all still available and in extensive use today. The book has long been sought after but has been unavailable in any format until now. Paul Read's copy has been scanned and is now available to download from www.fruitid.com. Go to Help, then Pomonas or see <a href="https://dx.download.gov/

Orchard recipes from Eastern England, Landscape Fruit and Heritage, Monica Askay & Tom Williamson, Bridge Publishing, Lowestoft, 2022.

Written as one of the outcomes of the Orchards East project, funded by Heritage Fund, it reviews the historic orchards and the use of their fruit with both new and old recipes and with adaptations that enable a cook today to replicate or come very close to the original dishes. Much of the extensive research was carried out in county archives and from historic texts.

Plant Chimeras, Richard A E Tilney-Bassett, Edward Arnold 1986, digital reissue Cambridge University Press, 2010. Print on demand.

This book is for the dedicated botanist. It contains a wealth of detail and botanical terms that even some experienced botanists will be unfamiliar with. Plant chimeras (or chimaeras) have genetic components from two different species or other clonal forms, and a large part of this book refers to fruit chimeras. The most frequent chimeras are variegated leaf plants. Some apple cultivar fruits have "hair lines", raised or coloured ridges, or wider stripes or bands of different colours, running from stalk to calyx when a local mutation occurs and two separate



Chimeral hair line on an unnamed apple cultivar in Girton College orchard.



Chimeral colour stripe on a fruit of Red Miller's Seedling. Photo: Fruit Forum.

clones are combined on one tree. Over 30 cultivars are listed in this book, including Bramley's Seedling Golden Delicious. See Apple Chimeras – information please? | Fruit Forum (wordpress.com) with images of Gala, and Citrus, chimeras.

Another rare Chimera is created during the grafting process. Graft-chimera arise at the point of contact between rootstock and scion. The tree will have properties intermediate between the two and some characteristics of both. It is not a hybrid but a mixture of cells from the two genetic sources. Well-known is the medlar, *Mespilus germanica*, which was propagated historically by grafting onto a seedling hawthorn, *Crataegus monogyna*.

See my images (below) of the unripe and ripe fruit on the tree in Wandlebury Country Park near Cambridge. The botanical name of this tree is + Crataegomespilus dardarii. + indicates a graft chimera. Propagation is by cloning, usually by grafting onto another rootstock, usually a hawthorn seedling.

Monica has some fruit of this chimera in her fridge and intends to find out if they have a culinary future.





Unripe and ripe fruit on the tree in Wandlebury Country Park near Cambridge.

Medlars, growing & cooking, Jane Steward, Prospect Books, London, 2023

This is the most extensive book on the history of growing and cooking medlars, perhaps in any language. I (Paul) was interested to discover how widespread the historical belief that medlars were native to England was. We know that they aren't native. And despite their botanical name being *Mespilus germanica*, they are not from Germany. They originate from much further east, just as pears, apples and quince do. And Jane's mixed fruit cider, made with added medlars, is on the to-do list for this autumn.



A flower of medlar Giant Russian



The large fruit of an unnamed seedling medlar in RHS Wisley



Monica Askay's Medlar Gin or Vodka Recipe

- · Gin or Vodka, 1 pint per pound of fruit
- Sugar, the quantity needed depends on how sweet you want it to be and the tartness of the fruit. I usually allow 6oz of sugar per pound of fruit for a dry spirit and 12oz or more for a sweet liqueur.
- You will need to use bletted (brown and soft) medlars. Medlars are hard, with little flavour straight from the tree. However, don't let them fully blet as 2/3 bletted works best, which takes a week or two at room temperature

Cut the medlars in half vertically. Their irregular stoney seeds can be left in the fruit pieces. Discard any mouldy fruit.

Place them in a Kilner jar or similar, cover them with sugar, pour the alcohol over the fruit and seal. Keep it in a cool, dark place and shake it gently every day for a couple of weeks until the sugar has dissolved. After three months, you can strain and bottle it. It may need to be strained several times through a fine sieve lined with muslin or a coffee filter to produce a clear amber-coloured liquid. Serve in a small glass as an unusual aperitif or after a meal.

Variations: Use different fruits prepared according to type. Slice larger fruits like nectarines, prick smaller fruits like damsons and cherries, use raspberries and blackberries whole, and grate hard fruits like quince. Almost any fruit will work. Experiment with the type and quantity of sugar. Try different spirits like rum, brandy and whisky.

Having tried medlars with both, I prefer using gin as I find vodka too harsh.

Monica Askay, August 2023



STOG Advice Notes

Our Advice Notes, aimed to provide background information on different aspects of orchards in general and to give a Suffolk perspective on orchards. See the Suffolk Biodiversity Information Service website www.suffolkbis.org.uk/orchards/advice. Titles available so far are:

- 1: Orchard traditions in Suffolk
- 2: Fruit varieties for Suffolk traditional and amenity orchards
- 3: Planning and planting new orchards
- 4: Protecting New and Old Standard Orchard Trees (including Parkland)
- 5: Live collections of orchard fruit varieties in Suffolk
- 6: Cobnuts in Suffolk
- 9: Suffolk Traditional orchard ground flora natural and planted
- 14: Suffolk's Seaside fruit trees, and a map of Dunwich/Minsmere with locations of 14 seaside fruit trees.

22: Apple juice and Juicing

Others in the series being researched and prepared are listed on the website, and some already in a draft form, can be requested if available.

A volunteer juicing apples at an apple day



Local community sale of fruit to the village

Practical Actions for Orchard Communities

The Orchard Network and Peoples' Trust for Endangered Species are running a series of webinars – Orchardist and author Wade Muggleton and a panel of Orchard Network's pomologists will present four sessions:

- Wonderful Orchards: 7pm 7th Nov orchard culture, heritage, and wildlife.
- Planning an Orchard: 7pm 14th Nov planning and planting.
- Managing an Orchard: 7pm 21st Nov ongoing management.
- The Orchard Harvest: 7pm 28th Nov picking and processing your fruit.

Sessions are primarily aimed at groups who manage or are planning a community orchard, but plenty of useful content for everyone. Each session is about 90mins, and includes Q&A with the panel, all for a trifling £5 each. www.eventbrite.com/cc/uk-orchard-network-2491029 and click on picture panels for tickets



The first apple day in a newly planted community orchard