



**Broadland Tree Warden Network**

# **Countryside Park, Brundall A Proposal**

**By**

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## **Introduction**

The Broadland Tree Warden Network inspected the Brundall Countryside Park orchard on 3 March 2022 and was dismayed at the poor condition of the trees.

One cannot just plant trees, particularly fruit trees, then walk away ignoring them and expecting them to grow and produce fruit. There appears to have been no formative pruning carried out and the competing ground vegetation (ie very long grass) is robbing the trees of valuable water and nutrients.

Pulling back the long grass from the base of the trees, we found several with spiral guards still attached and between the guard and trunk was a severe build-up of decomposing matter, heavy insect build-up and other detritus. In addition, most had the remains of rotting stakes still connected to the very base of the trunks by rubber tree ties. There was also clear evidence of rabbit activity which one must expect when there has been lack of management, long grass and (probably) fallen rotting fruit.

Every tree is heavily covered in lichen. There are more than a thousand varieties of lichens in colours from grey to green to a white fuzzy variety. Lichens are actually two life forms that co-operate together as one; fungi and green algae. Their many forms include powdery, crusty, scaly, leaf-like lobes, stems or hairy-branched filaments, but they are not harmful to fruit trees. They are a tiny plant form that use trees as support. They are not parasitic but are often mistaken for harmful fungi or diseases. Lichens thrive in moist environments.

The Network removed the spiral guards, rotting stakes and the rubber tree ties and removed dead wood together with crossed and rubbing branches, but could do nothing about the apparent rabbit damage and rot at the bases of the trees. I must therefore inform the Council that, in my opinion, I regret that most of the trees are now beyond saving.

## **Recommendation**

My recommendation is as follows.

The Broadland Tree Warden Network shall immediately assume sole responsibility for the orchard and only Broadland Tree Wardens shall be allowed to carry out any works associated with it, including general cutting of the grass.

Responsibility for the orchard shall not be shared with or be answerable to any other set of volunteers, such as any future "Friends of the Countryside Park".

The Network shall remove all current trees and accompanying matter as soon as possible and all grass shall be kept as short as possible. All tree matter must be removed from site but grass cuttings shall be allowed to remain on the ground to improve nutrition.

This will present a first-class opportunity to plant an orchard of great interest, not to mention value, both to the Brundall community and local ecology. Indeed, it could be of interest to Brundall School for its ecological and historic value (several 'ancient' varieties).

During the 2022-2023 tree planting season the Network proposes that 40 new/replacement local heritage variety fruit trees are planted.

## Norfolk Fruit Tree Information

The East of England Apples and Orchard Project has written that the earliest written account of apples in England comes from a thirteenth century Norfolk document, describing how a Norfolk farmer paid his annual rent with '200 Pearmains and 4 hogsheads of Pearmain cider.' At least one of the county's surviving apple varieties, the Five Crowned Pippin, may date from the medieval period, but most were developed in the last three hundred years. Many of these arose on the county's great estates during the nineteenth century. George Lindley, the Norwich based nurseryman and father of John Lindley, co-founder of the RHS, introduced several varieties during this period. In the late twentieth century the John Innes Plant Research Centre moved from Hertfordshire to Norwich, where it developed a number of canker-resistant sweet cherry varieties, including Colney, Merchant, Hertford and Summer Sun.

The late nineteenth century agricultural depression led many farmers to plant large commercial orchards on the heavier clay soils of mid, south and east Norfolk, and on the silty fenland soils. The fenland orchards were concentrated around Wisbech, just across the county boundary in Cambridgeshire, but extended into Norfolk, at Walsoken, Emneth and Upwell. Most of this fruit was sent by rail to the North and Midlands. Elsewhere in Norfolk, the pattern of orchards was more scattered with the fruit sent to London, local markets and also to Gaymer's Cider Works at Attleborough.

From medieval times East Anglian 'cyder' was produced as a form of currency for harvest time labour. It was made using a mixture of dessert and cooking apples, and still is, unlike West Country cider which uses specially bred tannin-rich apple varieties. After moving to Attleborough in the late 1800s, having outgrown their farmyard works in nearby Banham, Gaymers Cyder became the largest cyder-making factory in the region, relying on many local growers for apples. The factory closed in 1995 and as a result many local orchards were cleared. In the last fifty years the county's orchard area has declined by more than 50%. This has been due to a combination of development for housing, change of use to more profitable arable crops and neglect. This has had a dramatic effect on the landscape, particularly in traditional fruit growing areas, and has also led to a decline in biodiversity.

## Proposed Planting

### Rootstocks

Rootstocks govern the final size of a tree and offer some disease and pest resistance. Tree to be planted will be grown on half-standard (semi-vigorous) rootstocks as follows:

	<i>rootstock</i>	<i>eventual tree height</i>	<i>spread</i>
Apple	MM106	3.0 - 3.7m (10 - 12ft)	3m (10ft)
Pear	Quince 'A'	2.7 - 3.7m (9 - 12ft)	3m (10ft)
Plum/Gage	St Julien 'A'	2.7 - 3.7m (9 - 12ft)	3m (10ft)
Cherry	Colt	3.6 - 4.6m (12 - 15ft)	3m (10ft)

I recommend the following mix of varieties (subject to availability), selected to ensure full pollination.

## 24 x Apple

**2 x Norfolk Royal.** Discovered growing as a chance seedling at Wright's Nursery in North Walsham in 1908 but only named and introduced in about 1930. Once widely grown in East Anglia and still a popular exhibition apple. A medium to large dessert apple almost totally flushed bright red. Very crisp and juicy. Unusually greasy skin. Pick early September and use September to December. Has good scab and mildew resistance. Pollination group D

**2 x Norfolk Royal Russet.** A russeted sport of Norfolk Royal, discovered growing in the garden of Rev C Wright at Burnham Overy Staithe. It was first introduced by Highfields Nursery of Gloucester in 1983. A complex 'nutty' tasting dessert russet, it has become a popular gardeners' choice and with farm shops in East Anglia. Pick early September and use October to January. Has good scab and mildew resistance. Pollination group D

**2 x Lynn's Pippin.** Bred by William Lynn of Emneth by crossing Cox's Orange Pippin with Ellison's Orange and named in 1952. A large dessert apple, attractive yellowish-green skinned with delicate red stripes and a complex flavour. Pick mid-September and use September to October. Pollination group D.

**2 x New Costessey Seedling.** Arose from a pip planted in 1926 by George Fayers at New Costessey, near Norwich. This may have been from the variety Lord Lambourne (Beds 1907). Shown in local horticultural events for many years. Medium-sized dessert apple, greenish yellow skinned with a deep red flush and occasional russet scattered over the surface. Cream-coloured sweet crisp flesh. Was introduced in the 1990s by Ranworth Trees Nurseries, near Norwich. Pick early October and use October to January. Pollination group D

**2 x Admiral.** Propagated at Upton from pips brought back from Japan by Mr. A Watson. Originally called 'Togo of Upton' but renamed 'Admiral' around 1940. Once grown commercially on a small scale in the Broads where it was sold as 'Gloria'. Medium to large dessert apple, mostly green in colour, sometimes with an orange flush. Firm, sweet flesh. Pick early October and use November to December. Pollination group D.

**2 x Harling Hero.** Arose at East Harling, near Attleborough, sometime around 1914. Raised or discovered as a chance seedling by Frank Claxton, a local game dealer. In the 1920s Daniels Bros, the Norwich nurserymen, began marketing the apple locally. Large dessert apple, handsome yellow-skinned apple almost totally flushed red. Soft, sweet, juicy flesh. Pick mid-October and use December to February. Pollination group E.

**2 x Horsford Prolific.** Arose in the garden of the Rev Mountford at Horsford. Grown commercially on a small scale locally and sometimes sold under the name 'Queen Anne'. A very attractive dessert apple. Medium to large. Yellow skinned with a bright orangey-red flush. Some broken red stripes. Flesh is sweet, crisp and juicy. Pick mid-October and use December. Has good scab resistance. Pollination group E.

**2 x Sandringham.** Raised by Mr Penny, Head Gardener at Sandringham House and first exhibited at the National Apple Congress in 1883. It is believed to be a seedling of the UK variety Winter Pearmain and was first sold by Veitch's of London. It became a popular variety for gardens. A large green-skinned dessert apple with some red stripes. Keeps well and mellows with storage. Sweet and firm fleshed. Pick mid-October and use November to February. Pollination group E.

**2 x Hunter's Majestic.** Raised sometime before 1914 by Miss E Balding at Upwell, near Wisbech, probably from a seed of a Worcester Pearmain apple. Grown on a small scale commercially in the Fens during the 1930s by the Hunter-Rowe family. Large attractive red-flushed and striped yellow-skinned dual purpose apple. Becomes less acidic with storage. Pick mid-September and use September to December. Pollination group C.

**2 x Dutch Mignonne.** Introduced to the UK by Thomas Harvey of Catton Hall, probably from Holland, and first listed by George Lindley, nurseryman of Catton. A popular Victorian dual purpose garden apple, it is medium-sized, dull green-skinned with a little russeting and orange flush. Not unlike a Blenheim Orange in flavour. Cooks to a stiff sweet puree. Pick early October and use November to March. Pollination group C.

**2 x Golden Noble.** Discovered growing as a chance seedling in an orchard near Downham Market by Patrick Flanagan, the Head Gardener of Stow Bardolph Hall. A medium-sized, golden-yellow long-keeping culinary apple. A Victorian table favourite, it has always been a popular garden apple. Contains a very high

level of vitamin C. Cooks to a slightly acidic puree. Has good scab, mildew and canker resistance. Pick early October and use October to December. Pollination group E.

**2 x Winter Majetin.** Earliest record is from Norfolk. A small to medium-sized smooth skinned green culinary apple with a brownish-orange flush. Excellent keeper. Cooks to a firm brisk puree. Is notable for its very good natural resistance to woolly aphid. Also has good scab resistance. Pick late October and use December to April. Pollination group E.

## 4 x Pear

**2 x Robin.** May be the old 'lost' pear variety London Sugar, as listed in the catalogue of nurseryman George Lindley, of Catton, in 1796. Can occasionally be seen on sale on Norwich market and elsewhere. A small red-flushed dessert pear best eaten very soon after picking. Pick late August and use August to September. Pollination group C.

**2 x Hacon's Incomparable.** Origin confused. Arose as either a chance seedling found growing in a baker's yard in 1792 by Mrs Rayner, or it was propagated from 'Rayner's Norfolk Seedling' by Mr J Hacon, around 1814. A handsome mid-green coloured medium-sized dessert pear that keeps its shape when cooked. Sweet flavoured. Pick early October and use October to November/December. Pollination group D.

## 8 x Cherry

All these sweet dessert cherry varieties were developed at the John Innes Research Institute at Colney and are all canker resistant. All, except Summer Sun, are self-sterile so require another pollinator.

**2 x Merchant.** Norwich 1970. A large black skinned variety with very dark red flesh. Heavy cropping. One of its parents is Merton Glory, also raised by the John Innes Institute, when based in London. Pick and use June to July. It is resistant to canker. Pollination group C.

**2 x Colney.** Norwich 1974. A medium sized dark red skinned variety with deep red coloured flesh. A useful late ripening cherry. Pick and use late July to August. Pollination group D.

**2 x Summer Sun.** Norwich circa 1990. A medium sized dark red coloured variety with good late frost tolerance and suitable for planting in exposed areas. It is partially self-fertile so will set some fruit by itself. Pick and use mid to late July. Pollination group C.

**2 x Merla.** Norwich 1970. A medium sized pale-yellow skinned fruit, with a pinkish blush and yellow flesh. Pick and use early to mid-July. Pollination group D.

## 4 x Plum

**2 x Coe's Golden Drop.** Bury St Edmunds late 1700s. A large, sweet, yellow dessert plum. Pick late September and use late September to October. Pollination Group B.

**2 x Coe's Late Red.** Bury St Edmunds early 1800s. A small, dark red, acidic culinary plum. Pick late September and use September to October. Pollination Group B.

## Planting

Each tree will require its own planting pack, comprising a 1.2m wooden stake, a 60cm mesh tree guard, a soft tree tie and adjustable tree guard ties.

Trees will be spaced at 4.5 - 5m (15 - 16ft) to allow for the management of the trees and the sward. They will be staked for their first five years and will be protected against rabbits and deer using open-mesh guards (solid walled plastic guards such as spirals can cause pest and disease problems for fruit trees).

For the first 5 years after planting a 1m circle of clear ground will be maintained around the base of the tree to allow it to establish properly. Under no circumstances will chemicals or brushcutters (ie strimmers) be used. Instead, a layer of peat-free organic mulch will be used to smother any grass and weed out re-growth. Using mulch mats may encourage voles, which can damage trees. An organic mulch will also feed the tree.

Different varieties grow at different rates, but in normal conditions half-standard trees should start to fruit within three years of planting.

## Estimated Project Costs

It is difficult to accurately cost this project as next season's prices have yet to be published. I have therefore used this season's prices and added 10%.

<i>Item</i>	<i>Supplier</i>	<i>Qty</i>	<i>Unit £</i>	<i>Total £</i>
Old English variety fruit trees	East of England Apples and Orchards Project	40	17.05	682.00
Tree planting pack		40	5.50	220.00
Delivery of above to site		1	55.00	55.00
Peat free organic matter	Large bulk bags	2	80.00	160.00
Plant name tags (100/pack)	Various	1	8	8.00
<b>Total cost £</b>				<b>1125.00</b>

The above prices do not include VAT as both the Network and the Parish Council are exempt.

## Proposal

The Broadland Tree Warden Network will carry out all necessary work, and source and order all plants and materials free of charge. The only actual costs involved are those listed above.

The Network is prepared to commit £500 from its Broadland District Council 2022-2023 Tree Planting Budget toward the costs of the project.

Trees are now in very short supply and it is most important that we place orders for this project before the East of England Apples and Orchards Project exhaust next season's supply and we can obtain the varieties we seek. Therefore, it is of the utmost importance that the Parish Council makes a decision as soon as possible.