

Proposal for the replanting of the orchard

This sub-committee of the RHSO comprising Lanier Pole, Rob Richardson & Colin Gill have put together an outline plan for the replanting of Rivers cultivars as being the most appropriate way to maintain the legacy of this orchard. This preservation of the Rivers legacy forms a major part of the RHSO's objectives under our constitution and replanting is becoming increasingly significant due to some of the current trees likely coming to the end of their life. A specific collection of Rivers cultivars would seem the best way to maintain the legacy long term.

It appears from their website that East of England Apples and Orchards Project (EEAOP) have a good selection of Rivers cultivars which could be ordered in the next few months ready for delivery in November and planting out during the winter period. These can be heeled in prior to planting to protect them. Initial thoughts are to order those listed below as these are default EEAOP stocks.

- MM106 rootstock for apples
- Quince A for pears
- St Julian for plums/gages
- Colt for cherries

The planting of cherries is still up for debate given that cherry disease is present in the existing large trees and the hedge at that end of the orchard.

We will need Council permission and no doubt that of the land owner although we foresee few hurdles to overcome as we've proposed replanting previously without any objection to the earlier management plans. If there is opposition to replanting, then we will need to change the management plan accordingly.

The problems we've had with previous plantings can be summarised thus.

- Depleted soils from planting in positions in which previous trees of the same species grew
- Poor formative pruning at full-standard height, likely too tall for the rootstock
- Soil not dug out properly leading to competition with roots of the larger trees
- Large canopy of neighbouring trees leading to shading out of newly planted trees

It is therefore advisable to plant outside the existing grid to resolve these issues. If we do lose a lot of the larger trees, then further replanting within the existing orchard may be an option, but we believe it is advisable to avoid this for now, hence planting at the far end of the orchard in the south-westerly corner as the only significant space.

Our initial thoughts are to plant at a minimum distance of 3.5 metres in this part of the orchard. Our measurements of this area are approximately 30m x 14m which provides us with ample space to plant around 15 trees in the first year and a further 15 in the following year. Staggering the planting ensures a second batch can be planted should the first years fail due to adverse weather conditions.

The various tasks involved in this exercise can be briefly summarised as follows

- Soil preparation before planting – dig out to spade depth and strip turf for 1m circle. There are several ways to achieve the clearing of this grass, for example, using a covering of some kind to putting down wood chip which could be raked away before digging. This would not leave significant mounds or depressions in the planted area prior to tree planting. This may cause an issue when the grass is cut if we dig prior to the end of September when the site is being prepared ready for apple day.
- Soil improver to be dug in at time of planting or shortly before – this could be well-rotted horse manure and/or John Innes No 3 with its loam content and water retention advantages.
- Well-rotted horse manure to place around trees to protect ground from wood chip nitrogen effect and ensuring it's clear of tree bark.
- Wood chip placed over the manure to act as an additional mulch.
- Ideally, dig tree holes as close to planting as possible.
- Soak trees in buckets of water for a couple of hours before planting
- Sprinkle mycorrhizal fungi around roots when planting.
- Stake and collar around trees.
- Install tree guards.
- Watering required in the first few months if unseasonably hot in spring/summer and little rain.

EAAOP now recommends an organic mulch in place of membranes due to the risk of damage from voles as well as the added benefit of feeding the trees.

We may need to carry out some hedge maintenance to ensure sufficient good light into the newly planted area. This is more likely to be in year 2 as we can use the spaces further from the hedge for the first year planting and it is within our management plan to be able to carry out light hedge maintenance to promote fruit tree growth.

One of the main concerns may be grass cutting which is currently paid for by STC and one where they may decline at the far end of the orchard. This could be overcome if we can find someone to volunteer to cut that end, at least for the first few years.

Other hurdles to overcome will be the provision of manure, wood chip and watering although the latter will be mitigated by the introduction of organic matter into the soil and mulching around the base.

Clearly, a certain amount of labour planning will be required in the preparation of the site, soil improvements and the first few years of watering. The burden of pruning shouldn't be substantially increased as formative pruning is fairly straight forward and requires minimal work. On MM106 rootstock pruning to around 70cm on semi-vigorous varieties is usually advised. If this is done correctly in the first 3-4 years, then we should not have any major amount of work to do for many years.

The cost of varieties will be approximately £25 per tree including stakes, collars, guards and delivery which amounts to £375 in the first year. Of course, the soil preparation materials will be an added cost on top unless we can get these delivered free. The planting packs include the following recyclable items.

- 1.2m softwood stake
- Adjustable soft tree tie
- 60cm polypropylene open mesh tree guard
- Two nylon adjustable cable ties

There are a number of grant options available to us and worth pursuing with this possibly being linked into the 300 year anniversary of the formation of Rivers Nursery in 1725. This may add some gravitas to our replanting aims.

- HertsGoGreen – a group of businesses that want to fund and support tree planting.
- Stansted Airport Community Trust – provision of orchard packs.
- Heritage Lottery Fund
- Local government grants
- Local businesses

We've placed a map of the site below with the planned area for planting highlighted and this will not encroach onto any existing main paths around the orchard.



Minutes from the meeting to discuss the proposal (7th March 7.30pm)

Present: Ruth, Eric, Hazel, Dave, Lanier, Steve R, Geoff, Colin, Eugene, Rob, Adrienne, Elizabeth W, Nickie

Apologies: Robinne

Discussion / Actions & Decisions

Ruth opened the meeting and thanked everyone for coming. Rob, Colin & Lanier were thanked for their significant work on pulling together the proposal.

All were invited to give views which came freely and demonstrated overall that there was support for the proposal with the following key points and actions to be taken

1. The biggest challenge was felt to be watering and this would be critical if the trees were to thrive
2. A concern was raised that we were challenged to look after our current trees so would need to be following a plan and best practice
3. The best location was felt to be outside the existing grid of trees
4. Holes should be dug 1 spade deep, a meter width and a square hole is best for the roots
5. We should buy 1 year old trees
6. They would need watering for the first 2 years
7. It was felt that we needed to get some expert advice – **Ruth agreed to contact Peter Laws**
8. A discussion on how many trees we should have resulted in a decision to plan for 4 rows with 7 trees in each row with a spacing of 3.5m. The grid layout may alter slightly and we'll therefore need to be a little flexible with rows etc
9. We should prepare the ground over the summer/ autumn by skimming the grass etc, marking out the ground, exploring the root stock and then dig out the area in October
10. **10 (ten) trees in the first year were proposed by Ruth and seconded by David**
We would then wait to see how the first 10 fared before we planted the second 10
11. **Ruth** will send the proposal to the STC
12. **Colin** agreed to apply for grants
13. Nickie spoke of the 2 people who had approached us wishing to dedicate a tree in a loved ones memory. It was agreed that they would be welcome to make a donation to our new planting area

Meeting closed at 9pm