

Proposal for HPC orchard at Recreation Ground – summary for Env Ad. Com 29/11/21

This note is a summary of the orchard plan and lists the proposed varieties and some historical connections. Another document has details of varieties and a second one is a collection of general considerations in planting an orchard.

The elements of the proposal are shown in the plan on the right. The proposal is to carry out the work in several stages:

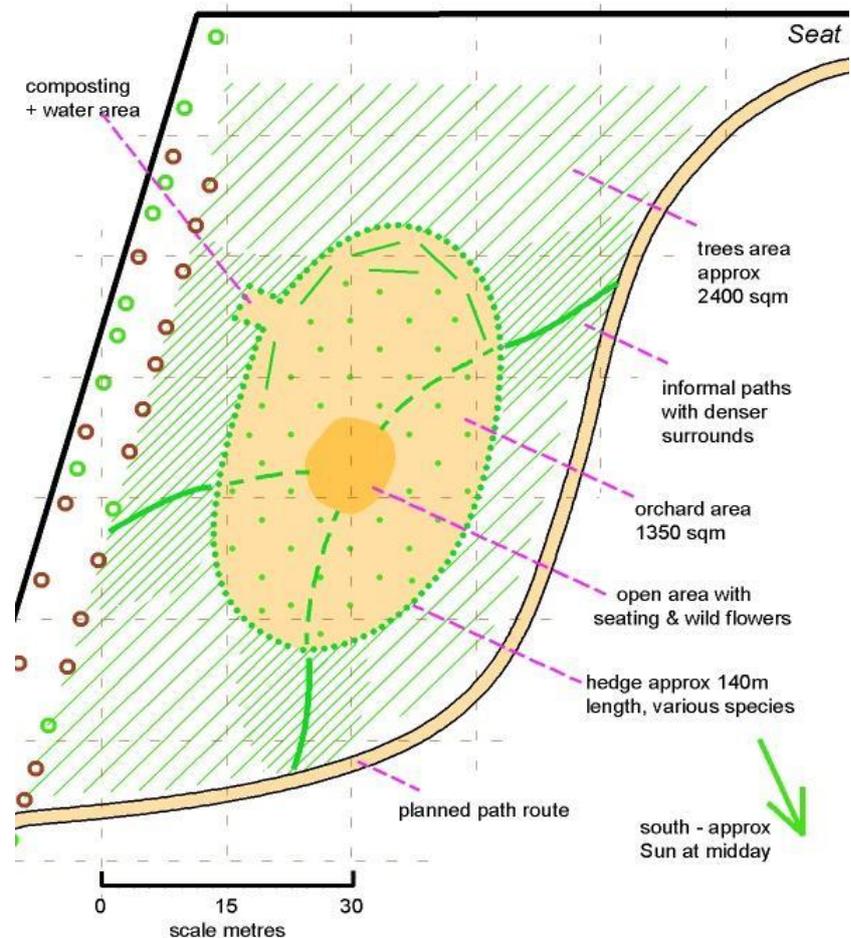
Winter '21/22 finalise list of tree varieties and where necessary order for delivery autumn '22 or '23.

March '22 planting of hedgerow that will surround the orchard – Woodland Trust supplying most of hedging plants.

Also install display board or 2 saying what is planned for the area.

Spring '22 preparation of wildflower area including sowing Yellow Rattle and / or using plug plants.

Winter '22/23 main orchard planting, with possibly some further planting winter '23/24.



HPC Env. Com - rec proposed planting area version 23/11/21

Winter 2022 onwards over several seasons - planting of woodland and foraging trees - nuts and other fruit. Woodland trees on south side selected to avoid shade in orchard.

Spring '23 sowing wildflower seed and using plug plants if funds available.

Main sources of Finance & materials:

1. SP's OCC Councillor fund for items to get project under way this winter.
2. Woodland Trust for approx.. 2/3 of hedge whips, rest locally sourced.
3. Possible 'sponsor a tree' scheme in orchard, with sponsors planting their tree.
4. Applications to National Lottery Funds by Sustainable Harwell.
5. Application to autumn round of Queen's Green Canopy initiative.
6. Donations from Parish and village organisations.
7. PC budget for 22-23 to include some provision.

Items as part of hedge-planting:

1. Discuss plans with grounds staff and their role in this and following phases, for example mowing in orchard, maintaining the hedge and any extra equipment that may be needed. This will include a suitable water container for the pick-up plus pump and hoses for water delivery.
2. Installation of a display board to tell anyone passing what is being done.
3. Protection of the area in general and any protection for whips tbd but not plastic coils.
4. Gaps left where gates are proposed so normal mowing can be done outside of the wild-flower season.
5. Install a water tank? Above watering can height. This so grounds staff can deliver to site for volunteers to dispense.
6. In due course install gates.

Items as part of Orchard planting:

1. Finalise varieties list having regard to provisional list with historic parish and North Berks connections, availability of types on rootstock and form.
2. Select type of tree-labelling and order if there's a long lead-time.
3. Encourage 'sponsor a tree' in the Parish
4. Check how hard hole-digging will be and if necessary find local assistance.
5. Write Schedule of tree planting to include
 - a. details of tree supports,
 - b. tree protection – possibly netting cylinder of c. 15 cm diameter and 50 cm height
 - c. management of the surrounding soil – for example bare of vegetation over a diameter of c. 75 cm & mulched at intervals.
 - d. installation of irrigation collar and plan watering requirement
6. Schedule planting as trees available.
7. Maintain watering schedule over tbd months of the summer for 2 years

Items as part of wild-flower area:

1. Prepare area by close cutting, scarifying and sowing with Yellow Rattle in spring 2022.
2. As required cut and remove cuttings.
3. Sow wild-flower seed in spring 2023.
4. In due course install seats, and picnic tables.

Items as part of planting surrounds:

1. Draft plan to provide seasonal interest, foraging varieties such as nuts, wild plums etc
2. Plant as available due to funds (consider sponsorship again) and season, with irrigation collars as thought necessary.
3. If any larger specimens to be planted then a contractor may be needed to do the work.
4. Maintain watering schedule for 1st 2 or tbd summers.

Draft list of varieties for HPC orchard

Summary:

The lists below contain 9 cherry of which 1 culinary, 5 dessert pear, 16 apple varieties and tbd other fruits which might be in the orchard or the surrounding area.

We think there should be some espalier trees, partly because this is a method of harnessing vigour without having too large a tree and partly because it's economical with space. They may be from within the list or additional varieties, if list ones not available.

Cherries:

Variety	Poll partner	Poll group	Notes
Early Rivers	Merton Glory	1	GB grew, black
Merton Glory	Early Rivers	2, u-p, not self-fertile	
May Dukes	Amber	3, self-fertile	Hist. 1813 Berks (1)
Black Heart		3, not self-fertile	Hist. 1813 Berks
Amber Heart	Stella	4, not self-fertile	GB grew
Stella	Self	4 u-p	AGM
Bradbourne Black	Morello	4/5 not self-fertile	GB grew
Morrello, culinary	Stella	4/5 self-fertile	AGM (2)
Napoleon	Stella	4/5	GB grew, white (3)

Notes on table:

u-p = universal pollinator

- 1) Primrose has May Dukes in poll group 4 and that they will pollinate any group 3 to 5.
- 2) Morrello also universal donor; self-fertile but nearby donor helps.
- 3) Napoleon reliable but poor disease- resistance, canker

Historical in Harwell:

Robert Loder (1610 – 1620) grew cherries but not named varieties – he details costs of picking, taking to market, selling, plus profits made.

From General View of the Agriculture of Berkshire, drawn up for the consideration of The Board of Agriculture, 1813, by William Mavor

Cherries: May Dukes, Black Heart

From A Soil Survey of the Eastern Portion of the Vale of the White Horse, 1934: Cherries - Duke,

From The Cherry Barn, The memoirs of Gordon Bosley transcribed by Kathleen Philip & published in 1974: Cherries: Napoleon, Bradbourne Blacks, Early Rivers, Amber (Heart?)

Pears – all dessert:

Variety & poll. group	Pollination Partner	Local	Notes
Conference 3	Beth	Bl, Br	AGM, fruit Oct – Nov.
Beth 3	Conference		AGM fruit early – mid Sept.
Beurre Hardy 3	Beth	Bl, Br, OBG	AGM vigorous, good pollinator, fruit Oct.
William's Bon Chretien 3	Conference		AGM, fruit mid Sept.
Doyenne de Comice 4	Conference		AGM, fruit late Oct – end Nov.

Historical in Harwell:

Robert Loder's Farm Accounts 1610 – 1620: In 1611 he mentions 4 orchards, and had pears and 'great pears'

Cherry Barn monograph mentions Doyenne de Comice, Conference, Bristol Cross, Beurre Hardy;

Note Pears need to be grown on quince stock or too big to harvest easily. None self-fertile.

Varieties

CONFERENCE was developed in Britain by Thomas Francis Rivers from the Rivers Nursery in Sawbridgeworth, Hertfordshire. It owes its name to the fact that it won first prize at the National British Pear Conference in London in 1885.

BETH A variety bred by Tydeman at East Malling Research Station, Kent, in 1938 from two old varieties, Williams' Bon Chrétien and Beurré Superfin. It was not named until 1974. The dessert fruit is ripe in late August and September and the trees usually produce very good crops. The flavour is good and the flesh has a white melting texture. Fruit is small to medium sized and often irregularly shaped.

BEURRÉ HARDY A dessert pear of Belgian origin, raised by Msr. Bonnet in 1820, a friend of the pomologist Van Mons, and subsequently named by another, after a Msr Hardy, Director of the Luxembourg Gardens, and introduced around 1840. The medium/large fruit has a very good flavour, with very juicy flesh, sometimes tinged pink, rich and scented of rose-water. The skin is russet and coppery red. It is a good cropper, ready to eat in September/October. Trees are strong, tall, and upright, with good autumn colour.

WILLIAMS' BON CHRÉTIEN Bon Chrétien pears were known by the Romans, and in the 16th century were considered the best pear of all. The name is derived from 'good christian' and the various Bon Chrétien pears were often called that in England. Williams' Bon Chrétien was raised by Dr John Stair, a schoolmaster at Aldermaston, near Reading in 1770 and introduced by a nurseryman called Williams. In 1797 it was taken to America and planted on the estate of Thomas Brewer. In 1817 Brewer's estate was taken over by Enoch Bartlett, who named the tree after himself, having forgotten the true name. In America it is still known as the Bartlett Pear. It is sweet, juicy and very soft when ripe, with a musky flavour. It does not store. It will grow passably well on a north wall and crops regularly. It is said not to be pollinated by Louise Bonne and will not pollinate Louise Bonne or Fondante D'Automne though the 1885 National Pear Conference, held at RHS Chiswick, had declared that no varieties of pears were found to be intersterile – i.e. they would all pollinate others, if flowering at the same time. Ripe in September.

So just 250 years old!

DOYENNÉ DU COMICE A French pear, grown from seed in the fruit garden of the Horticultural Society of Maine et Loire and first fruiting in 1849. It reached England in 1858 and soon became very popular for its delicious flavour and juicy texture. The medium/large golden yellow fruit is flushed red. It is best planted in a warm site if it is to fruit well. Fruit keeps until November/December. Crops are not always regular.

Apples:

Variety	Poll. Grp	Fruit Time	Vigour	Local	Historical, other
Beauty of Bath	2	Early	3	-	pt-b
Egremont Russet	2	Mid.	2	OBG	AGM, hist Loder?
Ribston Pippin T	2	Late	2	OBG	AGM, pt-b, hist Loder?
Blenheim Orange T	3	Late	3	N	AGM pt-b, GB grew
Bramley's Seedling x 2 T	3	Late	3	N	AGM, pt-b, GB grew
Cox's Orange Pippin	3	Late	2	Br	GB grew
James Grieve	3	Mid.	2	Br	AGM
Oxford Conquest	3			Bl,	(1)
Tydemans' Early Worc.	3	Mid.	2	-	t-b
Worcester Pearmain	3	Early	2	Br	AGM, t-b
Gloster 69	4			-	Poll, "Newton's apple"
Laxton Superb	4	Late	3	-	GB grew
Pitmaston Pineapple	4	Late	2	Br, OBG	
Tydemans' Late Orange	4	Late	3	-	GB grew
Flower of Kent, Newton's	5	Late	3	-	(2)
John Downie, Crab apple	4	Late			pollinator
Costard?					Hist. Loder

Notes on table:

T indicates Triploid, t-b = tip-bearing, pt-b = partial tip-bearing

Local sites – Blewbury, Brightwell, Oxford Botanic Garden, Newbury group

Varieties can be pollinated by others within 1 poll. group, so a group 3 can pollinate groups 2, 3 and 4

1) Oxford Conquest is a cross between Blenheim Orange and Court Pendu Plat, which is a very old variety and mentioned by Laurie Chumbley but has disadvantages.

2) Flower of Kent is identical to the variety growing in Isaac Newton's garden at Woolsthorpe Manor, Near Grantham, Lincolnshire. According to the legend Newton was sitting under this tree when an apple fell to the ground and gave him the ideas which lead to his theory of gravitation. The original tree died in 1814, but trees descending from it by grafting still survive. First listed in 1629.

Historical in Harwell:

Robert Loder's Farm Accounts 1610 - 1620

In 1611 he mentions 4 orchards:

Sanders had cherries, great peares, Pepions (pippins), Russettes, Empes, hard peares,

Bartlettes had peares, Pepions, Russettes, Empes, Wildinges, Costerdes,

Upper House Close had Pepions, Bechendons, Swetings, cherries, damsons

Fardinges had cherries and Sweetings

From Glossary + MT: Empes – a choice morsel, variety of apple, Wildinges - crab apples, Costerds are

Costerd or Custard apples – a large late variety, Swetings - a small early sweet eating apple,

Blechynden's? type of apple, perhaps from Blechynden Kent

From The Cherry Barn, The memoirs of Gordon Bosley transcribed by Kathleen Philip & published in 1974:

Apples: Blenheim, Cox's, Tydeman's Late Orange, Winston, Bramleys, Edward VII (Cooker? late to blossom so survive most frosts), Laxton Superb. Referring to Cox's - need for pollinators - every 5th tree

Remembered by JM: Worcester Permain, James Grieve, Bramley

From Laurie Chumbley's column in *Harwell News*, October 1994: Court Pendu Plat, Fiesta

Note on Espalier Trees: these are good for keeping the tree to a manageable size, particularly pears, which tend to be more vigorous than apples.

Other Fruit:

Other Fruit	In orchard / surround	Notes
Medlar	orchard	Variety tbd
Damson	Surround?	Variety tbd
Greengage	Surround?	Variety tbd
Plum	Surround?	Variety tbd