

On view near Oasis Cafe and Peace Garden:

30. Golden Rain tree/Pride of India, *Koelreuteria paniculata*



31. Hawthorn, *Crataegus submollis* - delicious fruits



Barnet, Enfield and Haringey **NHS**
Mental Health NHS Trust

Trees of St. Ann's Hospital: Guidance Notes and Map

True Service tree with
pear-shaped fruits or 'sorbs'
Sorbus domestica

On view near Emergency Reception



St. Ann's Hospital in Tottenham N15 3TH is home to some of the rarest trees in Britain, many of which have remarkable fruits. This booklet, with its centre map, will guide you around the hospital grounds and give you information about our trees. It is part of a project funded by the Forestry Commission and hosted by the hospital, which has included Tree Tours led by David Bevan and Russell Miller, activities for psychiatric inpatients such as apple pressing and tree care. *St. Ann's Hospital Tree Team*, led by patients of St. Ann's and the Community, is collaborating with the Estates Department to continue to improve the care of our inspiring trees.

Photographs by Maria de Fatima Campos
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A. PICNIC LAWN TREES (yellow stickers)

Straight ahead just inside Main Entrance; the lawn with picnic tables

1. English Oak, *Quercus robur* (pressed leaves pictured left)

The English Oak can be distinguished from the other native oak (Sessile Oak, *Quercus petraea*) by two little lobes at the base of each leaf. It is common in southern England and thrives on London clay.

Locally, Queens Wood and Highgate Woods N10 have fine examples of both species. Oaks support more dependent invertebrates than any other tree in Britain. English oaks can live for 1000 years if pollarded.

2. Pear, *Pyrus communis*

The pears of this tree are small sweet and crisp. They are being used by the hospital to make preserves and juices with our Apple Press.

3. Horse Chestnut, *Aesculus hippocastanum*

Horse Chestnuts suffer from a number of problems:

Horse Chestnut leaf miner moths – the larvae of which live inside the leaves and cause them to turn brown by August. This reduces the tree's capacity for photosynthesis and so places stress on the tree. The moths first reached England in 2000 and have now spread across most of the country;

Horse Chestnut bleeding canker – is a more serious bacterial disease that kills the cambium (the growing tissue beneath the bark). If the canker girdles the tree it will die. Even less serious infections often lead to further fungal diseases entering through damaged bark.

Tree Care Note: Treating either disease is difficult and involves pesticides or fungicides that have detrimental effects on wildlife. Something as simple as placing woodchip beneath a tree can improve its health. The woodchip keeps the soil moist and encourages worms which aerate and decompact, greatly improving soil structure. A ring of woodchip as far as the drip line of the canopy is ideal.

4. Red Oak, *Quercus rubra* (pressed leaf pictured right)

Our mature red oak was felled in 2007 but has since thrown up many suckers with distinctive large red leaves in Autumn.



5. Black Mulberry, *Morus nigra*

The delicious fruit of this tree can be harvested in summer, but beware of stains from the dark red juice. Young and mature leaves differ in shape. Mulberry-stem galls are often caused by bud proliferation, where hundreds of dormant buds are produced close together. The crown on this mature tree has leaned on one side, which is a typical growth habit of mulberries.

B. GRAND LAWN TREES (orange stickers)

left at Main entrance, parallel to hospital ring road/Mulberry House

6. Strawberry Tree, *Arbutus unedo*

This evergreen tree is native to Ireland and European coastal areas. It produces large red fruits similar to strawberries which are not particularly good to taste but make good jam and a Portuguese alcoholic drink. The Romans called it 'unedo', meaning 'eat one only'. Strawberry trees may fall over with age. Our tree is a very large specimen.

7. Rowan/Mountain Ash, *Sorbus aucuparia*

Rowan are common in Scotland as native trees. Compare this Rowan to the True Services nearby (both *Sorbus* spp.). The leaves are almost identical but the rowan fruits are much smaller.

8. Group of True Service Trees, *Sorbus domestica*; RARE (pictured)

True service trees are only found naturally in remote places, like the Welsh cliffs. The only trees in London are planted (not wild) and St. Ann's may well have the largest collection in London. In 2009 Tree Preservation Orders (TPOs) were placed on all the True Services on site, which we trust will protect them for our hospital and local community.. The fruits or 'sorbs' are abundant in Autumn* and may be apple-shaped or pear-shaped. The sorbs are sharp to eat until they have been allowed to become over-ripe or 'bletted'. Then the pulp has a strong deep flavour. The Romans made cider with it and the St. Ann's Trees Project has been making preserves with the bletted fruit. A young True Service is growing at Railway Fields Nature Reserve, Green Lanes N4 and is likely to have grown from seed deposited by a bird which had eaten the ripe fruit at St. Ann's Hospital.

Tree Care Note: One tree has a wound at the base and a bracket fungus (*Phellinus* sp.). Bark is a tree's primary defence against infection. Heartwood is fungal resistant deadwood; Sapwood is living wood.

* When a tree fruits heavily it may be a sign that it is dying.

9. Black Mulberry by Mulberry House, *Morus nigra* - fruits prolifically

8. True service trees showing apple and pear-shaped fruits or 'sorbs'



C. EMERGENCY RECEPTION TREES (red stickers)

Continue along both sides of ring road but beware of cars!

10. London Plane, *Platanus x hispanica* (in Chestnuts Park)

London Plane is a hybrid of Oriental Plane and American Plane. It is pollution tolerant and distinguishable by its flaky bark.

11. Ash, *Fraxinus excelsior*

12. Lime, *Tilia x europaea* - pollution tolerant

The Limes planted in London by the Victorians are hybrids of the Small Leaved Lime and the Large Leaved Lime. Honeydew is excreted by aphids as they feed on sap in leaves. The honeydew attracts other insects and the aphids attract birds like blue tits. Lime leaves make good salads and the blossom makes a calming tea.

13. Lombardy Poplar, *Populus nigra italica*

14. Sweet Chestnut, *Castanea sativa*

The Sweet Chestnut originates from Italy and was introduced to Britain by the Romans. It produces edible nuts, is an excellent timber tree and can be coppiced.

15. Hungarian Thorn (overgrown by ivy), *Crataegus nigra*

The Hungarian Thorn is identifiable by its black fruit.

Tree Care Note: Ivy tends to grow over trees if they are old and frail. The ivy provides a home for many invertebrates and valuable nesting sites for birds. In this case, the ivy should be removed since the tree is small, quite rare and covered by a large amount of ivy.

16. Medlar Thorn X *Crataegus grandiflora*: RARE

This Medlar Thorn is a hybrid between Midland Thorn (*Crataegus laevigata*) and Medlar (*Mespilus germanica*). The hybrid scion is grafted on hawthorn rootstock. This tree is old and struggling.

Tree Care Note: The hawthorn rootstock suckers emanating from below the graft need to be removed to allow more energy to be focused on the Medlar Thorn scion. This should be done gradually over 2-3 years so as not to force change too quickly on an old tree.

D. HALLIWICK CENTRE TREES by Orchard Gate Entrance

(purple stickers)

17. Crab Apple, *Malus sylvestris*

The golden yellow crab apples of this tree make excellent jellies.

18. Plums, *Prunus domestica*

These trees produce delicious small, sweet plums with a striking blue patina. The ripe fruits can be picked from the trees in August or collected when they fall to the ground, since they are not damaged by the fall. They make excellent jams, cakes and puddings.

19. Wild Service, *Sorbus torminalis* - RARE (leaf pictured left)

The Wild Service is very rare because it does not produce much fertile seed but reproduces by sucker. It is rarely found growing wild in London and is confined to ancient woods such as Queens Wood N10. This tree is not wild but was planted. The fruits resemble brown haws and taste similar to dates, but this tree has not yet produced fruit.

20. Common Whitebeam, *Sorbus aria* (leaf pictured right)

This is a resilient tree which thrives as a street or park tree. The leaves are white and woolly beneath. The scarlet fruits, borne in clusters from September, make this an impressive Autumn tree.

21. Oriental Thorns, *Crataegus orientalis*.

Note the sharp thorns and deep red haws, which are bland to taste but abundant.

22. Ornamental Cherries (grafted), *Prunus* sp.

These trees have been 'top-grafted' to boost vitality. They are exotic Japanese flowering cherries grafted onto native cherries.

Tree Care Note: Cherry trees should be pruned in summer because they are highly susceptible to Silver Leaf disease, a fungal disease that is prevalent in winter. The cherry closest to the Halliwick has pink blossom; the other cherry has white blossom and is in need of improved care.



St. Ann's Hospital
 St. Ann's Road, Tottenham
 London N15 3TH

TREE WALK MAP

Main Entrance

A. Picnic Lawn (yellow stickers)

just inside Main Entrance

1. English Oak, *Quercus robur*
2. Pear, *Pyrus communis*
3. Horse Chestnut, *Aesculus hippocastanum*
4. Red Oak, *Quercus rubra*
5. Black Mulberry, *Morus nigra*

B. Grand Lawn (orange stickers)

left at Main Entrance/parallel to ring road

6. Strawberry Tree, *Arbutus unedo*
7. Rowan/Mountain Ash, *Sorbus aucuparia*
8. True Service trees, *Sorbus domestica* RARE
9. Black Mulberry by Mulberry House, *Morus nigra*

C. Emergency Reception (red stickers)

10. London Plane, *Platanus x hispanica* (Chestnuts Park)

11. Ash, *Fraxinus excelsior*
12. Limes, *Tilia x europaea*
13. Lombardy Poplars, *Populus nigra italica*
14. Sweet Chestnut, *Castanea sativa*
15. Hungarian Thorn, *Crataegus nigra*
16. Medlar Thorn X *Crataegus pilus grandiflora*

D. Halliwick by Orchard Gate (purple stickers)

17. Crab Apple, *Malus sylvestris*
18. Plums, *Prunus* sp.
19. Wild Service, *Sorbus torminalis* RARE
20. Common Whitebeam, *Sorbus aria*
21. Thorns, *Crataegus* sp.
22. Ornamental Cherries (grafted), *Prunus* sp.

E. The Wild Place (blue stickers)

23. Crab Apples, *Malus sylvestris*
24. True Services, *Sorbus domestica*
25. Ornamental Cherries, *Prunus* sp.
26. Hawthorn, *Crataegus* sp.
27. False Acacia/Black Locust, *Robinia pseudoacacia*

F. Oasis Cafe & Peace Garden (green stickers)

28. Apple, *Malus domestica*
29. Ornamental Cherries, *Prunus* sp.
30. Golden Rain/Pride of India, *Koelreuteria paniculata*
31. Hawthorn, *Crataegus submollis*
32. Maidenhair Tree (young), *Ginkgo biloba*

G. Pharmacy (black stickers)

33. Crab Apple, *Malus sylvestris*
34. Spotted Thorn, *Crataegus punctata* RARE
35. Redbud shrubs, *Cercis siliquastrum*
36. Apple, *Malus domestica*
37. Indian Bean, *Catalpa bignonioides* (stump/young)

H. Water Tower/Greentrees (white stickers)

38. Water Tower Orchard: 'Cared-for Trees'
39. Pair of Hawthorns, *Crataegus* sp.
40. Pair of Hawthorns, *Crataegus* sp.
41. Black Mulberry, *Morus nigra*
42. Redbud tree, *Cercis siliquastrum*

True Service Tree
Sorbus domestica

E. THE WILD PLACE (blue stickers) by Blocks G, H and railway line

This is a dedicated wildlife area or 'ecological corridor' which allows animals to move around safely, without danger from cars, humans etc.

23. Crab Apples, *Malus sylvestris* - abundant fruits in Autumn.

24. True Service Trees, *Sorbus domestica* (see '8. True Services')

The True Service closest to the Railway Line may be the largest on site and shows signs of 'Reaction growth':

Tree Care Note: Reaction Growth is produced when a tree senses some of its wood has been destroyed by a fungus. The extra wood helps to stabilise the tree. Some fungi consume lignin (hard substance in wood) allowing a tree to react when it senses it is less stable than it was. Other fungi consume cellulose (stringy substance that gives tensile strength). Since these fungi leave the rigid lignin, the tree cannot react because it does not sense the weakness until the remaining brittle lignin breaks.

25. Ornamental Cherries, *Prunus* "Kanzan".

These trees are weighed down by pale pink blossom in Spring. We hope to have Spring Tree Walks so as to enjoy all the blossom on site.

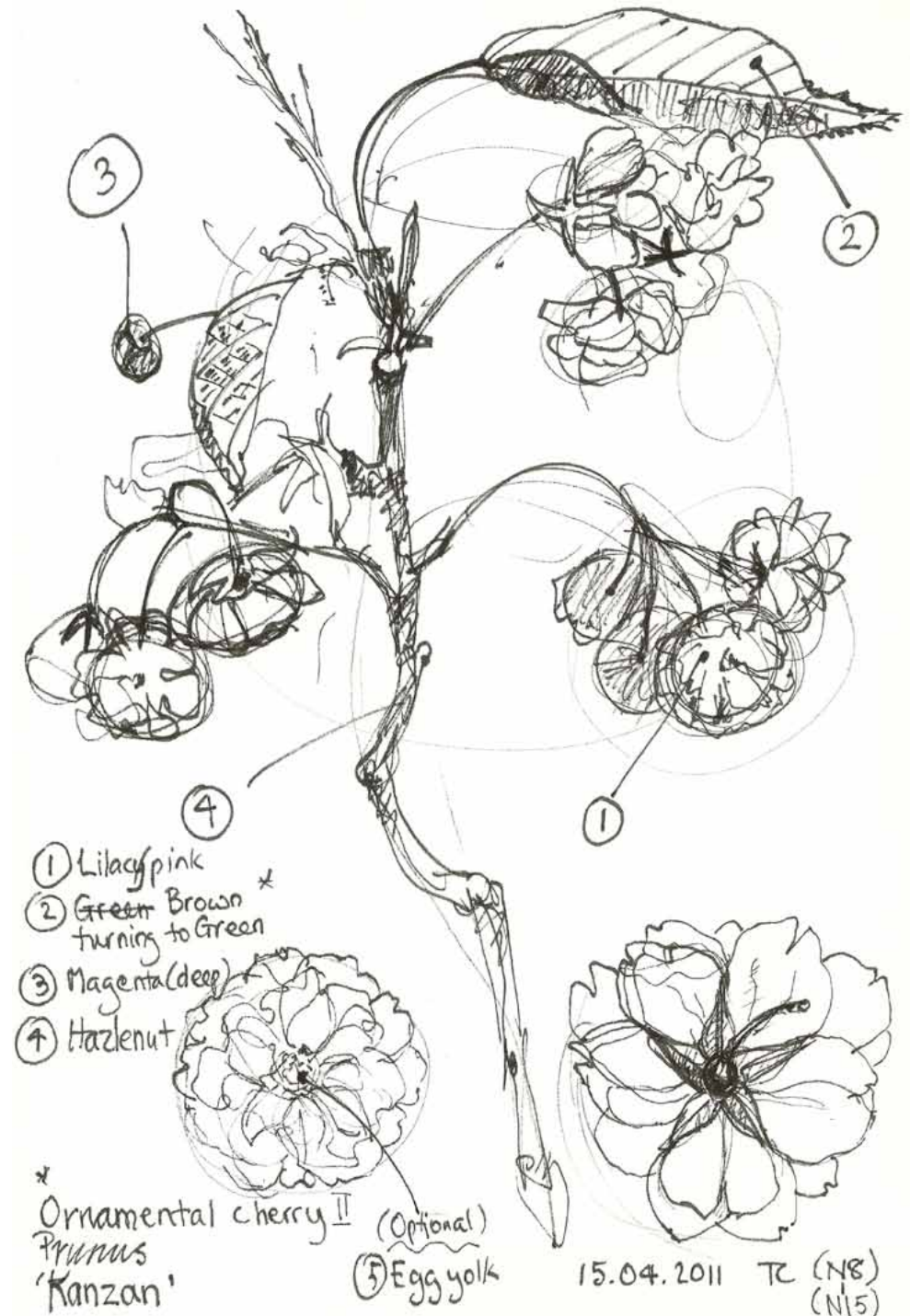
26. Hawthorn, *Crataegus* sp. - delicious red haws of medium size.

Tree Care Note: Young plum showing severe damage by dog/s:

The biggest problem with dogs is when they bite the trunk (cf. Branches) of a tree. If they chew the bark all around the tree they ring bark it and it will die. Some dogs will do this if they are bored. Damage by dogs is one of the main reasons we lose trees in urban areas.

27. False Acacia/Black Locust, *Robinia pseudoacacia*

All trees are examples of convergent evolution, i.e. different species evolving the same form. Many trees are not related to each other but are closely related to herbaceous plants. E.g. False Acacia is a member of the Pea Family (hence the 'pea' pod type fruits). It has evolved into a tree because trees are excellent structures for holding a mass of light-gathering leaves.



F. OASIS CAFE & PEACE GARDEN TREES (green stickers) (see back cover photographs)

28. **Apple**, *Malus domestica*: excellent large sweet apples.

This tree is not very noticeable because it has become more of a shrub, hidden among others. In Spring the apple blossom makes an uplifting display against the white lilac behind it.

29. **Ornamental Cherries**, *Prunus* sp.

These trees (of different cultivars) have deep pink blossom in Spring.

30. **Golden Rain Tree/Pride of India**, *Koelreuteria paniculata*

Hardly visible among the shrubs, this tree is a precious find in London. It produces large panicles of lantern-shaped fruits in Autumn, turning from pale green to deep brown. Each lantern is hollow and contains 3 large black seeds in 3 cells. The blossom is yellow. (see back cover photograph).

31. **Hawthorn**, *Crataegus submollis*

This Hawthorn produces large haws with a delicious flavour reminiscent of apples. (see back cover photograph).

32. **The Maidenhair Tree**, *Ginkgo biloba*

This young tree was planted in 2005 as part of the Peace Garden Project which provides a small garden as an outdoor sanctuary, created by and for the patients and staff of the hospital, but open to visitors at any time. The Maidenhair Tree evolved very early and dates back to Jurassic times. It has a reputation for surviving environmental disasters (eg Hiroshima). The leaves have a very distinctive shape which suggests the tree's 'prehistoric' pedigree. Hornsey Churchyard on Hornsey High Street N8 has two fine mature Maidenhair Trees, standing tall on either side of the historic clocktower.

G. PHARMACY TREES (black stickers)

33. **Crab Apple**, *Malus sylvestris* - fruits make good jelly, combined with rose hips which grow abundantly on site.

34. **Spotted Thorn**, *Crataegus punctata*; RARE / has TPO



This is one of St. Ann's most important trees, partly because of its impressive size and rarity. At 2.1m in girth, it is exactly the same size as the Spotted Thorn on Hamsptead Heath, but is narrowly beaten by a tree in Romford at 2.31m. This tree does appear on the tree register which is a national database of trees in Britain. There is a fee to access the database: www.treeregister.org

35. **Redbud** (shrubs), *Cercis siliquastrum* (see mature tree No. 42)

This Mediterranean tree thrives in London due to the extra urban heat.

36. **Apple**, *Malus domestica* - abundant small sharp apples

This tree produces so many apples that it is hard to prevent them being wasted. The St. Ann's Trees Project/Day Therapies Dept. have been harvesting apples and pears on site and making excellent juices using our own Apple Press.

37. **The Indian Bean**, *Catalpa bignoniodes* (stump and young tree)

Photographs taken in 2005 show this tree as it once was - magnificent and standing tall over the parked cars. Following a tree survey, the tree was felled and a young Indian Bean planted in its place. The St. Ann's Tree Team are collaborating with hospital staff to improve the care of this young tree - and many others on site - by protecting and mulching, thus increasing chances of survival. (See No. 38 'Cared for Trees').

H. WATER TOWER > GREENTREES and Way Out

(white stickers)

38. Young Cared-For Trees of the Water Tower Orchard:

Many young trees were planted in 2007 to replace mature trees which had been felled. Sadly, some died due to lack of sufficient protection and mulching. The St. Ann's Hospital Trees Project received a small Forestry Commission Grant to lead Tree Care work and other activities for psychiatric inpatients, working with Day Therapies staff. Further care of the young trees throughout the site will be led by members of the Tree Team, including patients and volunteers, in collaboration with the hospital Estates Department.

39. Pair of Hawthorns, *Crataegus* sp.

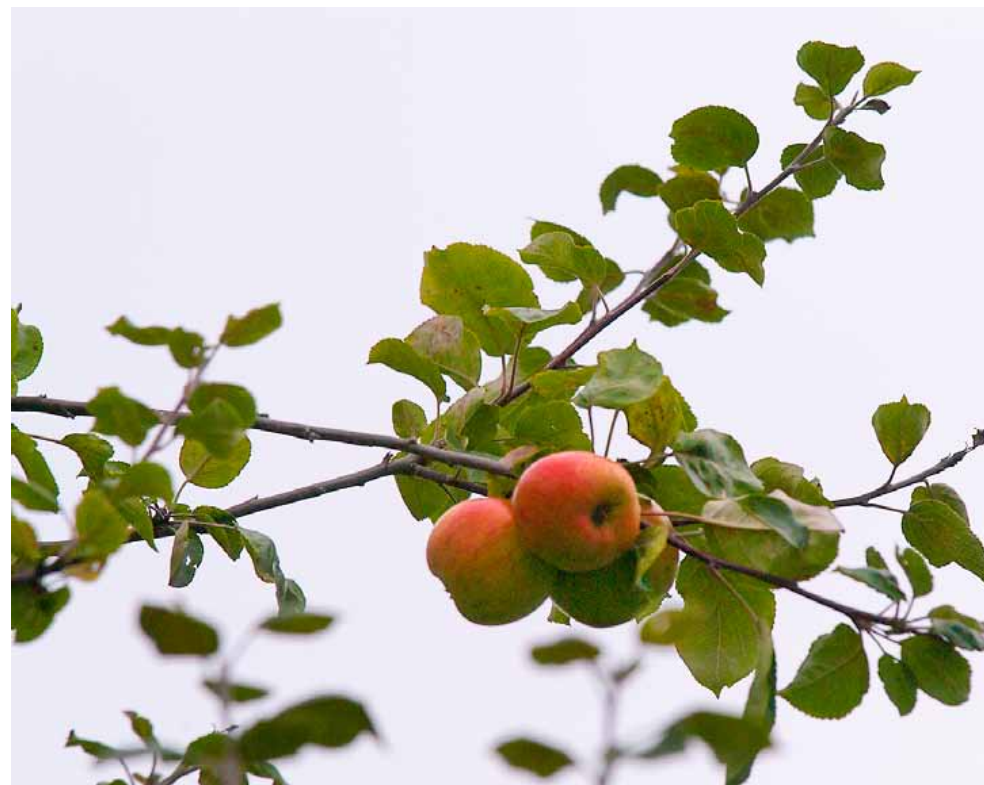
These attractive little Hawthorns produce scarlet haws which remain on the trees long after the leaves have fallen. The leaves are very different to the Common Hawthorn because they are 'obovate'/almost oval and rounded at the base. The thorns are impressively long and extremely sharp, reminding us that Thorns are part of the Rose Family.

40. Pair of Hawthorns, *Crataegus* sp. - delicious fruits in Autumn

41. Black Mulberry, *Morus nigra* -(young and mature leaves pictured)

42. Redbud tree, *Cercis siliquastrum* (behind Main Entrance Reception)

This tree is a member of the Pea Family and has heart-shaped leaves, deep pink blossom in Spring, and brown pea-pods in Winter. It is drought tolerant.



This booklet was produced by St. Ann's Hospital Trees Project © 2011

Text written in collaboration with David Bevan & Russell Miller

Photographs by Maria de Fatima Campos

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Tree Care by St. Ann's Hospital Tree Team

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