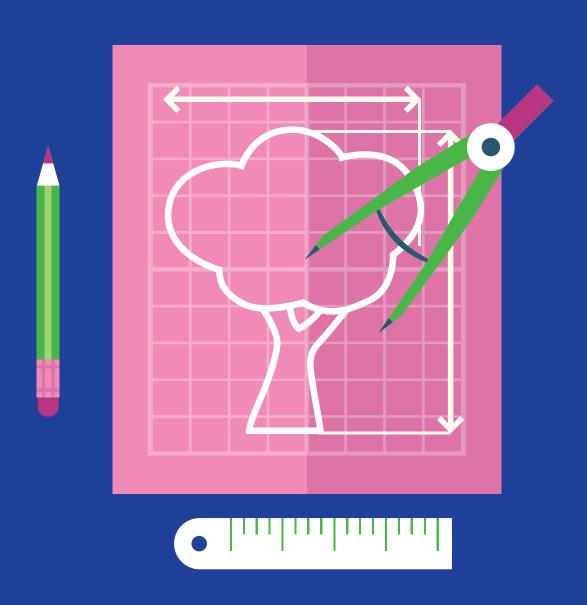
A brief guide to the trees in War Memorial Park, Romsey



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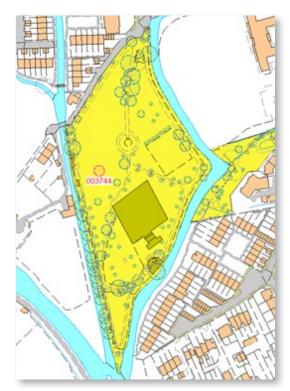




Panoramic view across War Memorial Park, Romsey



Aerial photograph of War Memorial Park



Ezytreev extract of War Memorial Park



Panoramic view across War Memorial Park, Romsey

War Memorial Park has a superb collection of trees and there are 122 individual trees recorded within the park grounds. The most abundant species of tree in the park is Lime (Tilia) and these provide a very characteristic and impressive feature in the landscape.



Indian Bean Tree (Catalpa bignonioides)



Caucasian Wingnut (Pterocarya fraxinifolia)

Of the majority of trees, 114 are of good vitality with 8 showing signs of low vigour. 33 are in good condition, 84 are of fair condition, 3 are in poor condition and 2 are dead. The dead trees include a Cherry and a young Black Mulberry tree. The overall age range of the trees is young with 61 young trees, 23 middle aged trees and 38 mature trees.



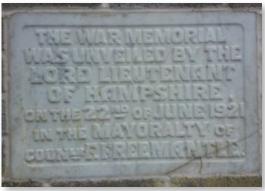
Newly planted Memorial Lime tree



Plaque for the Lime tree

The memorial tree element of the park is an essential part of the park and there are 20 named memorial trees within the park with plaques in situ.





Carvings on the either side of the entrance into War Memorial Park, Romsey

The Park was formally opened to the public in 1920 by Major Spencer Chichester and was designed by Mr Charles Dyson, the Rural District Surveyor aided by Mr Greenwood.

The Limes are the key trees within the park and are part of the original planting and can be seem in early photographs of the park and on aerial photographs and are around 100 years of age. It was not until 1974 that Test Valley District Council became responsible for the Park.







Tree surveys and

tree works

A full re-survey of all the trees within War Memorial Park was completed in July 2017 and the tree works recommendations are currently being carried out.

These works include:

- Crown cleaning the limes to remove major deadwood and damaged branches to reduce the potential hazard.
- Crown lifting the Limes by removing the epicormics off the main trunks to 4-6m and removal of basal suckers around the base to reduce the potential hazard of low branches.
- Severing ivy around the main trunks of trees where ivy is present.
- Crown reducing the Black Mulberry by 20% to reduce the end weight of the branches to aid with its long term retention.
- Felling the dead Cherry and dead Mulberry.
- Felling a Sycamore and Alder and coppicing the Alder and Sycamore behind the Café in the Park. Plus crown cleaning the Caucasian Wingnut and Siberian Elm.
- Other works already ordered included formative pruning some of the young trees, topping up the mulch, watering the newly planted trees.

Tree surveys and tree works

Latin Name	Common Name	No. of each species
Acer campestre	Field Maple	2
Acer griseum	Paper Bark Maple	1
Acer pseudoplatanus	Sycamore	4
Aesculus hippocastanum	Horse Chestnut	1
Aesculus x carnea	Red Horse Chestnut	1
Alnus glutinosa	Common Alder	5
Catalpa bignonioides	Indian Bean Tree	1
Cedrus atlantica	Atlas Cedar	1
Cercidiphyllum japonicum	Katsura	2
Cercis siliquastrum	Judas Tree	1
Crataegus monogyna	Hawthorn	2
Cryptomeria japonica	Japanese Red Cedar	1
Fagus sylvatica 'Dawyck' & 'Purpurea	Fastigiate Beech & Purple Beech	3
Fraxinus excelsior	Ash	1
Laurus nobilis	Bay Laurel	1
Liquidambar styraciflua	Sweet Gum	2
Magnolia species	Magnolia	1
Malus sylvestris	Apple	2
Metasequoia glyptostroboides	Dawn Redwood	4
Mixed broadleaves	Ash, Alder, Sycamore	1
Morus nigra	Black Mulberry	2
Picea abies	Spruce	1
Prunus avium, Prunus subhirtella, Prunus x 'Schmittii'	Cherry varieties	7
Prunus cerasifera 'Pissardii', Prunus domestica	Purple leaved Plum, Plum	7
Prunus insititia	Greengage	4
Pterocarya fraxinifolia	Wing Nut	1
Pyrus calleryana 'Chanticleer'	Pear	1
Quercus robur	Oak	2
Salix babyloncia, Salix fragilis, Salix species	Weeping Willow, Crack Willow, Willow species	4
Sorbus aria 'Majestica'	Whitebeam	1
Taxodium distichum	Swamp Cypress	1
Taxus baccata	Yew	2
Tilia cordata, Tilia platyphyllos, Tilia	Small Leaved Lime, Large	47
x europaea	leaved lime, Common Lime	
Ulmus pumila	Siberian Elm	1

The key hazards to be observed in the park from trees are:

Hazard	Risk	Action
Roots lifting pathways	Potential trip hazard.	Monitoring of the pathways and root activity.
Dead wood in canopies	Falling branches and twigs from height.	Regular tree works to remove major dead wood.
Epicormic and basal growth and low hanging branches	Restriction of access along pathways.	Routine maintenance to cut back epicormics and basal growth and crown lift the trees where necessary.
Pests and diseases	Pests suck as Oak Processionary moth where caterpillars are harmful to human health.	Routine monitoring for pests and diseases annually.
High winds	Trees falling or branches falling or snapping.	Re-surveys following high wind and storm events. Temporary closure of the park if necessary.
Seating underneath trees	Falling branches or debris.	Trees with targets underneath or within falling distance surveyed more regularly to assess for hazards and tree works ordered to address hazards.
Leaves and small debris	Slip hazard.	Leaves and debris routinely cleared by grounds maintenance teams.



Seating underneath Caucasian Wingnut tree



Roots underneath pathways

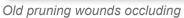


Dead wood in Lime trees

The key issues for trees in the park are:

Key issues for trees	Issue	Action
Grafted stock	Failure of graft point so tree failure.	Monitoring of graft unions for signs of failure.
Bark wounds, old pruning wounds	Entry point for pests and diseases.	Avoid damage to bark of trees, install bark mulch rings, reduce structures around tree trunks or embedded into tree trunks. Provide tree shelters or guards for young trees. Keep tree works to minimum and wound size as small as possible.
Storm damage	Branch failure so loss of canopy.	Follow up remedial tree works to remove damaged branches.
Ivy & climbing plants	Suppression of back budding, additional weight in winter months, limits inspections.	Routine severance of ivy to control growth and extent on trees.
Drought stress / heat stress / Flooding	Foliage stress, die back, decline and potentially death of tree.	Water all young trees for 3 years following planting and any young trees in periods of prolonged dry weather.
Tight unions / Poor form	Weaker form more liable to fail.	Selection of good quality trees for planting. Proactive remedial tree works to address poor form with formative pruning.
Fungal pathogens, Pests and diseases	Naturally present but can be fatal for trees.	Maintain good tree health at all times, provide mulch rings, and reduce compaction under tree canopies. Monitor for signs of pests, diseases and fungal fruiting bodies.







Heat stress / drought stress



Tight unions with included bark

Pests and diseases and problems with trees in the Park



Spangle galls on Oak leaves (Wasp: Neuroterus quercusbaccarum)



Horse Chestnut leaf miner (Moth: Cameraria ohridella)



Horse Chestnut leaf blotch (Fungus: Guignardia aesculi)



Nail galls on Lime leaves (Mite: Eriophyes tiliae)



Branch failure in high winds



Alder leaf beetle (Beetle: Agelastica alni)

These are all naturally occurring issues and trees have developed various methods to reduce the impact of them. The above examples are all found within War Memorial Park currently. As long as the trees are able to remain in good health and vigour they can continue to defend themselves or adapt to changes in their environment.

The pest issues are more of a concern if the trees are already stressed or in poor health. Therefore it is important to reduce the potential for stress on the trees from unnatural impacts like compaction or root excavation.

Health monitoring of the trees is a key part is assessing the long term impacts of pests, pruning works and diseases, so in addition to the routine tree survey add hoc visits are carried out throughout the year to assess the condition of the trees.

Wildlife in the park





Ducks and wild birds



Bird nesting boxes on trees

Bat boxes on trees

War Memorial Park provides a range of habitats to a variety of wildlife both naturally and through installations of additional habitats such as bat boxes on trees.

The trees being situated adjacent to the River Test and within the park provide an important feeding and roosting habitat for bats like Pipistrelle, Noctule and Daubentons.

Various birds are able to be seen in the park also including Green and Greater Spotted woodpeckers, Kingfishers, Coot, Moorhen, Mallard Duck, Grey and Pied Wagtail plus many more.



Green Flag status

The Green Flag Award is the national standard for parks and green spaces in England and Wales.

War Memorial Park achieved the Green Flag Award in 2008 and has held this prestigious accolade each year since then.

Green Flag in 2017

Tree species of interest

Lime tree



- The Common Lime tree is a hybrid between the Small leaved lime and Large leaved Lime and all three species are within the Park. They belong to the family Tiliaceae and have a wing on the flower bract.
- The leaf shape varies with the small leafed lime (Tilia cordata) having a heart shaped small leaf, which is glossy above and smooth with hairs in the vein axils beneath.
- The common lime (Tilia x europaea) has a broader leaf ovate to rounded and is coarsely toothed, dark green above and paler beneath.
- The broadleaved limes (Tilia platyphyllos) has deeply veined large leaves and are hairy on both sides.

Black Mulberry



- Mulberries belong to the Moraceae family and the Black Mulberry, Morus nigra has rough hairy leaves and barely stalked edible fruit clusters.
- They go a pale yellow in autumn. The trees can be monoecious (male and female) or dioecious (male or female).
- They propagate from air layers and cut branches easily but seedlings are slow to develop.

Indian Bean Tree



- The Catalpa bignoniodes is from the Bignoniaceae family. It has trumpet-shaped flowers borne in loose upright panicles.
- The leaves are large, broad and usually un-lobed leaves.
 They produce long fruit pods which ripen from green to brown.
- They secrete nectar, a most unusual characteristic for leaves, by means of groups of tiny glands in the axils of the primary veins.

Paper Bark Maple



- Acer griseum is from the Aceraceae family and has a stunning peeling / flaking reddish to cinnamon brown bark.
- The leaves are compound with three leaflets and blunt teeth on the margins.
- It has the classical winged fruits and turns a stunning red in autumn.
- It originates from China and is a very popular highly prized small to medium ornamental tree.

Judas Tree



- · Cercis siliquastrum is from the Leguminosae family.
- It has small pea like deep purple to pink flowers borne on the branches usually before the leaves.
- The bark is grey-brown and cracking into small rectangular and square plates with age.
- It produces a flattened seed pod which is green initially then turns pink and ripens to a brown colour and persists after the leaves fall.

Katsura Tree



- Cercidiphyllum japonicum is from the Cercidiphyllaceae family and originates in Japan and China.
- It has a similar leaf shape to the Judas tree but has a distinctly heart shaped leaf base and rounded teeth on the leaf margin. They also produce a small curved green pod.
- The leaves in autumn turn yellow and emit a distinctive smell of candy floss or burnt sugar. The sweet scent is caused by the molecule maltol that is released as the leaf breaks down, which is indeed the same molecule released when sugar is burnt to become caramel.

Caucasian Wingnut



- · Pterocarya fraxinifolia is part of the Juglandaceae family.
- The leaves are pinnate and the fruit have two semi-circular wings and are borne in slender hanging catkins.
- They sucker freely but are a fairly fast growing species reaching heights of 30 metres with a broad spreading crown.
- The leaves turn a rich yellow in autumn. They are a monoecious species which has both male and female reproductive organs in the same individual, so hermaphrodite.

Siberian Elm



- Ulmus pumila is part of the Ulmaceae family.
- The leaves have a curved point at the tip and nearly equal sided leaf base. They are narrowly ovate, long and sharply toothed and dark green above and smooth.
- The bark is grey-brown and rough, corrugated and they can reach 20 metres in height.
- The Siberian Elm is able to self-pollinate successfully unlike most Elms.

Sweet Gum



- The Liquidambar styraciflua is part of the Hammelidaceae family. It has a sweet resinous sap hence the name liquid amber which is exuded by the trunk when cut.
- It has a conical form, star shaped leaves which turn a rainbow of colours in autumn. The bark is dark grey-brown and deeply furrowed with narrow ridges with age.
- Fruits are individually small and brown borne in rounded hanging clusters.
- It is a deciduous tree used frequently as an ornamental specimen for its form and autumn colour.

English Oak



- Quercus robur are part of the Fagaceae family and are one
 of the native trees in the park. They have acorns borne on
 long stalks and one third of the acorn is enclosed in the cup.
- They have three to six lobed leaves which are dark green above and blue-green beneath.
- They are a majestic tree when mature and have a broad spreading habit.

Greengage



- Prunus domestica subsp. italica var. claudiana is part of the Rosaceae family.
- They are considered to be a good dessert plum for their rich confectionary flavour.
- They originate from the Middle East and were imported into England from France in 1724 by Sir William Gage.
- The variety in the Park is Oullins Golden Gage Plum.

Damson plum



- Prunus domestica subsp insititia is also part of the Rosaceae family and is a deciduous fruit tree
- It has blue coloured soft fruits with a stone containing the seed. Most individual damson varieties can be conclusively identified by examining the fruit's stone, which varies in shape, size and texture.
- The tree blossoms with small white flowers in early April and fruit can be harvested from late August to September.

Dawn redwood



- Metasequoia glyptostroboides is part of the Cupressaceae family and one of the deciduous redwoods.
- The leaves are in opposite pairs and it comes into leaf earlier than that of the Swamp cypress. Cones are on stalks and rather cylindrical.
- They are narrowly conical in form and the orange brown bark is a key feature with indentations under the branch attachments like arm pits. The bark peels vertically in stringy flakes.
- The foliage is soft green and turns yellow, pink or red in autumn. It is a fast growing tree with the potential to reach heights of 40 metres and is native to SW China.

Swamp or Bald cypress



- Taxodium distichum is part of the Cupressaceae family and has the potential to reach heights of 40metres.
- Branches are alternate and persistent shoots have spiralled leaves. They are deciduous and turn a stunning shade of bronze in autumn.
- They have a grey-brown bark which is thin and rough and often fluted and buttressed at the base. They are broadly conical in shape
- The fruit is a rounded cone going from green to brown with ripening. They prefer moist soils in swamps and stream banks and are native to SE America.
- If it grows in water then it develops woody knees to aid with the aeration of the roots called pneumatophores.

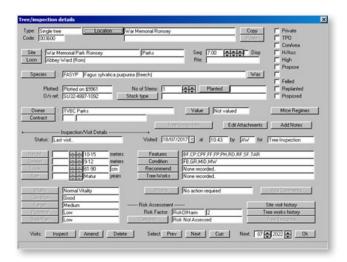
Brief guide to surveying trees in general

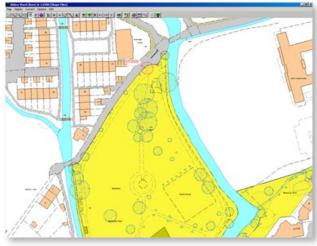
Test Valley Borough Council manages trees on council owned land. The trees are surveyed on a systematic basis and the data is recorded using a tree management database called Ezytreev. During a tree survey basic details are collected about the tree in order to ascertain the health and condition of the tree and any associated hazards and risks.

If any tree works have been set these should have an associated priority for when the tree works should be completed by. The works are usually prioritised based on risk and can fall into one of the following categories: Emergency, Urgent, Routine, Planned, and Cyclical which in turn should have associated timescales.

Anyone who owns a tree has a legal duty of care the owner's liabilities for injury to others caused by the fall of a tree or branch. The formal duties come from the Occupiers Liability Acts of 1957 and 1984. It means that as a tree owner, it is important to understand how healthy your tree is and whether it poses any obvious defects that would be a risk to others and could cause them harm.

A tree owner should have their tree inspected on a periodic basis. There is no set timescale but a tree owner should do what is reasonable and prudent as a landowner. It is recommended that trees are inspected as a minimum every 5 years.





Data collected on trees during a tree survey can include

- A unique tree identification number
- Location details Actual location of the tree
- Site features Grass, woodland, hard standing
- Tree owner details of who owns the tree
- Weather conditions at time of survey
- Date of tree survey
- Name of Tree Surveyor
- Date of next inspection
- Legal constraints like Tree Preservation Order (TPO) or Conservation Area (CA)
- Any other site comments
- Type Broadleaf or Conifer
- Tree species Common name and Latin name

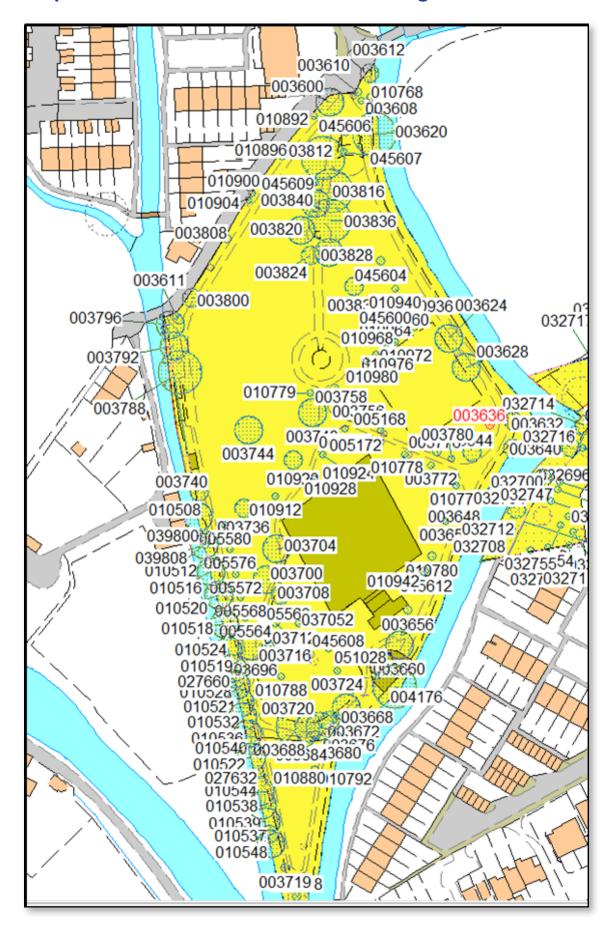
- Height of tree in metres from ground level
- Height of crown above ground in metres
- Crown spread to each cardinal point of the compass in metres
- Stem diameter in millimetres measured at 1.5m above ground level
- Age Young, established, semi mature, mature, over mature, veteran
- Vigour Good, fair, poor, dead
- Condition Good, fair, poor, dead
- No. of trunks Single, twin, multi or group
- Target What the tree or part of the tree could hit if it failed
- Potential of failure likelihood that the tree or part of tree could fail
- Size of part that could fail
- Defects or observations on the tree

Tree work recommendations following the initial tree survey could include

- Root pruning
- Mulching / Watering
- Pruning back crown or branches from structures
- Crown clean / Deadwooding
- Crown thinning / Crown lifting
- Pollarding / Repollarding
- Felling
- Crown reduction

- Removal of object from tree
- Formative pruning
- Checking stakes and ties and installations
- Full visual tree inspection
- Monitoring
- Coppicing / Recoppicing
- Aerial inspection
- Wildlife / Bat habitat assessment

Map extract of War Memorial Park showing the trees





For more information or to report a tree related problem please contact the Arboricultural Officer, at Test Valley Borough Council.

- By phone on 01264 368000 extension 8809
- By post at Beech Hurst, Weyhill Road, Andover, Hampshire, SP10 3AJ
- Online at www.testvalley.gov.uk
- By e-mail leisuretrees@testvalley.gov.uk
- Register for My Test Valley and report issues via the application which can be down loaded from the App Store, Google Play or Windows Store.

'My Test Valley' app available on:





