



The Gardens are entered by the wrought iron, Grade II listed, main gate A. The gates and railings date from the early 18th century, probably 1721, when an avenue of elms was planted in front of the house. The driveway is lined with flowering cherry (Prunus "Kanzan") backed by sycamore (Acer pseudoplanatus) and yew (Taxus baccata). The wall to the right is screened by several different varieties of climbing roses.

At the end of this short avenue, the road divides to enclose a large *shrubbery* **B**. This was the site of the old coach house, which was demolished in the 1960s. Here you can see a black walnut (Juglans nigra), beautyberry (Callicarpa bodinieri) and silk tassel (Garrya elliptica "James Roof") against a background of yew.

Bearing to the left at this junction one can see the pond C. It appears to be a natural dew pond and features in some old pictures of the manor house dating back to the 17th century. It is overlooked by several ancient oak trees (Quercus robur), which also feature in paintings by Lady Caroline Lawes dating from the late 19th century.

A section of **ha-ha D** extends along the south of the front lawn, overlooking the fields beyond. It was surmounted by a 19th century ornamental wall until it collapsed in the 1990s.

Looking north from this vantage point, across the expanse of lawn towards the manor house (Grade I listed), with its ornate clock tower, you can admire a view that is little changed since the middle of the 17th century.

The south face of the house **E** is framed by two southern Magnolias (Magnolia grandiflora). Other climbers on this wall include Wisteria (Wisteria floribunda), kiwifruit (Actinidia chinensis) and grape (Vitis vinifera). Around the front door, there are two climbing roses.

Moving *around the corner of the house* **F** you will see various wall shrubs, most notably firethorn (*Pyracantha* sp.) and Japanese quince (Chaenomeles sp.).

On the wall to the right of the black wooden door, with a crest above it, is an *old glory rose* **G** (*Rosa* "Gloire de Dijon"). The present rose is clearly not of this vintage but may well be descended from a plant of around that date via several generations of cuttings.

EXTENSION

Dirce Circle

The area on your left is **the croquet lawn H**, originally designed as a bowling green, with two rose arches. The one at the south-west end used to have a marble statue under it but it was stolen in 1997; you can still see an indentation in the lawn where it stood.

The yew lawn • is set on a lower level than the Croquet Lawn, which provides a panoramic view. Flower beds and clipped yews are symmetrically arranged around circular stone beds, and an ornamental "fountain" feature, which appear to have always been intended for planting rather than water. In the centre of the pond is a statue of **the bather J** by Sir Charles Lawes-Wittewronge.

The west wall of the Walled Garden provides an impressive backdrop to *the herbaceous* **borders K**. Several varieties of Clematis, and winter jasmine (Jasminum nudiflorum) clamber over its solid support. The borders have undergone extensive renovation. Replanting has been progressive and many new plants have been introduced with the intention of providing a spectacle of colour over a long season.

The walled garden L is over 300 years old. The top section of the west wall, with its embellishments, is a later addition to the base, which is Grade II listed. The enclosed area behind the wall (not accessible to the public)

was a productive kitchen garden until the early 1970s. It is now mainly used for storage by the gardeners but it is hoped that the area will be refurbished over the next few years.

WALLED GARDEN

FORMAL GARDENS

Croquet

FRONT

LAWN

Set within the lawn, towards its northern end, is a bed planted with *red clover* M. This is the smallest of Rothamsted's famous "Classical Experiments", which were started between 1843 and 1856. It has been used to grow red clover continuously since 1854. It was established within the kitchen garden but, when the Walled Garden was halved in size in the 1860s, it was left "stranded" in the newly-created parterre.

The area of longer grass beyond the Yew Lawn, was once the site of a fruit orchard N but the trees were removed during the early 1980s. The area has since been planted with variety of coloured-bark trees, and is managed as a wild flower meadow.

On the woodland side of the yew lawn, is a **rose arch** (0); the arches were redesigned, rebuilt and extended the full length of the lawn and ornamental wall in 1993-1994. The arches were replanted with different varieties of climbing and rambling roses, and are underplanted with a collection of

50 different Hosta varieties (a list of the plants is available). In the woods, towards its northern end, is an octagonal brick and timber summerhouse with a clay-tiled roof, which is much in need of renovation. Around it and extending farther into the woods are what remains of collections of Camellias, Rhododendrons and daffodils planted by the late Leslie Scowen, who worked at Rothamsted from 1946-1974. He was a keen amateur breeder of daffodils, who enjoyed some success at RHS shows, and many of the daffodils are unnamed varieties bred by him.

ROTHAMSTED

RESEARCH

At the house end of the Rose Arch walk, you will find a little bridge that leads you to the **exedra P**, a semi-circular grassed area with two copper beeches and two stone "rococo" urns.

From here, an avenue lined with clipped yew hedging leads to the sculpture by Sir Charles Lawes-Wittewronge entitled "Death of Dirce" **Q** .

As you walk back to the house, the small copper beech on your left, next to the Ha-Ha, is intended to be a replacement for the copper beech (Fagus sylvatica "Purpurea") R on your right; the latter is a superb grafted specimen of an unknown cultivar.







A Brief History of the Manor Gardens



The Rothamsted estate was mortgaged, in 1611, by the then owner, Edward Bardolph, to Jacob Wittewronge. Jacob's widow, Anne, bought the property outright in 1623, and it formally passed to their son John in 1639. John Wittewronge (later Sir John) was responsible for the frontage of the manor that we see today, and for the construction of a large walled garden. Sir John had an eventful life but of particular interest is the weather diary that he kept from 1683-1689. In this, he described the weather on a daily basis but also noted what was happening on his farms and in his gardens. These notes create a picture of mature and wellstocked gardens and orchards, with ornamental and formal features but devoted largely to productive plants.

On the death of Sir John Wittewronge, in 1693, Rothamsted passed to his second son, James (1647-1721). He was a reliable and responsible custodian of the property but it is not known whether he had much interest in, or made any changes to, the gardens.

In contrast, Jacob Wittewronge The Younger (Sir John's grandson), who inherited the property in 1721, loved country life and showed considerable interest in the Rothamsted estate. He planted an avenue of elms in front of

the house, many fruit trees, and a large quantity of trees for topiary. Wood walks were cleared and were lined with hornbeam hedges.

Little documentary evidence survives from the late 18th and early 19th centuries but it appears that little changed within the walled garden. The fields to the south and east of the manor were opened-up as parkland.

Sir John Bennet Lawes (1814-1900), the founder of the organisation now known as Rothamsted Research, was directly descended from Sir John Wittewronge. He was born in the manor, and took up permanent residence in 1834. In the 1840s, his wife, Lady Caroline Lawes, painted views that suggest little had changed since the 18th century. In the 1860s, the walled area was reduced by half, formal parterres were laid-out, and also an ornamental woodland of mixed planting. The ornamental ha-ha walls date from this period.

Sir Charles Lawes-Wittewronge (1843-1911) inherited the manor, which included the gardens, in 1900. He undertook changes to the gardens in accordance with his desire to see Rothamsted as a country seat worthy of the Wittewronge pedigree. He added ornamental garden features, including urns, seats, two of his sculptures, and



Receipt for manor gates

Dutch gables to the west wall of the walled garden. The manor woods were replanted and made more formal. To the north of the yew lawn he created a formal orchard.

After the death of Sir Charles, in 1911, the manor and gardens were let, and remained so after the family sold the Rothamsted estate to the Lawes Agricultural Trust in 1934. During the 1939-1945 war, the manor was requisitioned by the army.

Much of the present garden, including the surrounding woodland, occupies some 12 acres, was laid-out in around 1900. It contains a wide variety of planting although over the years many trees have been lost in storms, and the elm avenue succumbed to Dutch elm disease in the 1970s.





The Pond



The pond dates back at least to the 17th century, and a few trees dating from the 18th century or earlier stand on its bank. The pond lies at a lower level than the driveway, which skirts its northern edge. Between the drive and the pond are two or three terraces for planting. The view across the pond towards the house is one of the classic views of Rothamsted, and the subject of several historic paintings and photographs. The group of sycamores (Acer pseudoplatanus) in the left foreground are undoubtedly self-sown and probably date from the war years, when garden maintenance was minimal.









The Ha-Ha



A ha-ha is a landscape design element that creates a vertical barrier while preserving an uninterrupted view of the landscape beyond. Before mechanical lawn mowers, a common way to keep large areas of grassland trimmed was to allow livestock, usually sheep, to graze the grass. A ha-ha prevented grazing animals on large estates from gaining access to the lawn and gardens adjoining the house, giving a continuous vista, and creating the illusion that the garden and landscape were one and undivided. The design incorporates a turfed incline that slopes downward to a sharply vertical face, typically

a masonry retaining wall. The unusual name "ha-ha" is thought to have stemmed from the exclamations of surprise by those coming across them as they were designed to be invisible unless very close to them.

In 1721, an elm avenue was planted running south from the house, apparently for "show" rather than to mark a planned access. Over the years, some of the trees died of old age; those that remained were lost to Dutch elm disease in the 1970s.







The Yew Lawn



The yew lawn, which is to the west of the walled garden, is about 400 mm below the level of the croquet lawn, to which it is linked by steps at both sides. Part of the yew lawn was originally within the walled garden until the latter was reduced in size in the 1860s.

The clipped yews, which are arranged symmetrically, were heavily pruned in 2003 to reinvigorate and restore them. The circular beds made of ornamental stone appears always to have been intended for planting rather than water. In the centre of the circular pond is a bather statue. It is made of white

marble, and is the work of Sir Charles
Lawes-Wittewronge. Until 2005 there
were two square rose beds in the lawn,
each of which consisted of four smaller
square beds (see photograph below);
the outlines of the beds can still be
seen in the grass.

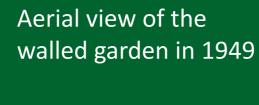
To the east of the yew lawn, benefiting from the shelter provided by the red brick wall, are the herbaceous borders; they are divided into two sections by a gravel path.

The most unusual feature in the yew lawn is the small bed of red clover (*Trifolium pratense*). This is

"Classical Experiments", which were started between 1843 and 1856. It was established in 1854 in what was then the kitchen garden, and became 'stranded' in the lawn when the Walled Garden was reduced in size in the 1860s.

The path along the eastern edge of the yew lawn features a rose arch that was installed in the 1990s; the flanking beds are planted with assorted Hosta species.









The Walled Garden



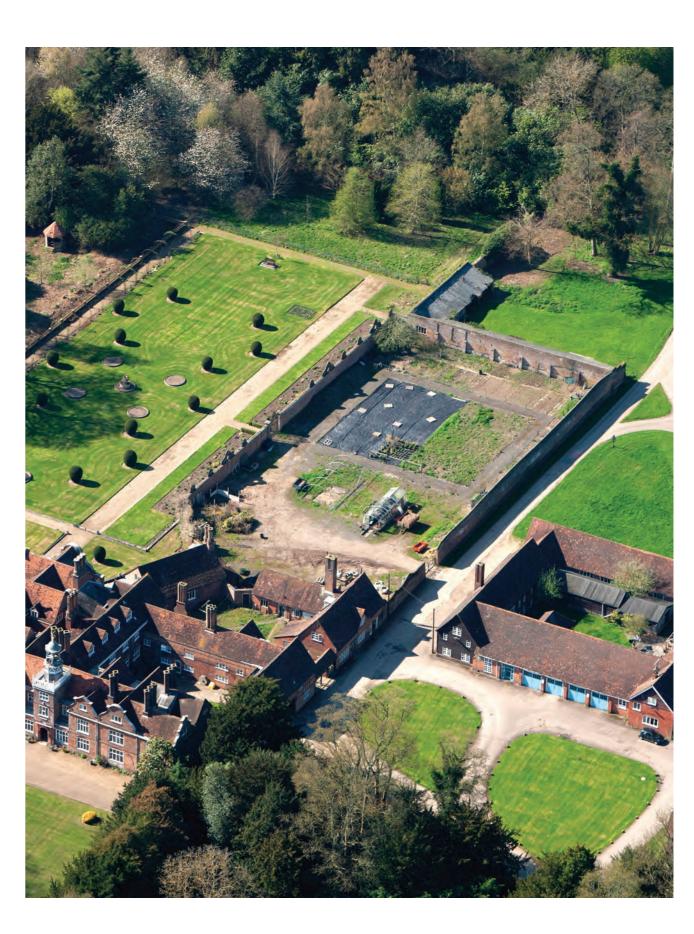
The present walled garden occupies an area that is approximately half that of the original 17th century garden. It was reduced in size at about the same time as Sir John and Lady Caroline Lawes added the great drawing room to the manor, in 1863, so that the coming-of-age of their son, Charles, could be celebrated in suitable style in the following year.

The walls of the garden are red brick, and are Grade II listed. The lower part of the east wall is the oldest section of brickwork in the garden and dates from the 17th century (or perhaps even earlier). The north wall and the upper part of the east wall probably date from the late 17th century although they may have been altered later when

the lean-to building was constructed outside the walled garden to the north. The west wall is middle 19th century with early 20th century ornamental additions echoing the Dutch gables of the house.

It was a working kitchen garden with fruit trees and cultivated beds, a fruit room, peach house, tomato house, potato store, potting shed, pit house, frames, bird cages, and an arched walk of trained apple trees. The latter became old and neglected, and was removed in the 1970s.

The walled garden is not currently cultivated, and is mainly used by the gardeners for storage, but it is hoped that it will be refurbished over the next few years.



Aerial view of walled garden in 2018

Current use of this space by Rothamsted gardeners







Garden Clover



This is the smallest (and simplest) of Rothamsted's famous classical, long-term experiments; known as "classical" because they started between 1843 and 1856, of which seven continue to this day. It was established because Lawes and Gilbert found that red clover (Trifolium pratense), although a perennial, seldom survived through the winter in experiments sown on the Rothamsted farm. So, in 1854, they laid down this plot in what was then the kitchen garden to see if it would be more persistent in a "richer" soil. It is almost certain that poor survival resulted,

in large part, from most of the fields being badly infested with soil-borne pests and pathogens, including nematodes and the fungus *Sclerotinia trifoliorum*, the cause of clover rot. These factors were not understood at the time.

Yields were very large for the first 10 years, averaging about 10 tons of dry matter per hectare, probably because the well-manured garden soil was rich in nutrients and because the most damaging pests and pathogens were absent. Reasonable yields continued over the next 30 years but, thereafter, yields showed a marked

decline, as pests and pathogens moved in. Commonly, as on the farm, the red clover died during the winter, and so the plot often had to be re-sown in the spring.

At different times between 1956 and 1990, the plot was sub-divided to test the effects on clover survival and yield of various nutrients and pesticides. The plot is now treated uniformly, and is currently sown with the cultivar Milvus red clover, which has good resistance to clover rot and stem eelworm; re-sowing is relatively infrequent, and yields are similar to those obtained in the early years.





Barbed wire was placed at the entrance to Dirce circle when the manor was requisitioned by the army during the 1939-1945 war



The Death of Dirce



The fine, Grade II listed, sculpture at the end of the avenue opposite the great drawing room carries the inscription "Death of Dirce. Sir Charles Lawes-Wittewronge, Bart, 1908".

It depicts a story from Greek mythology. Dirce, daughter of the Sun god, Helios, was the second wife of Lycus, King of Thebes. Her persecution of Antiope, the King's first wife, incited Antiope's twin sons, Amphion and Zethus, to avenge their mother by binding Dirce to a wild bull. The original, and famous, depiction of this event is The Farnese Bull, a marble grouping carved in the 3rd century that

was unearthed in Rome in 1546. Sir Charles Lawes-Wittewronge created a bronze version of his work in 1906, which greets visitors to Tate Britain.

Eugen Sandow, the man many consider to be the "father of modern bodybuilding", organised the first ever bodybuilding competition at the Royal Albert Hall in 1901 ("The Great Competition"; pictured below). The three judges were Sandow himself, Sir Charles Lawes-Wittewronge and Sir Arthur Conan Doyle, the creator of Sherlock Holmes. The winner, William Murray, was used by Sir Charles as his model for the twins.

The statue was set-up in its present position after Sir Charles' death, in accordance with his wishes.

The avenue was laid out in its present form in the first decade of the 20th century, on the line of an earlier avenue. The hedging is backed in the main by mature conifers, with several giant redwoods (*Sequoiadendron giganteum*) and Lawson cypresses (*Chamaecyparis lawsoniana*).

Barbed wire was placed at the entrance to Dirce circle when the manor was requisitioned by the army during the 1939-1945 war.





A picture from about the 1940s



The Copper Beech



Fagus sylvatica "Purpurea" is a stunning, dark purple-leaved variety of common beech (Fagus sylvatica).

It has dark purple-red foliage in the spring but, like many other purple-leaved specimens, it gradually turns to a dark green-bronze as the summer progresses. In autumn, the deep bronze foliage turns to a golden brown.

Fagus sylvatica "Purpurea" is a tough tree and will thrive just about anywhere but it does not do well in exposed or coastal conditions. It is best suited to reasonably fertile and well drained soils but does not perform well on heavy clay or light sand, and being a shallow rooted tree under-planting is not recommended.

It is a large and majestic tree, of great beauty, and as such is a superb specimen to plant as a statement in parks and large estates. It is a great choice for creating contrast in the landscape, with its dark colours tending to draw the eye to it. It is best planted on the perimeter of a scheme but if planted too close to the front it is likely that specimens planted beyond it will be overlooked.

Our tree's estimated parameters

Height: 29 metres

Average crown spread radius: (approx) 12 metres

Diameter of stem at 1m: **1.5 metres**

Age class: Mature

Fungal fruiting bodies of *Meripilus* giganteus, growing from the tree's roots, have emerged from the ground in various locations close to the trunk. Meripilus giganteus is a fungus that can cause severe root decay in beech trees, and is frequently associated with tree failure. It is apparent that the fungus has been associated with this tree for a long time; the development of the large buttressing is likely to have been caused, at least in part, by the tree's response to the fungus. It appears that the tree has adapted to the fungus, and there is no indication of a high risk of failure.

The Copper Beech in 2018

