The Great Vine

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Hi there, so today I'm going to be talking about the Great Vine. It's the largest grapevine in the world, and lives at Hampton Court Palace.

I'll talk a little bit about the site and the history of the vine, how people have interacted with it over the years, and how we look after this amazing plant.

This is Hampton Court palace, its located in the furthest south west part of London, and has a rich history dating back 500 years.

The palace is owned by the crown but run by Historic Royal Palaces, a charity that also manages the Tower of London, Kensington Palace, Kew Palace, and Hillsborough Castle in Northern Ireland.

There are extensive gardens at Hampton Court, extending out to acres of royal parks, and situated beside the river Thames.

For my job, I look after the kitchen garden, which is over here, and the vine, which is round the other side of the palace there.

One of the things I think is interesting about Hampton court is that these different sections of gardens all have very different characters. The south front has gardens in a very formal style next to the river, theres the east front with its mushroom-shaped yew trees. There is a famous hedge maze, and the 'wilderness' area of trees and flowering bulbs, and then theres the kitchen garden.

With this picture, zoomed into one corner of the palace, we can see the great hall, the older part of the palace, and the newer building off to the right. This area is called the south front gardens, off to the right is a parterre garden and these 2 sunken gardens, this area here is where the citrus trees and exotics are displayed in the summer. and right down in the corner here, is the glasshouse that contains the great vine.

And this is what it looks like inside the greenhouse. The great vine is the largest vine in the world. It's a variety known as Black Hamburg, which is a dessert grape for eating, so not for making wine out of.

Well you could make wine, but it probably wouldn't be very nice.

Around the base of the trunk measures 4 metres

It extends 36.5 metres along the length of the greenhouse,

Its over 250 years old, so it has a long history, which I'll try and summarise for you in the first bit of this talk

Long before the vine was planted, Hampton Court was the home of the English king Henry VIII. In this area, in around 1530, he would have had pond gardens -water was pumped from the river, to the ponds which provided fish for the royal table.

A bit later, in the 1660s, close to this site- in the privy garden- there was a vineyard, possibly planted on the orders of the Countess of Castlemaine by the royal gardener John Rose. That's him there, on the left, presenting a pinapple to King Charles II. He also wrote a book about growing grapes in England.

At the end of this century, King William and Queen Mary were living at the palace- Queen Mary was a great collector of exotic plants, and so this warm corner of the garden was ideal for them, heated glass cases were built, to house the collection.

Around this time the walled kitchen garden was created, to provide fresh food for the royal household. In the 18th Century, there was a lot of fruit being grown at Hampton Court. Lots of new techniques were being developed then, to produce out of season or exotic fruit The famous landscape architect Lancelot Capability Brown became the head gardener at HCP in 1764, and like many gardeners for the wealthy at the time, he took fruit growing seriously. This was a chance for gardeners to really show off, and demonstrate the value of the garden. There was also a financial reward- capability brown would get a bonus of £100 for producing fruit out of season, and another £100 for growing pineapples. Pinapples were a very prestigious and expensive fruit at the time, but dessert grapes were starting to become fashionable then as well.

Sometimes a vine greenhouse would be combined with one for growing pineapples – known as a 'vinery – pinery'

This is Valentines mansion, in Essex- just on the other side of London to Hampton Court. The photo is from later on, but in the 18th C it was owned by Sir Charles Raymond, who already had a notable vine, planted in 1758. It was said to produce 200kg of fruit in 1791- so it was a pretty big vine.

A cutting from it was given to Capability Brown, and planted at Hampton Court in 1768. It was originally planted outside a greenhouse, with the upper part of the vine trained inside.

By 1798, a magazine article described the great vine as filling the greenhouse, and producing 1800 large bunches of grapes, and in 1799-, 2000 bunches of grapes. The Vine was becoming famous, with its size and productivity being reported in the papers. But the gardens wouldn't have been open to the public yet.

At this time we start to see a gardener who is responsible for the vine. The first vine keeper was John Birtles, who was appointed by king George III in 1777. He had a bumpy start to his career- the story goes that he gave the vine a very hard prune, on his first day on the job, chopping it right back, getting himself into trouble- but the vine produced such good grapes that year, that it was much admired by the king and his guests, and in following years the king would visit the gardens to taste the first fruits of the season.

The head gardener from 1805 was William Padley. He was another important fruit grower, and so Hampton court had an exceptional collection of fruit trees, which was used as

examples for the botanical artwork in the book Pomona Britannica. He oversaw the rebuilding of the vine house, as by this time it had outgrown the previous hot house

This engraving from 1840 was an early souvenir that visitors could buy, dedicated to queen Victoria by the Master gardener, and it certainly makes the vine look very impressive. It was a time of change for the royal gardens- Queen Victoria didn't use Hampton Court as her residence, and fruit and vegetable production was moved to Windsor. The gardens were gradually opened to the public, and became a very popular place to visit.

Unlike today, visitors in the 19th C could walk through the vine house.

The gardens were opened to the public, but at first if they wanted to see the orangery and vine, theyd have to ring a bell, and pay a fee to the kitchen gardener.

but I don't think this arrangement could of lasted long, because it rapidly became very popular, attracting thousands of visitors.

The royal vine was a famous plant, that people were proud of, and so great importance was placed on it and any sign of deterioration was a newsworthy concern- the gardeners magazine in 1837 said there were less grapes, and what sounds like mildew affecting the fruit.

These are a couple of postcards from the early 20th Century One on the right shows James Jack, who was vine keeper 1884-1916

He started to implement thinning out the bunches of grapes, to prevent over cropping and a loss of quality. He was also the vine keeper when the vine house was rebuilt again in 1904, and its around here where I first saw a mention of the vine keepers house, which is adjacent to the vine glasshouse. (although I expect it probably existed before then). This meant that the vine keeper was around at all times, to maintain the vine and glasshouse.

There were concerns about the number of visitors that were now coming from London (averaging 6000 per day) bringing in dust and keeping the vine door open, making temperature regulation difficult. – at this stage, these were still the royal grapes, and royal family paying the vine keepers wages.

So when the new glasshouse was built, it had this viewing area for visitors, to protect the vine, so they wouldn't have to come in to the glasshouse itself

After WWI the grapes started to be bought by the king, queen and residents of Hampton Court who then donated them to hospitals, then later a scheme developed with one of the hospitals, where war veterans who had been injured were taught basket- weaving, and these baskets were then used for packaging the grapes for sale to visitors.

Around this time, the responsibility for the vine was transferred from royal family to office of works. And this single plant made them a lot of money- in 1924, £1167 from charging people a penny to come and see it, and selling some of the grapes- equivalent to £60,000 in todays money.

It Continued to be popular visitor attraction through the 1920s, with grapes sold directly from the vine house- which were also very popular, and it was reported in the Times

newspaper that there was a real rush for people to buy them, with applications for them received from all over the country, and that all of them were sold in a few hours. I really like this picture, I aspire to get the vine looking as neat as it is in this photo!

Work continued in the same way through the 20th C, it looks like the grape harvest is taking place here

And for a while, the vine seemed to become a location for fashion shoots of the time, and there are a few photos of very smartly-dressed ladies posed there, using the vine as an interesting background

This is probably not what they wore every day for work in the vine house- imagine climbing a ladder in those heels!

In 1962, the vine keeper Bill Tizzard retired, and although the job wasn't taken over immediately, his assistant Mary Parker was eventually given the position of vine keeper, who was the first woman to hold this title.

This was quite a big deal at the time- Royal Parks had only decided to employ female gardeners a few years previously.

In 1985 the next keeper was Gill Strudwick, who in her long career cared for the vine until 2019.

She was the 10th Vine keeper, and as of 2020, the role of the 11th vine keeper has been passed on to myself.

This is in addition to my original role at Hampton court, which is looking after the kitchen garden

It's a reconstruction of the kitchen garden that was here in the 18th-19th Century, rebuilt in 2014. The design is based on the original drawings from the 1700s, and also some archeology that was carried out on the site.

The original kitchen garden was about 6 times the size of this, as it had to feed a lot of people. Nowadays, the vegetables, herbs, flowers and fruit are sold to visitors, and also used by the cafe.

There is one other gardener who works here, and a team of volunteers. We grow a combination of traditional and modern crops, using 254 no-dig beds.

We have the use of a heated greenhouse behind the scenes as well, where we can start growing everything from seed early in the year, then plant out when the weather warms up. The garden isn't certified organic, but we try and keep to organic principles as much as possible. I think that organic certification is great, as it gives people some idea of the farming standards involved in food production. But here the garden is open to visitors, so its easy for them to see where the produce comes from – they can walk around, look at it, and talk to the gardeners.

We grow a wide variety of things, this year about 150 different vegetable cultivars. Each year is different, but it's a relatively warm site that gets a lot of sun, so things like squash and pumpkins, tomatoes, peppers, aubergines and basil tend to do very well here.

Also, as is historical at Hampton court, theres fruit, such as melons, also redcurrants, blackcurrants, and gooseberries, and also wall trained fruit trees – so apples, pears, apricots, cherries, plums, peaches and nectarines.

So fruit growing is still an important part of the gardens here, popular with visitors, and well-suited to the site

So one question that has been asked over the years is why is the great vine so big?

There were some previous ideas that the roots had reached into the old 16th century sewers, which were dismissed by a writer in 1877, who said that it was more likely to be reaching into the river thames, which would have been even more polluted then and contained a lot of nitrogen. Although I think as a prestigious plant like this, he probably didn't like the idea that the royal grapevine was feeding on sewage!

Nowadays, we don't know exactly where the roots go, they probably go a long way, but we leave this area outside the vine house clear, and feed it by adding 10 tons of manure every couple of years, plus extra feed and fertilizer.

The great vine is not alone, there are a few other remarkable vines. Some sources online say that Hampton court's is the oldest living vine, but it is in fact this one here in Maribor, Slovenia. It is 450 years old, and in this wine growing area, is much celebrated. It has its own museum, and festival during the grape harvest each year.

Others include the Killen vine, which in 1832, claimed to be the largest vine in the uk, and the Northallerton Vine in Yorkshire-another large and famous vine – its hard to tell from the available online records if there is anything much left of either of these plants today. The vine from Valentine's house, where the cutting was taken for Hampton Court, had died off by the beginning of the 20th C

But its common for other walled kitchen gardens to have a glasshouse where fruit would be grown for the gardens owners.

So the last bit of my talk is about the maintainence of the great vine through the year. In the winter, the vine is in its dormant phase. This is the time for the pruning which creates the structure of the vine and removes most of the previous years growth. Then there is the time consuming process of bark scraping where we scratch off all the loose flaky bits of bark with a knife to prevent pests from living underneath it. Some of the gardens volunteers got involved with this last winter, and for some reason, they all really seemed to like doing the bark scraping! Then we'll apply a winter wash. It is also important to keep the vine house generally tidy and get rid of any debris that may harbour pests and diseases from year to year.

We'll take a few cuttings when we prune the vine in winter, and use them to propagate new vines- we'll just sit them in some water, and they'll start to produce roots and leaves, and we can then pot them up. Occasionally theyre sold to visitors that particularly ask for one.

In the Spring, as temperature increases, first shoots start to appear. The Greenhouse has heating, so we don't have the same worries about frost as anybody trying to grow vines outside

There is rapid growth in spring and early summer. Vines in general are really vigorous plants. This means lots of pruning, cutting back and tying in those new shoots. I'll work from one end to the other, using scaffolding and a walkway above the viewing area. By the time you reach one end, you have to go back to the other and start it all over again- it grows so fast. In order to combat powdery mildew, we set up some sulphur burners in the glasshouse around this time.

The next job will be Thinning bunches of fruit – this is important to prevent over-cropping, especially in a very old plant like this one. Meanwhile, the pruning is on-going Pest control is also important- we use a biological control, cryptolemus predators are introduced a few times a year to eat the mealybug,

During the summer the grapes start to ripen.

This is later in the season than previously, as before, when there was a live-in vinekeeper, they were able to adjust the ventilation and humidity carefully to get the vine house really hot in about February, meaning everything would be ready earlier.

But nowadays the harvest is in September, and lasts for a few weeks.

I'll weigh the bunches, inspect them and remove any damaged grapes, and box them up to take to the palace shop where they are sold to the public.

This process, like a lot of the processes involved in caring for the vine, is exactly the same as it would have been done years ago.

The grapes used to only be consumed the royal family, and the bunches of grapes were even numbered to make sure nobody else took any. But now they can be enjoyed by anybody who visits the palace.

On average it produces 270 kg of grapes a year, or about 1000 bunches.

(although unfortuonately last season we didn't get any useful quantity of grapes. The south east in particular suffered from a drought and exceptionally high temperatures, which led to damaged fruit and there were also mildew problems. We were'nt alone in this, I spoke with other professional kitchen gardeners who were in a similar position, and those who were growing grapes in historic greenhouses experienced the same thing- in a hot greenhouse, the grapes literally cooked over the course of a few days)

Again, sometimes things just don't work out, which is disappointing when you've put so much work into it. But you just have to carry on, this year we'll be looking at more options with feeding, spraying, watering and biological controls to try and combat some of these issues- although theres nothing much we can do about extreme temperatures.

Shortly after harvest ,its autumn so the leaves start to change colour and fall off. The main job at this time of year is raking the leaves up and collecting them.

Up in the canopy of the vine, its quite a nice place to work.

And then its time to start the process again, pruning out the last years growth, and forming the structure which the vine will grow and fruit on next year.

Its an unusual thing, to do a job where you're looking after something that has so much history and spans generations.

Working in the vine house and the kitchen garden, its amazing to think that people have been doing the same thing on this piece of land for such a long time

And I hope that the great vine interests and inspires visitors now, just as it has done for hundreds of years.