

The park in autumn

#### History

The park extends over the northern slopes of the hills of Ronzano, which, at the summit, has a convent founded by members of the Order of the Blessed Joyous Virgin Mary, known as the frati gaudenti (joyous friars), whose founders—Loderingo degli Andalò and Catalano dei Malavolti—were mentioned in the XXIII canto of Dante Alighieri's Inferno as being among the hypocrites. The convent, much of which was rebuilt by the Dominicans, was privately owned for more than a century after the Napoleonic suppression—Count Giovanni Gozzadini was one such owner. It was then be reconsecrated in 1921 by the Order of Servants of Mary. The Franciscan convent known as the Osservanza is located in the hills opposite, along with the neoclassic Villa Aldini built in the Napoleon era on what was the location of the sanctuary of the Madonna del Monte. The seventeenth-century Via dell'Osservanza, which is studded with impressive buildings, runs through here.

Villa Ghigi, an understated building with a nineteenth-century appearance, is almost at the centre of the current public park, in a wonderful panoramic position overlooking the city. The first mention of this place was way back in 1520, when it belonged to the Volta family. Actually, it was mentioned in Borso Volta's will, and, at the time, it was a simple country home. Only in 1578, were the two houses mentioned, one as a farmstead and the other "suitable as the home of the owners." The wonderful frescoed ceiling roses on the first floor probably date back to the first half of the seventeenth century when the building and surrounding land were acquired by clergyman Roberto Malvezzi. The powerful Bolognese family, which had other properties in the Gaibola community, did not hold on to the villa for long. In 1691, Malvezzi sold the entire property to silk merchant Giacomo Zagnoni, with it later going to the noble Cavalca family. At the time, the estate was quite vast, with the small farms Muraglia (today known as Due Orologi). Meloro (below Ronzano), La Fontana, and a thicket of trees along with a chestnut grove that descended in the parallel vale of Montescalvato. It was surrounded by important streets: Via dell'Osservanza, Via Nuova (today Gaibola) and Via delle Fontane, which connected modern-day Via San Mamolo and Via Gaibola, but was later incorporated into the

various properties in the twentieth century. The only small road that entered the property was Bago, a small seament of which continued into the valley. During the Napoleonic era, the estate, which at the end of the eighteenth century included seven small farms, passed to the Caldesi family and later the Chelotti and Dozza families. The way the villa appears today is thanks to one of the owners in the nineteenth century, and it is likely that the salon that runs along the front, with landscape tempera paintings in line with Martelli's style, was added to the building in that period. In 1874, the property was acquired by Callisto Ghigi, a solicitor originally from Ravenna, and stayed in the family until 1972. The estate, including the small farms—Becco, Palazzino, Tre Portoni, Stradelli, and San Michele (the current park includes the first two and a large part of the land from the third)— took up more than 50 hectares at the time. The Ghigi family also owned a home in the city and, as was the tradi-



Alessandro Ghigi



A common redstart (*Phoenicurus phoenicurus*)

a dormouse. Wild boar and roe deer are frequent visitors, especially during the winter months, in the early morning and late evenng. Their presence certainly enriches the park and is a new point of interest, but at the same time, it disrupts life in the underbrush and in the fields where these animals go to search for food. Recently, wolf tracks have been spotted, and wolves have been found n the hills of Bologna for quite some time. Local birds are the most numerous, easy-tospot component of the park. They like the variety of environments here and, to some extent, the abundance of trees providing fruit and food. It is easy to spot many different species throughout the year: the black-

cap, tit tit, chaffinch, cirl bunting, jaybird, green woodpecker, and red woodpecker, just to name a few. Some species, like the European robin, is more commonly seen in winter, while various migratory birds, such as the redstart and the oriole, can be spotted in summer. The tawny owl is a common fixture in and around the villa while daytime birds of prey like buzfrequently happens, populated by opportunistic corvidae like magpies and grey crows, which are both quite popular in the area. Escarpments, sunny meadows, and areas of brush land are ideal habitats for quite a sizeable population of reptiles like field lizards, green lizards, blindworm, and coluber. As a contrast, the damp valley floor of the Fontane brook and various small bodies of water allow for a more limited number of amphibians, though they are still quite significant. Near the foundation headquarters in summer it is possible to see a rare toad from the Apennines (Bombina pachypus) that is protected in Europe. The abundance of flowering plants attracts butterflies, bumble bees, and solitary bees, while the great old trees and some corners of the underbrush with decomposing wood are home to many species of beetles. The large meadows abound with grasshoppers, crickets, and other orthoptera. These are some examples of the many varieties of invertebrates that call the park home



A European green lizard (Lacerta viridis)

## Salse and Becco: two place names that require explanation

The Le Salse area—mentioned by Dante and, sadly, seen as a valley where those not worthy of being buried in consecrated cemeteries were to be laid to rest—has been a focus for Dante scholars as well as local researchers. The area is mentioned on a plaque at the Tre Portoni farm as well as on a column at the historic entrance to the estate. Alessandro Ghigi spoke of this topic in an article in 1965: "The world 'Salse' has nothing to do with 'salt' but comes from the expression in Bolognese dialect meaning 'flint,' in the sense of pebbles. Actually, [the dialect word] 'salghè' means 'pavement' and 'salghén' means a person who paves. The slope facing Ravone, is arid, clay-rich, and very steep. It looks like a gulley and is scattered with little pebbles. (...) Le Salse were 'pungent' or 'biting' due to the blowing of frigid, impetuous winds that went from north to west and through the gap of Le Salse. (...) This is a naturalist's explanation. If Dante was alluding to Malebolge's suffering, it is not for me to say as it is not my area of expertise." The short carriageway that leads up to the park from Via San Mamolo, in the eighteenth century, was known as the "Bago path," and even two centuries before that, in documents from the Volta family, there was mention of "loco ditto Bagho" and other such references. In Bolognese dialect, the term means that an area is particularly shady (shady terrain is still known as a bagùr). The Becco farm is certainly a representation of this as the name must be a variation on Bagho from five centuries earlier, with words like Begh, Becc, and tion at the time, came up to the hills in nice weather, for holidays or to oversee the activities on the farms, which were turned over to sharecropping families. Callisto, who was very interested in botany and ornithology, is certainly the one responsible for some of the ornamental elements including exotic trees, in line with nineteenth-century tastes, and the planting of a group of beech trees in a particularly cool corner of the property (here, we are at just over 200 metres in altitude, and the beech tree in the Apennine Mountains grows at over 800 metres). One of Callisto's sons, Alessandro (1875-1970), lived in the villa for almost all of his life, showing an interest in the natural sciences from the time he was a child. In 1922, he became a tenured professor of zoology at the University of Bologna, and was dean from 1930 to 1943. At the villa, he focused on raising doves and exotic pheasants, and he had numerous aviaries (though no traces of these remain). He founded and was a key figure in various associations and institutes for the study and conservation of flora and fauna. He is considered a trailblazer in nature conservation in Italy and, especially after the war, he worked tirelessly on initiatives that favoured the national parks and the protection of Italy's natural beauty. Ghigi is considered a trailblazer in nature conservation in Italy and, especially after the war, he worked tirelessly on initiatives that favoured the national parks and the protection of Italy's natural beauty. In 1936 he asked that his property and adjacent areas be declared an oasis for animal protection within the "Tenuta di Monte Scalvato" game reserve. From an initial ten or so hectares, in 1947, the oasis took the place of the game reserve, with 262 hectares (and an additional 21 hectares in 1952), though it ceased to exist after Ghigi's death. In 1962, he had presented the oasis to Bologna's mayor, Giuseppe Dozza, saying, "The oasis has great naturalistic importance, considering it includes the wonderful ravines of Montescalvato and Vincareta, the chestnut grove (the only one in town) of Ronzano, the chalk formations of Gaibola recognized for their natural beauty, and it is subject to, given the decline of farming in the hills (...), further development and expansion." The year after, Ghigi donated the eastern part of the estate to the city of Bologna, and, in exchange, obtained permission to build on the first section of where the property began. This is where various homes and a building were later constructed. In the meantime, the provisions in place for protecting the hilly area of Bologna prevented any new construction. When Ghigi died in 1970, his heirs sold the villa and part of the land to the city of Bologna, while two farms went to private buyers (a third farm, San Michele, had been donated to CNR by Ghigi in the nineteen-sixties). The park, after undergoing works to make it suited to its new function, opened to the public in 1974. Nobody has lived in the villa since, and it is currently in a state of abandon.

We need to reinforce the study of natural sciences in schools... (...) And now that the university is paying attention to this area in the interest of preparing citizens in matters of nature along with the need to conserve natural resources, we need to prepare teachers to teach and to understand what needs to be taught to young people (....). For example, they need to be able to speak about Virgil's "Georgics" not just in terms of the beauty of the poetry, but also about the important parts that highlight life in the fields and the mysteries of nature.

Alessandro Ghigi, La natura e l'uomo, 1955

#### Nature

The park occupies a large part of the western slope of the Valverde, crossed by the Fontane brook, a tributary of the Aposa torrent. Thanks to the variety of different environments and its pristine natural state, the park perfectly exemplifies Bologna's hilly landscapes, allowing visitors to appreciate its many different aspects: large plots of arable land that today have become meadows,

some of which have been allowed to return to their wild state; portions of vineyards and vegetable gardens; swaths of wood, different in type and origin; and an ornamental grove of trees framing the villa. There are impressive examples of the durmast, the oak tree typical of the sunny slopes of the hill, distributed throughout various areas of the park. In terms of the rural nature of the park, testifying to how the area was used in a productive way in the past, along the headland access path, there are rows of fruit trees, many of which belong to ancient cultivars typical of the Bologna hills. These trees are an important legacy in historical and genetic terms, with cherry, pear, apple, quince, fig, plum, persimmon, pomegranate, Mediterranean medlar, apricot, walnut, almond, and cherry plum trees, some of which are centuries old. There are also many other fruit trees throughout the meadows, often the result of past plantings, with a typical arrangement for the Bologna countryside featuring vines—grown in rows spaced out with arable land trained with living supports (field maple, elm, various fruit An example of an Orchis simia



#### Fondazione Villa Ghigi

In 1980, the city of Bologna—acting on the desire of various nature associations with ties to Alessandro Ghigi, including the Unione Bolognese Naturalisti led by Francesco Corbetta—decided to create a centre in the villa with the aim of managing the park, conserving nature, and educating about natural sciences. The nascent Centro Villa Ghigi. which began operating in early 1982, immediately took on an important role thanks to its first president, Delfino Insolera (1920-1987), head of the Zanichelli publishing house in the nineteen-sixties. Insolera brought an original and refined idea of a commitment to education and the sharing of information, skills he'd honed his entire life. Under Insolera's leadership, the centre launched a series of guidedvisit initiatives for schools in Bologna, and these were an immediate success. These initiatives recruited groups of young students or new graduates with expertise in natural sciences, farming, and similar disciplines who were skilled in these types of educational activities, and this was the Delfino Insolera first core of the organisation, which continued over the



years, while progressively expanding its activities over the years. After Insolera, entomologist and writer Giorgio Celli took over as president, followed, for a period, by forestry professor Umberto Bagnaresi. In 2001, the Fondazione Villa Ghigi was established, with the city of Bologna, province of Bologna (now known as the Città Metropolitana of Bologna), and University of Bologna as founding members. The first president elected was Paolo Pupillo, a professor of vegetable physiology, followed by architect Federico Scagliarini and now engineer Mauro Bertocchi, a former director in the city's urban-planning department. Also in 2001, the foundation established its headquarters in the rural Palazzino building on the upper part of the park. For almost forty years, the centre and now the foundation have played a fundamental role in environmental education in Bologna and throughout the region (the foundation is considered one of the premiere centres for environmental education and sustainability in the Emilia-Romagna region). We have published numerous educational publications, launched surveys and initiatives locally for the city of Bologna and other organisations, and planned events focused on the environment. The staff of the foundation, which is led by Mino Petazzini, includes highly motivated specialists and educators with a great deal of experience. Starting in 2004, the city of Bologna turned over management of the park to the foundation, which embarked upon a wide-ranging programme to restore and improve the green areas. In 2019, the caretaker's house next to Villa Ghigi was turned into a refreshment area for visitors.

#### Management

The park aims to follow organic-management principles for its green spaces along with respecting environmental sustainability in order to safequard, restore, and increase the legacy of natural and rural biodiversity in the area, while conserving elements of great landscape value. Meadows and escarpments, for example, are mowed on varying schedules to safeguard the most precious plant species, allow the grass to complete its life cycle and disseminate seeds, favour insect pollination, and prolong the beauty of flowering meadows. Over the years, various water-drainage systems have been implemented, with trenches, sluices, and hydraulic processes that look to the best practices of yesterday. This is essential for managing this fragile hilly context as it has historically had issues with landslides. To increase local biodiversity and enrich the botanical value of the park, in 2011—as part of the European "Life" project— a station was created dedicated to the dictamnus (Dictamnus albus), a rare, protected species of herbaceous perennial, and its pollinators, which are increasingly and alarmingly in decline. Over the last few years, numerous artificial nests have been installed

duction of various bird species (the tit tit, redtail, martin, and tawny owl) and bats; Alessandro Ghigi was a pioneer in this. In the park, it is still possible to see artificial nests installed back when the park was run as an estate. Among the projects aimed at conserving the rural legacy of the land, the fruit trees are once again being pruned after decades in which they'd remained untouched. The foundation also launched a project for carrying out a census of and breeding fruit-bearing plants, starting with



Palazzino orchard was created as the first of a regional Small great tit birds (Parus major)

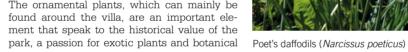


The large Himalayan cedar (Cedrus deodara) in front of Villa Ghigi

species). The vineyards boast local grape varieties: Angela, Paradisa, Sasla, and Negrettino. Only one of these, located near the Becco farm and abandoned for decades, has been recolonised by bushes and young trees, and today it is an intricate shrub that offers refuge and nourishment to wild animals. One of the initiatives aimed at making the most of the park's legacy of rural biodiversity is the Frutteto del Palazzino orchard, which has rare fruit-bearing plants and grapevines from the Emilia-Romagna region.

In terms of more natural plant coverage, the park offers various points of interest, and it surprises for the incredible richness of different environments and biodiversity. The mature wood that marks the eastern confines of the park has great importance in terms of nature and landscapes. This forested segment of the park boasts large examples of durmast, black hornbeam, field maple, ash, and cherry trees, along with other tree, bush, and climbing-plant species typical of the hilly mesophilic wood, such as walnut and honeysuckle. There is a small group of beech trees, which were planted by Callisto Ghigi at the end of the nineteenth century, located in a limited section of the wood that was fenced in about fifty years ago, that, unfortunately, have felt the effects of climate change in the last few decades. Today, there are just a few left. In the spring, the rich herbaceous underbrush gets colourful thanks to hellebores, primrose, violets, anemones (Anemone nemorosa, A. ranunculoides), lungwort, and periwinkle. In autumn, it comes to life with cyclamen (Cyclamen hederifolium). The eastern wood going toward the valley continues into an area of native broadleaf trees that was reforested in the 1970s as the public green spaces were being prepared, and, today, this makes for quite an appealing spot. Alongside the Fontane brook and the main ravines are dense swaths of vegetation from previous reforestation projects, with areas of white poplar, alder, and ash trees and hygrophilous species that regenerate spontaneously (black poplar, willow, elder, and equisetum). Especially on the margins of the forested areas and in the escarpments that haven't been cut back, there are dense groupings of pioneer species like elm, dogwood, field maple, black-

thorn, and wild rose (this species, which tends to often grow on to trees and bushes, flowers beautifully in the park in May, making for a lovely sight). The meadows and escarpments that link together the various plots of land also have a great deal of flowering plants, including rare and protected ones: orchids (Orchis purpurea, O. morio, O. simia, Cephalanthera damasonium, Anacamptys pyramidalis), narcissus (Narcissus poeticus, N. tazetta), tulips (Tulipa oculis-solis, T. sylvestris), and carnations (Dianthus carthusianorum, D. balbisii). The ornamental plants, which can mainly be





network of Frutteti della Biodiversità (Orchards of Biodiversity) promoted by Arpae Emilia-Romagna. Various broad, wide-ranging initiatives have been carried out to support educational activities, equipping the park with new areas for learning, and promoting in-depth exploration by school children, families, and citizens. There is a small pond, a series of temporary watering holes along the Fontane brook, and a large vegetable garden near the Becco farm. Along with the original features and layout of the park, over time, there are new structures and pieces (cabins, benches, plant-based sofas and other elements created with natural materials) that inspire children to come in more direct contact with nature.

The foundation's staff is on hand every day as a way of favouring dialogue with area residents and those that frequent the park, leading to the development of projects that aim to satisfy the requests and desires of citizens, with useful and functional ideas for how the park is managed. One of these is the Un albero per te (A Tree for You) project launched in 2015, allowing people to make a donation and plant a tree in the park, contributing to a rapid replenishment of the trees and increasing the important legacy of the woods here. Many citizens from Bologna, as well as other cities, have taken part and these new plantings are enriching the park with new quality trees in various strategic points and areas. For park maintenance, the foundation relies on a social cooperative with expertise in this area, which carries out its work with professionalism and includes disadvantaged workers who can benefit from working in nature. This experience has led to another type of initiative dedicated to the theme of horticultural therapy or, in general, better living through nature. This to be a place of learning and experimentation.



Flowering meadow in the upper part of the park

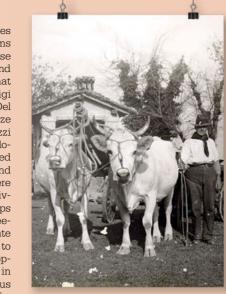
#### Activities

For decades now, the park has been well-known and much appreciated by schools and Bolognese citizens, who frequent it regularly. There are classes that visit for educational purposes, families who participate in workshops and summer camps organised by the foundation for kids and teens, citizens who enjoy guided excursions throughout the park and neighbouring areas, as well as courses and other initiatives. The foundation's website lists all of these educational activities every year. Typically, the year starts off with students taken on guided visits of the park (free for schools in Bologna, from preschool all the way to high school). After these guided visits, which typically take place in autumn or winter, classes are invited to return to the park to continue the work started during the first visit, including themed talks or a series of more in-depth sessions requiring payment. In more than thirty years, the foundation has experimented with dozens of educational initiatives, and, in recent years, has intensified its efforts, along with the city of Bologna and University of Bologna, in terms of training teachers and professors in Bologna and other school districts. The main objective is to educate the schools on the importance and the urgency of getting children back in touch with nature, discovering, updating, and promoting environmental and outdoor education from a very young age.

What's more, the foundation has continued to add to its educational offerings with new opportunities for the schools, to favour visits to the park, and, generally, studying nature out in the field while putting a focus on environmental topics. La scuola nel bosco (School in the Wood) is aimed mainly at preschool-age students, and is always experimenting with new ideas and initiatives so that children can spend a few days completely immersed in nature. Another initiative invites schoolchildren to the park in the late afternoon to stay overnight—watching night fall, discovering unusual, mysterious nature in the dark, and setting off on a hike at the first sign of dawn. There are also hikes that can be taken in the nearby hills, offering excellent views of the city, where one can

### An estate on the hill

The surface area of the park today combines the land that belonged to the three old farms on the estate: Becco and Palazzino, whose farmsteads are found inside the park, and Tre Portoni, with a house and stall/barn that are today private homes. When Callisto Ghigi purchased what was then known as the "Del Monte" estate, it included five farms (the size of the area was just over that of the Malvezzi family's estate at the time). A family of colonists lived on each farm, and often extended families lived there, including siblings and their children (in the nineteen-forties, there were nine members of the Cerè family living on the San Michele farm). Relationships were managed by sharecropping agreements, which were common during the late Middle Ages and were still being used up to fifty years ago. The most recent sharecropping contract on the estate was signed in 1960. The document discusses the various



crops to be planted, which were common for the lower part of a hillside, and "special vegetable crops," confirming how popular it was to grow vegetables in these hills close to the centre of Bologna. Crops were rotated in the fields—wheat, barley, and alfalfa. Vines were grown as part of specialized grape varieties as well as in other plants, with elm trees and fruit trees used as "living supports." Up until the nineteen-sixties, we can imagine landscapes that alternated plots of land with different crops that almost always dotted with rows of vines trained on trees, with vineyards and vegetable gardens, rows of fruit-bearing plants along the internal roads, forests and brush where the terrain slopes down and along the main irrigation ditches. This image is confirmed by areal photos from the nineteen-thirties.

curiosities in previous centuries, and the recreational and productive role these suburban locales once played. Trees and shrubs are distributed in such a way as to provide dense coverage. These are mainly evergreen plants, which provide shade to a network of paths and some of the old stone benches: a formation of old Linden trees, some nice pines, and a few cypresses are joined by old field maples and cherry trees. The undergrowth mainly consists of bay, laurustine, and cherry laurel with abundant yew trees that regenerate again and again. The large Himalayan cedar (Cedrus deodara) truly stands out, dominating the meadow in front of the villa. It was planted by Callisto Ghigi when he purchased the property (unfortunately, two other similar trees from the same era died decades ago). Another tree worth pointing out is an old female yew tree in the woodland behind the villa that is quite rare in its spontaneous state. This type of yew is often used for ornamental purposes. The foliage of a magnificent photinia (Photinia serratifolia) provides shade to the old stone and brick staircase that leads to the upland plain overlooking the villa. The ornamental nature of this area is emphasized by the flowerbed offset by gypsum barriers. In the middle is a young evergreen magnolia, which replaced an old plant of the same species. Around the villa, there are quite a few wonderful examples of the durmast, similar to what can be found in other areas of the park, especially along the access road. Other areas of the park play an ornamental function as well. For example, with the row of ginkgo trees and the old examples cryptomeria along the Fontane brook. There is also a group of large cedar trees providing shade to the barn on the Becco farm, and some exotic evergreen plants at the entrance to the fenced-in woodland on the eastern border of the property.

The rewilding of large swaths of the hillside after the decrease in agricultural activity has meant that wildlife has returned in the last few decades, and birds and mammals are now more a regular than occasional presence. Thanks to its location, the park is like a hillside stronghold overlooking the city, with fauna that includes species typical of urban parks and orchards as well as hill species that come out at twilight and in the night to then take refuge in more remote neighbouring vallevs. Hare, foxes, and badgers hide their nests and lairs in the thickest areas of shrubbery or trees where the discovery of spines testifies to the fact that there are porcupines here too. Throughout the year, it is possible to see squirrels up in the trees and, during summer nights, you might spot



A Sunday stroll as part of the Le colline fuori della porta programme

stop to watch birds, listen to the sounds of nature while using the park as a way of understanding what biodiversity, evolution, and landscapes mean. At the beginning of the school year, students in newly formed classes can meet up here in the park to get to know one another better. A wonderful event takes place in the autumn for the Festa degli alberi (Tree Festival), allowing schools to gain an understanding of the main tree species.

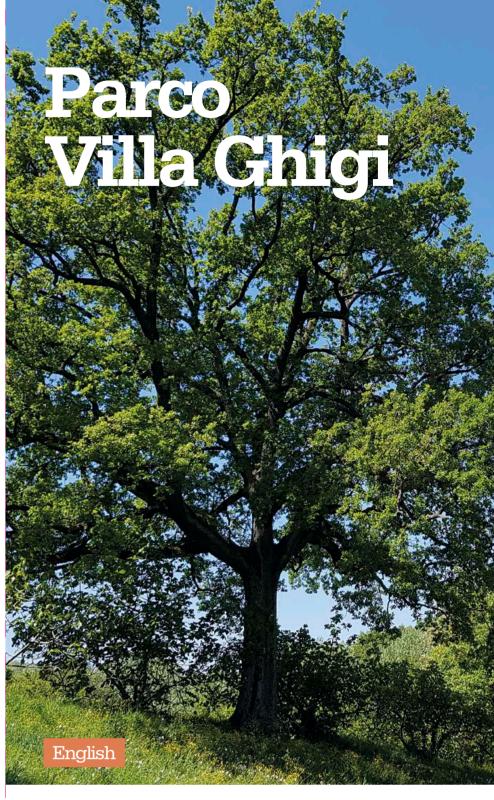
Throughout the year and in summer, the foundation holds extracurricular activities for a growing number of children and, sometimes, their parents. Along with the workshops held a couple of Saturdays per month, there is also a popular summer camp held in June, July, and September. These camps last nine or ten weeks, with a few weeks focused on very young children and a travelling camp for teens. During the year, the foundation holds initiatives and events in the city, as well as guided walks and excursions in the park. These are always very popular and focus on aspects of botany, agriculture, zoology, history, culture, and literature

Most of these walks—there are a dozen or so each year—are part of the Le colline fuori della porta (The Hills Outside Your Door) programme, and are promoted along with the Consulta per l'Escursionismo di Bologna. For more than ten years now, this organisation has successfully inspired Bologna's citizens to rediscover this area of the city's hills. Each year, the foundation also holds evening events in summer dedicated to fireflies and the night stars or reading stories about nature for young and old. There are also meetings, food or wine tastings, theatrical events, music

Speaking about "Nature" cannot substitute the experience of seeing and touching nature. The work that we are trying to do at Villa Ghigi is a necessary complement to classroom study, if we want to serve as a starting point for coming to truly understand the area where one lives. Mere knowledge of the local area is not enough, but it is certainly necessary for us to begin making better use of it. Delfino Insolera, Il Parco Didattico, 1984



A visiting class







# Parco Villa Ghigi







### Points of interest

1. A gate marks the old entrance to the Ghigi estate. Its stone pillars bear the words Villa Ghigi and Alle Salse, a reference from the eighteenth Canto of Dante's Inferno. The gate leads to a private driveway that visitors can walk on foot to reach, past some modern homes, the public park. To the side of the gate there is a small building once inhabited by one of the Ghigis' custodians; beyond the gate, a few old horse chestnuts still survive from the double row marking the driveway up to the estate

2. As you climb, you will pass a block of flats on the right and some gable-roofed houses on the left by Enzo Zacchiroli, who also designed the concrete fountain built over the source of a spring; the gardens of these houses have incorporated some large ornamental trees dating back to the Ghigi period, including horse chestnuts, maidenhairs, spruces, cedars, and pines. 3. A wooden display case and a pair of oval signs mark the start of the public park, in a some-

what dark and narrow part of the valley floor. Here, the waters of the Fontane brook, overshadowed by dense vegetation with poplars, elms, and elder shrubs, begin their underground journey towards the nearby Aposa stream, which is also underground. The stone ruins of an eighteenth-century armoury, now hidden by vegetation, lie on the opposite bank of the brook. This armoury was active up to the Second World War, and was then destroyed by an explosion

4. A row of maidenhairs (Ginkgo biloba), containing young and old specimens of both sexes, runs along the road. In the autumn, the fanlike leaves of this exotic species, whose fascinating evolutionary history has caused it to be named a living fossil, fall thickly on the ground below to form a golden carpet, upon which the round, malodourous fruits will subsequently drop. Near a pretty, travertine-encrusted little waterfall formed by the brook there is a specimen of Cryptomeria japonica, an exotic evergreen introduced at the time of the Ghigis and now in a precarious condition.

5. The escarpments on either side of the road contain old horse chestnuts, lindens, and poplars alongside young field maples, ash, and hornbeams. From the end of winter, the lovely flowers typical of temperate oak woodlands bloom one after the other: hellebores, primroses, anemones, violets, and lungwort; later, the delicate flowers of the periwinkle predominate.

6. At the start of the footpath that climbs along the right bank of the brook you will find the *Percorso Vita*, a fitness trail consisting of 15 exercise stations along a ring-shaped course a little over a mile long. Fitness trails were invented in Switzerland in 1968; the example in Villa Ghigi, one of the first in the Emilia-Romagna region, was installed in 1977 and has been renovated several times since then.

7. The brook twists and turns over a clay bed, forming a number of temporary pools that are important microenvironments for the local fauna. Its banks have recently been reinforced through careful bioengineering and are the home for plants typical of cool, damp environments such as sedges, horsetails, and ground elder (Aegopodium podagraria).

8. On its left bank, under the shade of a majestic Eastern black walnut (Juglans nigra), there is a small building that is one of the access points to the Roman aqueduct dating back to the Augustan era. The aqueduct was reactivated in the mid-1800s and, along a route of about 11 miles, carries water taken from the Setta stream to Bologna. From its entrance, which can only be accessed by authorized workers, a narrow stairway with 324 steps leads to the tunnel, 66 metres down. From February to April, the edges of the footpath under a poplar and ash canopy are carpeted in succession with yellow wood anemone (Anemone ranunculoides), lesser celandine, and comfrey.

9. An ancient downy oak (Quercus pubescens) died in 2018 after a phase of advanced senescence, but still displays its huge trunk and imposing branches, giving it a curious appearance. At the bend in the road, a remarkable specimen of ivy has practically covered the old locust tree on which it is climbing. Behind it, at the edge of the wood, three large white mulberries bear the signs of past pollarding - a reminder of their use in the cultivation of silk moths; the 1782 Boncompagni Cadastre bears witness to the presence of numerous mulberry trees in all the smallholdings on the estate.

10. The pathway that runs along the slope is flanked by a line of trees on each side. On the valley side there is a line of Japanese persimmons (Diospyros kaki), introduced by the Ghigis for their delicious fruit, while on the upper side you can see specimens of the American persimmon (D. virginiana) dating back to the early years of the park's public management, which bear smaller fruit and are less sprawling. In autumn, visitors can enjoy their spectacular foliage,



11. An old line of figs along the road is interrupted by another majestic downy oak, planted by Callisto Ghigi in 1875 after the birth of his son Alessandro. In late January the ground below is covered with the yellow flowers of winter aconite, while in April you can enjoy the sweet scent of pheasant's eye daffodil (Narcissus poeticus).

12. A charming pathway leading through the meadows is accompanied by a double row of cherry plums and apricots. A large sorb tree with fruits resembling small pears grows near the fitness trail's third exercise station

13. A charming corner shaded by poplars, white willows, elders, and hazels can be found near a small brick building that marks an old spring, once used as a drinking trough for livestock. This is a favourite spot for school trips and families involved in the foundation's activities, and is equipped with a number of items made from natural materials (huts, a plant-based sofa,

14. A pathway runs between two old vineyards. Uphill, the vineyard that once grew Negretto (or Negrettino) grapes has been left wild since the nineteen-nineties and has now become a thick shrubland of wild roses, bloody dogwood, cherry and field maple, gradually turning into a young wood; today it is an interesting "maze of discoveries", and is used in educational activities on how to find the tracks left by wild animals. Downhill, the vineyard has been partly recovered and is the home to the traditional Bolognese varietals such as Angela, Paradisa, and white

Muscat, with low head-trained bush vines. 15. The large garden surrounded by a low fence and lavender borders in the Becco farmstead was created with educational activities and horticultural therapy in mind. It contains plots of various sizes for the cultivation of vegetables, grains, flowers, berries and aromatic plants, with par-

ticular attention to traditional Bolognese hill cultivars and agronomic curiosities. 16. The Becco farmstead is still inhabited

by the same family whose forefathers were sharecroppers at the time of the Ghigis. Its old core consists of the farmhouse itself over the entrance of which is a terracotta figurine of Saint Eurosia (the patron saint

of grain farmers), and the hay barn, rebuilt in the post-war period and now unstable. In the farmyard you may spot specimens of a local dove species known as the colombo romagnolo, first described by Alessandro Ghigi in 1898. This dove, which has characteristic "slipper-like" plumage on its legs, is now at risk of extinction. A lovely avenue with benches, tall ash trees and laurel and cherry laurel shrubs leads you around Becco, skimming past a rest area shaded by European nettle trees.

17. The panoramic pathway taking you from Becco to the eastern side of the park is flanked by old pear trees of typical local varieties (Molinaccio, Francesina, Spadona) as well as by recently planted young specimens (Curato, Giugnola, and Volpina).

18. A stone stairway runs past a large photinia, whose white flowers bloom between April and May, and leads to the villa's courtyard, passing under the foliage of a majestic Himalayan cedar; a broad wooden walkway protects the roots of the old tree from the footsteps of the numerous visitors. This cedar is over 150 years old and was recently added to the list of monumental

trees of Italy. In the early nineteen-nineties it was struck by lightning, which left a long and still visible scar on its trunk; despite this it still has plenty of foliage. Along the ground on the nearby lawn, you can see the remains of another cedar of a similar age, which was cut down in 1975 due to wood-decay fungus: a count of its rings shows that it was 113 years old. The plateau offers a panoramic view of the heart of Bologna. In the foreground, you can see Villa Aldini in the centre and the San Michele in Bosco complex on the right. 19. The circular bed in the lawn contains a

young Magnolia grandiflora and is delim ited by chalk blocks, a local material that was once commonly used in the parks and gardens of Bologna. The imposing downy oak in the wood

> over 5 metres. 20. The unstable ruins of the villa's old icehouse, hidden by vegetation and protected by a fence, can be seen near the Casa del Custode (caretaker's house); an earth embankment enables the underlying stonework to be glimpsed, although it is largely covered by vegetation (a large downy oak with a visibly leaning trunk grows on one side). A little above the ice house is a splendid female yew - undoubtedly one of the oldest trees in the park, given the longevity and very slow growth of this evergreen species. The abundant production and dispersal of its fruits is probably responsible for the many other specimens growing in other

> above the courtyard is the widest in the park, with a circumference of just

The shady cart track is flanked by an escarpment with a splendid line of ancient downy oaks that forms the eastern bound ary of the villa's garden; on old stumps sur rounded by patches of butchers broom and at the foot of some of the oaks, you may sometimes see the fruiting bodies of wooddecay fungi species, which, in the case of the latter, are unfortunately a sign of their precarious condition

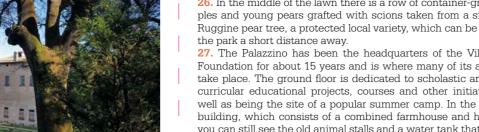
22. The ornamental wood behind the villa is crossed by footpaths with old stone seats and is characterized by a horseshoe formation of old lindens pruned in a candelabra shape. It contains large specimens of cypress, um-

aucuba, partly originating from earlier hedges, still survive. 23. At the beginning of the year, the escarpment extending to the west of the ornamental wood is covered with flowering hellebore and winter aconite, while in spring you can see groups of narcissi and daffodils, wild tulips, and two beautiful spontaneous orchids: the lady orchid (Orchis purpurea)

brella pine, downy oak, field maple and yew; patches of laurel and

and the monkey orchid (O. simia) 24. This was the location for Alessandro Ghigi's cages and aviaries, which were taken down after the park was opened. The chalk-block wall supporting the escarpment is all that remains of the previous layout. It is now a quiet corner with tables and seats under the shade of the lindens and field maples, a lovely wisteria pergola, an old quince, a calycanthus and patches of common laburnum, Judas tree and buddleia, which are visited by a great variety of butterflies and other insects. 25. The plateau is one of the most popular spots for educational activities. On one side it is shaded by some large downy oaks, whose foliage hides the nearby villa from view. A large elm grows in the upper escarpment, while in the lower escarpment there is a pretty ornamental mixed hedge containing strawberry tree, hibiscus, snowberry, pomegranate, spiraea, tamarisk, vitex and winter honeysuckle. Towards the villa, the formation culminates in a young windmill palm (Trachycarpus fortunei), which was donated along with a pomegranate in memory of the poet Roberto Roversi, his





28. The Palazzino's orchard was created in 2010 in collaboration with Arpae Emilia-Romagna, the regional environmental protection agency. It has 30 young fruit trees (apples, pears, pomegranates, figs, olives, etc.) and about a dozen vines grown from cuttings

enclosed by a wooden fence to protect it from roe deer and wild boar. It was created with the aim of conserving the precious germplasm of these ancient varieties: its collection of fruits with their unusual histories, shapes, colours and flavours is a true tribute to rural biodiversity

29. Near the bend in the track you will find some of the oldest fruit and nut trees in the park. Towards the outer bend there is a Francesina pear tree and a large almond tree, behind which flows one of the branches of the Fontane brook, flanked by a row of ancient willows. On the inner bend is a surviving Ruggine pear tree, and a little further downhill, a Molinaccio pear tree.

30. Beyond the bridge, the gulley is hidden by tall white poplars and ash trees, planted in the 70s, and by an intricate tangle of spontaneous shrubs. You can often hear the characteristic hammering of the green woodpecker in this area, and in the summer, you might

> 31. Along the track, which is bordered by cherries, walnuts and patches of hazel, there is a chalk outcrop with characteristic shining crystals. Yellow tulips (*Tulipa sylvestris*), star anemones and lady orchids grow in the nearby lawns, and it is not uncommon to spot

plants surrounds a small artificial pond, whose surface is often cov-

tables and benches. Towards the valley there is a small wood of white poplars with bright, pale bark, accompanied by ash trees and alders.

mixed hedges of field maples, hawthorn

continue towards the north, with Judas trees, common laburnum and smoke trees. A row of young olives flanks a pathway that extends to a public area granted decades ago to the nearby Villa Due Orologi, which

35. On the main house of the Tre Portoni cluster, a former Ghigi smallholding that is now private property, there is a plaque bearing Dante's celebrated verse Venedico se' tu Caccianemico: / ma che ti mena a sì pungenti salse?; this actually is meant to allude to the arid valley into which, in the Middle Ages, the corpses of the executed, the excom-Via di Gaibola, on the other side of the road from the park.



grape vines typical of the Bolognese hillsides (Angela, Paradisa, Saslà). Towards the top are three surviving Lambrusco piantate. in which the vines are supported by wooden poles and fruit trees; these date back to 1929 and were recently restored.

. The length of footpath bordering the top edge of the park, marked by a pretty mixed hedge, gives a splendid view of the plain to the east and west of Bologna. It forms part of the mountain track CAI 904, which starts from the hill by the Osservanza Church and, after the park, proceeds towards the Hermitage of Ronzano, terminating at the nearby church of San Michele of Gabiola.

38. At the end of the pathway you can see a solitary bench by the side of an old gulley edged with chalk blocks, in sight of an attractive group of old quinces. The way is now overgrown and unpassable, but once climbed towards the Hermitage of Ronzano and the old Via delle Fontane.

39. The dittany station was created under the European Life Pp-Icon project with the University of Bologna and CRA-API, an apiculture research association. In April and May the plant produces its splendid flowerheads, consisting of flowers with five purple-veined white petals, which attract

40. The long pathway, which crosses the upper lawns of the park, offers lovely views over the city

and surrounding hills. Uphill, it is flanked by cherries, quinces, patches of wild rose and young trees planted under the Un Albero Per Te [A Tree for You] project; these include almond, cherry, peach, quince, serviceberry,

bloody dogwood, wild rose, and field maple, which in the meadow below have formed, along with old man's beard, a patch from which emerges the foliage of a cherry tree. 42. A handsome row of almonds distinguishes this part of the border, which marks the park's highest point (243 m). This is the perfect spot to admire the view: let your gaze travel from the towers of the historic centre to those of the Fiera District

and on towards the plain - on the clearest days you might even make out the Alpine foothills. The silhouette of The Sanctuary of the Madonna of San Luca emerges towards the west, while to the east, you can catch a glimpse of the former seminary. now owned by the Rizzoli Orthopaedic Institute.

43. At the top of the climb, passing by pear, apple, and fig trees, you will find a group of old azaroles bearing both red and yellow fruit. Some younger specimens alongside were propagated from cuttings of the old plants. On the ridge a group of cypresses marks the edge of the park, from which there is a magnificent view over the valley of Montescalvato; on

> the other side of the gate, which is closed to visitors, the road leads to some private properties that were also once part of the Ghigi estate. 44. A row of old downy oaks marks the eastern edge of the park and broadens towards the valley to form a patch of mature natural wood, most of which is fenced off. This extends towards the park entrance in Via Martucci.

45. A gathering point contains a monument - a sandstone notebook ying on the grass - dedicated to Callisto and Alessandro Ghigi by the Bolognese sculptor Nicola Zamboni. Next to it is a group of wild service trees and a handsome Lady Banks' rose bush. The large lawn, which contains several lines of young oaks, is mown just once a year, to respect the plants' natural life cycles, and is full of meadow flowers, including a number of species of orchid.

arranged in a candelabra shape. Up hill on the right are the remains o two western red cedars. These trees are polycormic, meaning they have a crown of large branches that start almost from the ground. The trees are among the last relics of the ornamental plants introduced at the end of the 1800s; these have by now almost all disappeared, due to age and old health. Recently, various young North-American tree species were planted, including tw seguoias.

48. This part of the fenced-off wood has a wild appearance due to the presence of fallen trunks and se nescent trees colonized by mosses

spindle and fly honeysuckle.

lichens and bracket fungi. Among these still survive some old beeches, as well as downy oaks, European hop-hornbeams, field maples, ash trees, and young yews. The undergrowth contains some noteworthy species, such as Isopyrum thalictroides and Veronica urticifolia (nettleleaved speedwell), and is an ideal home for numerous species of fungus and invertebrates.

49. Until the nineteen-nineties this fenced-off area contained a small group of fallow deer and was maintained as pasture. It was then left to transform naturally into a thick scrubland, which is gradually evolving into a young wood. Field maples dominate, but they are accompanied by young oaks, manna ashes and cherry plums above a broad carpet of ivy and primroses. It is now maintained for educational and research purposes: an area along the footpath contains equipment for the various activities.

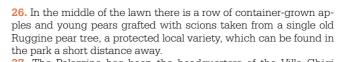
O. The charming pathway crosses some agricultural land managed by the tenants of the Casa del Custode, with a large orchard and vegetable garden and some vineyards containing vines such as Negretto, Saslà, Trebbiano d'Empoli as well as more diffuse varieties (Sangiovese, Barbera). The willows dotted between the rows are still pollarded to produce the flexible branches used to tie the vines. 51. Downhill of the Fitness Trail station, which is shaded

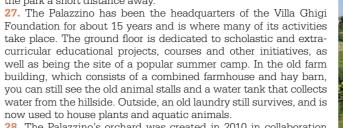
by an umbrella pine, there is a dense natural wood from which emerge two large downy oaks surrounded by maples, ash trees, hazel bushes, European

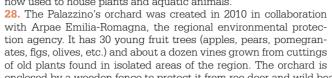
52. The footpath crosses a thick reforested area created in the 70s, which has been enriched with spontaneous regrowth over time. It contains ash trees, oaks, cherries, hornbeams, elms, maples, and dogwoods over a broad carpet of ivy, hellebore, cyclamen, and many other woodland species. Uphill of the footpath there is a large "plant-based sofa" among the trees, which is often used in children's activities.

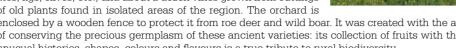
53. At the end of Via Martucci, beyond the park entrance, the hill climbs steeply and is cut through by a small watercourse that runs between carpets of sedge in the shade of ash trees, bitternut hickory, and wild cherries. This stream gathers rainwater from the eastern sector of the park and once flowed into the Fontane brook a little further downstream, but it was incorporated into the public sewerage system when this part of the hill was urbanized. Its course along the terraces is marked in spring by the blooms of anemones, violets, hellebores, and other typical oakwood species.











be treated to the melodious song of the golden oriole. Italian wall lizards and European green lizards.

ered with duckweed. In the spring common toads lay their spawn in the pond, which is also a magnet for various species of dragonfly. whose larvae live in the water alongside other insects and snails. 33. The tree-studded lawn under the carpark in Via di Gaibola is a gathering point for school trips and other events, and is fitted with

34. At the head of Valverde there is a lovely view over the whole valley, which drops towards Via San Mamolo. Thick

and other shrubs border the carpark and

houses a Mondo X religious community.



