

Birmingham TreePeople

Birmingham Orchard Equity Mapping

End of project report, October 2025



Photo 1, Plum Tree, Druids Heath, June 2025

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Researcher Biography



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Project Summary

Birmingham TreePeople received funding from Birmingham City Council's Food Legends Fund to deliver the first city-wide survey of publicly accessible orchards and fruit trees in Birmingham. The primary aim of the project was to identify and map existing orchard sites, producing an online map that establishes a robust baseline inventory of 1,680 fruit trees across 86 orchards.

Alongside the mapping work, the project delivered a programme of volunteer training in fruit tree planting, pruning, and surveying, helping to build local skills and strengthen community capacity for long-term orchard stewardship. Survey volunteers were trained one-to-one on site, gaining experience in species identification and use of TreePlotter software, while additional community sessions supported new planting and seasonal pruning.

The Birmingham TreePeople Equity Orchard Mapping Project makes a substantial contribution to the ambitions of the Birmingham Food System Strategy by advancing a fairer, more sustainable, and more resilient urban food system. By documenting the current distribution of orchard sites—and the significant inequalities between Birmingham's northern and southern wards—the project provides a vital evidence base to guide future planting, investment, and community-led food growing. The resulting map enhances transparency, accessibility, and public engagement, while empowering communities, policymakers, and land managers to work collectively towards a more abundant and equitable urban orchard landscape.



Photo 2, Pebble Mill Playing Field Orchard and Forest Garden, Bournbrook and Selly Park, July 2025

Definitions

Publicly Accessible Orchard - A *publicly accessible orchard* is an area of land where 6 or more fruit- or nut-bearing trees are cultivated and maintained, and where members of the public have the right to enter, enjoy, and harvest fruit at any time of the day.

Fruit Tree - A *fruit tree* is defined as any tree that bears edible fruit. Within the context of this project, the term encompasses both traditional orchard species - apple, pear, plum - and non-traditional species that have been planted and are being actively maintained with fruit-bearing as an intended outcome of their cultivation.

A map displaying publicly accessible fruit trees in Birmingham is available here: <https://uk.pg-cloud.com/BTP/?scenario=orchard-trees>



Photo 3, Adding fruit trees to an existing orchard in Stechford Hall Park - a collaborative public workshop between Birmingham TreePeople and Fruit & Nut Village, Bromford and Hodgehill, May 2025

Introduction

Before Birmingham's rapid expansion during the Industrial Revolution, the surrounding landscape was predominantly rural and agricultural, with orchards forming an integral part of the local economy and way of life. Fruit trees were traditionally grown alongside arable crops and livestock, forming part of the mixed farming systems that characterised the Midlands landscape.

Remnants of this pre-industrial landscape persisted well into the 19th century, particularly in the southern and western fringes of the city, where traces of former orchards can still be identified today - notably in places such as Woodgate Valley Country Park.

The mild and sheltered conditions of the West Midlands region historically supported the cultivation of a diverse range of fruit species. The surrounding counties of Worcestershire, Warwickshire, and Staffordshire were each home to locally distinct varieties. Within Birmingham itself, however, the only fruit tree believed to have been unique to the city is the apple cultivar '*George Fox*' - named after George Fox (1624–1691), the founder of the Quaker movement.

Prior to the commencement of this project, there had been no centrally coordinated review or inventory of publicly accessible fruit trees within Birmingham. Over time, a wide range of stakeholders have established orchards across the city, employing differing approaches to planting design, community engagement, and ongoing maintenance.

The principal organisations historically and currently involved in the planting and management of publicly accessible orchards include Birmingham City Council (Parks Team and Tree Officers), the Canal and River Trust, the National Trust, Fruit & Nut Village, Birmingham TreePeople, Birmingham Trees for Life (now ceased trading), and The Orchard Project (no longer operating in Birmingham).

In addition to these city-wide initiatives, a diverse network of localised contributors—including Friends of Parks groups, University of Birmingham, the National Health Service housing developers, local community organisations, and private individuals—continue to play an important role in establishing and maintaining fruit trees and orchard spaces across Birmingham.

Through this project, a total of 1,680 fruit trees were mapped and recorded across 86 publicly accessible orchards in Birmingham. Of the city's 69 wards, orchards were identified in 31 wards. This information is accurate as of October 2025.

Methodology

This project was delivered between March and October 2025.

The survey process began with a desk-based search to locate orchards and fruit tree plantings within the city. This phase sought to collate all available information, including formal records, community knowledge, and anecdotal accounts of historic planting and maintenance activities. A variety of research methods were employed to ensure comprehensive coverage, including:

- Internet searches using a range of orchard-related terminology e.g. Birmingham community orchards, fruit trees, community planting.
- Direct engagement with orchard stakeholders and community organisations
- Communications with individuals possessing relevant local knowledge
- Social media outreach via Birmingham TreePeople channels
- Requests for information through tree and food-focused WhatsApp groups
- Satellite and map-based searches using Google Maps and Google Earth
- The knowledge and lived experience of the researcher

As orchard locations began to emerge, each site was plotted on a custom Google My Map, allowing for efficient, systematic and shareable recording. Each orchard was represented by a single map pin and accompanying name, awaiting physical, on-site verification and survey - Birmingham Orchards Map 2025 - [My maps link](#).

Although no single, centralised map of Birmingham's orchards previously existed, several existing resources proved particularly valuable during this phase. These included the Fruit & Nut Village sites map (fruitandnutvillage.org.uk/oursites) and The Orchard Project's historic map of orchards planted ([Google Maps link](#)).

As the project progressed, new orchard locations continued to be identified through ongoing research and community engagement. During this phase, the research also identified a number of semi-accessible orchards. These included sites that were gated but open to the public at specific times, those situated within spaces requiring an entrance fee, and others located on allotments or community-managed land. While such sites were recorded as points of reference where encountered, they were not actively targeted as part of the core research methodology, which remained focused on fully publicly accessible orchard spaces.

Once traditional desk-based research methods had been largely exhausted, the focus shifted to the 'ground truthing' phase — the physical verification of orchard sites that had been recorded on Google My Maps.

Where geography and orchard distribution allowed, surveying was conducted by bicycle, which proved particularly effective along the canal network and in areas with a high density of orchard sites. In areas where orchards were more widely dispersed, travel by car was necessary, with individual sites accessed on foot wherever possible.

The final data point parameters of the survey for each tree were as follows:

- Family
- Genus
- Species (Where known)
- Location marked using an individual pin on Tree Plotter
- Classification as an 'Orchard Tree' on Tree Plotter
- Date Surveyed
- Surveyor

This information was recorded using Tree Plotter mapping software, which is routinely used by Birmingham TreePeople. This platform is available to the public, the data recorded can be viewed via Tree Plotter here -

<https://uk.pg-cloud.com/BTP/?scenario=orchard-trees>

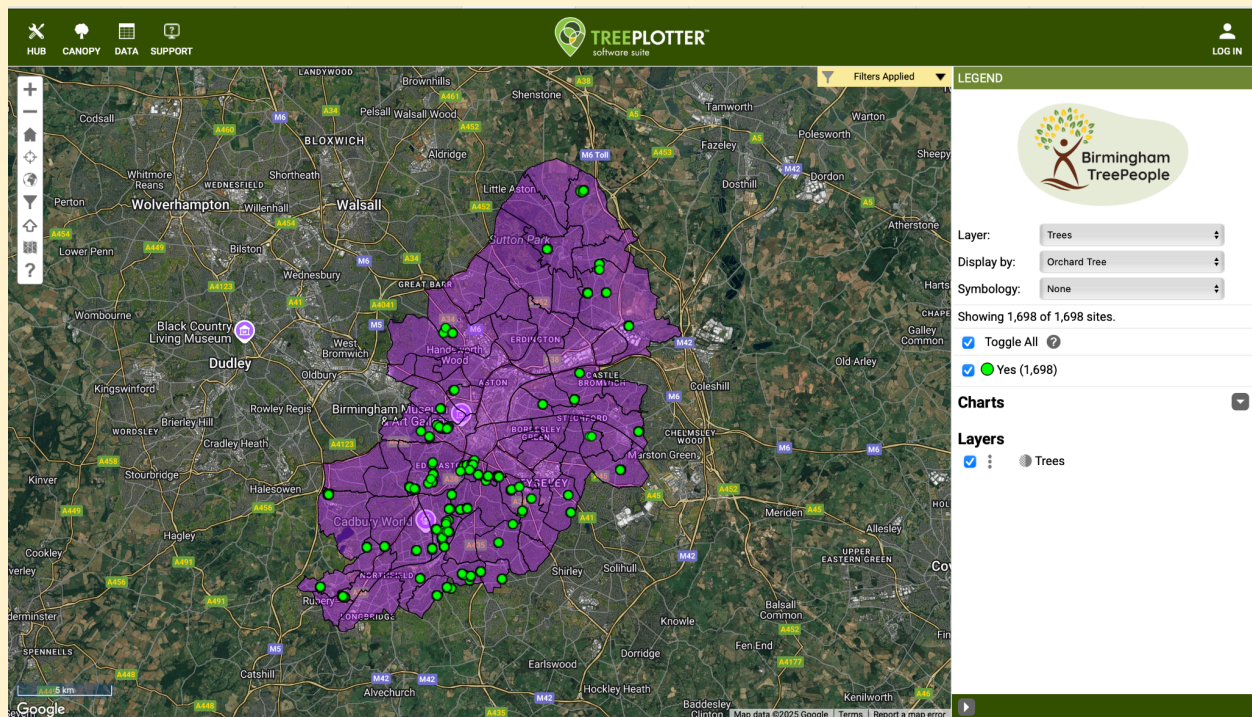


Figure 1, A screenshot of the treeplotter Orchards Map

Findings

- A total of 1,680 fruit trees have been recorded in publicly accessible orchards across Birmingham.
- These trees are distributed across 86 individual orchard sites throughout the city.
- 17 different fruit species have been identified within Birmingham's publicly accessible orchards (see Appendix 1 for species breakdown)
- Over 96% of all recorded fruit trees belong to the Rosaceae family.
- 31 of Birmingham's 69 wards are home to orchard sites, with Stirchley alone home to 18.5% of the city's publicly accessible fruit trees (see Appendix 2 for ward breakdown).

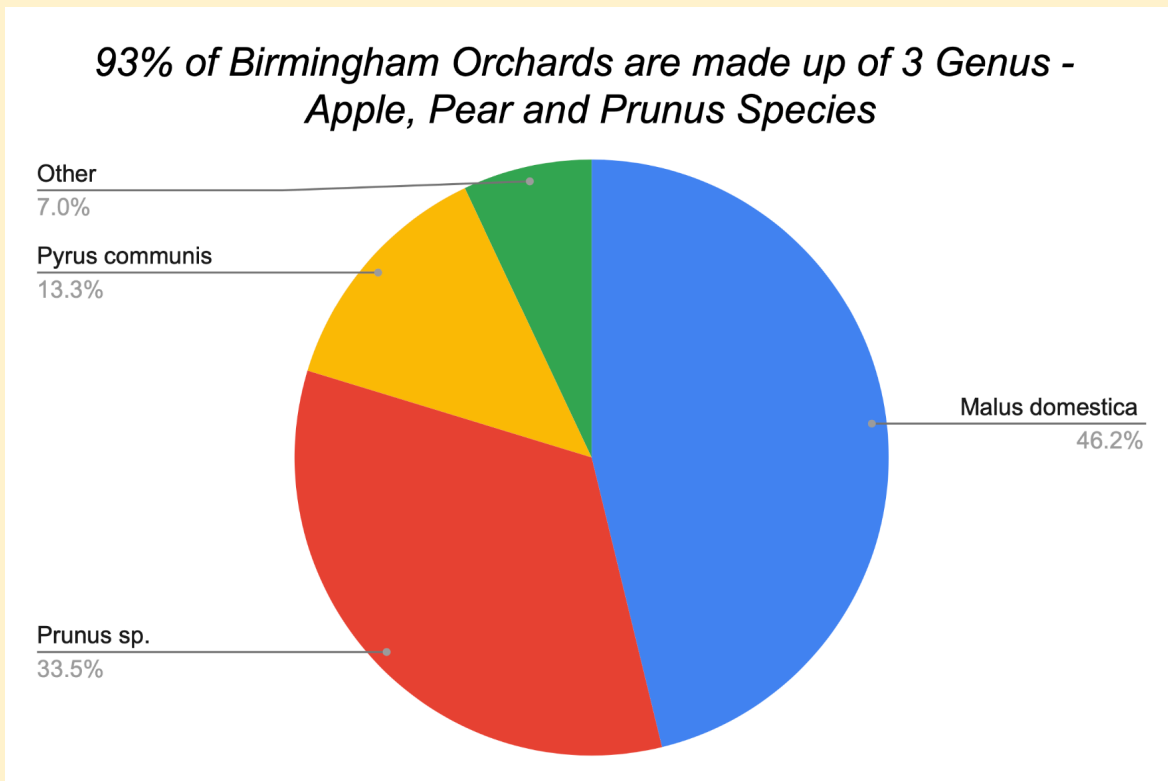


Figure 2, A pie chart displaying the percentage breakdown of Apple, Pear and stone fruit species as a proportion of the 1680 publicly accessible fruit trees in Birmingham

The remaining 7% are comprised of 14 species, although Quince, Walnut and Medlar predominate

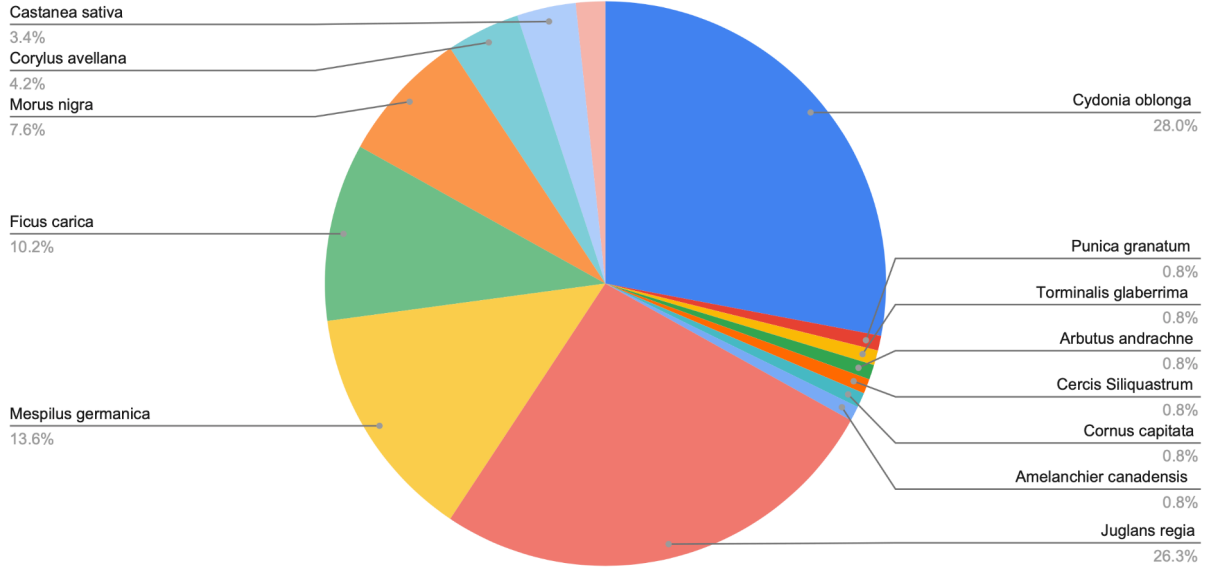


Figure 3, A pie chart displaying the percentage breakdown of 14 minority species in Birmingham's publicly accessible orchards

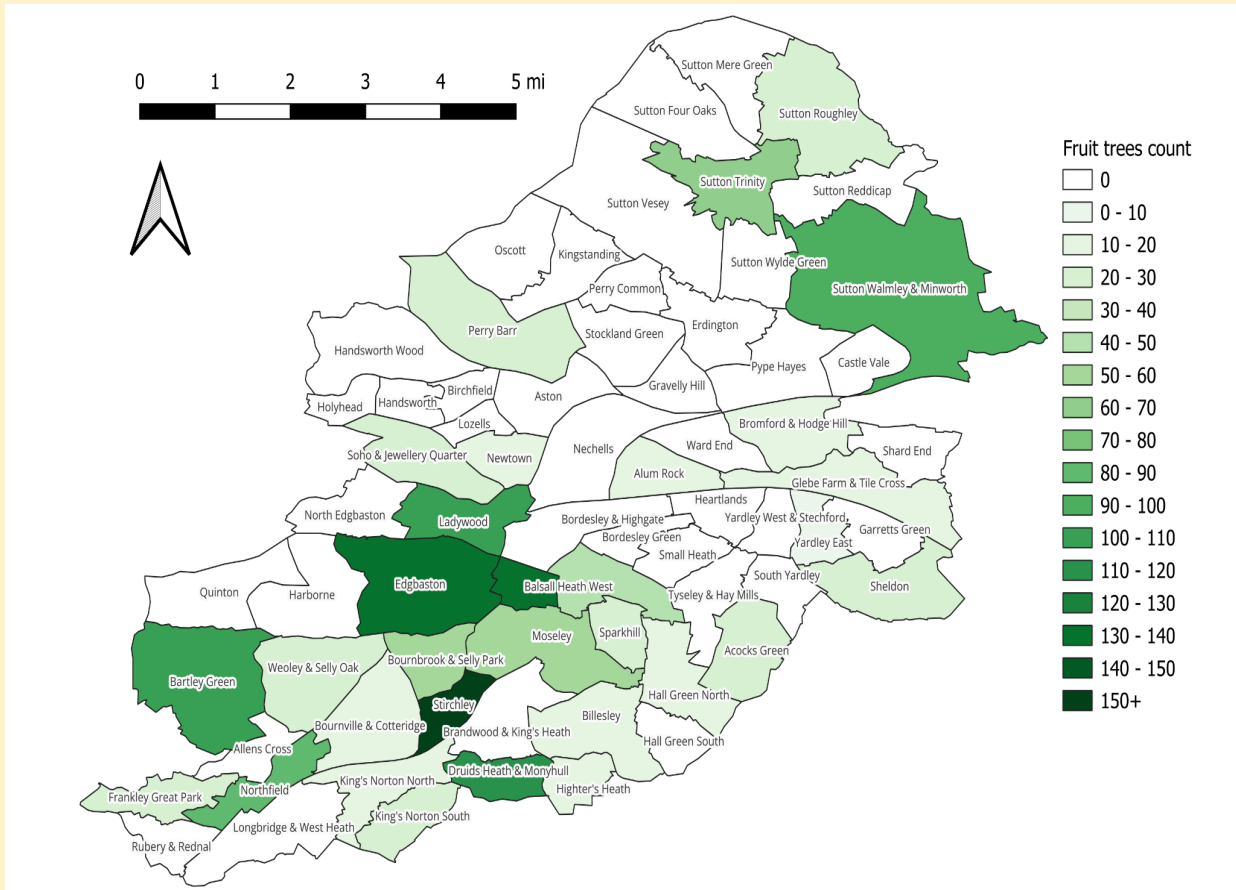


Figure 4, A heat map displaying Birmingham's 69 wards and fruit tree count by ward

Discussion

The dataset provides valuable opportunities for quantitative analysis, while the researcher's direct observation of 1,680 fruit trees across the city also offers a rich source of qualitative insight.

Fruit tree species selection

The species data reveal that nearly all publicly accessible orchards in Birmingham are dominated by three genera: *Malus* (apple), *Pyrus* (pear), and *Prunus*. The genus *Prunus* encompasses a wide range of fruiting species, including cherry, plum, damson, apricot, peach, nectarine, and almond. All of these were identified across the city, although differentiation between individual species proved challenging, particularly for volunteers, and were therefore recorded collectively as *Prunus sp.*

A widely accepted principle in arboriculture, endorsed by Birmingham TreePeople, advises that an urban forest population should comprise no more than 10% of any single species, 20% of any one genus, and 30% of any one family. The current composition of Birmingham's publicly accessible orchards significantly exceeds these recommended biodiversity thresholds. Approximately 96% of trees belong to the *Rosaceae* family, with 46% identified as *Malus domestica*. This high concentration within a single taxonomic group heightens vulnerability to pests, diseases, and environmental stresses, thereby reducing overall ecological resilience.

Although Birmingham's orchards exceed the 10–20–30 diversity thresholds, this guideline should be applied with flexibility in the context of fruit tree planting. As these sites are managed primarily for food production and community benefit, the genetic diversity among fruit cultivars, together with the active maintenance of orchards, helps to mitigate risks from pests and disease. Nevertheless, incorporating a greater range of non-*Rosaceae* species in future planting would further enhance ecological resilience and long-term sustainability.

The recommendation to diversify Birmingham's orchard population presents an exciting opportunity to expand the planting of fruit species that are already thriving locally in small numbers, as well as to introduce new species that are not yet publicly available but have strong potential to succeed. *Ficus carica* (fig), *Morus nigra* (mulberry), and perhaps more marginally *Punica granatum* (Pomegranate), are excellent examples of non-*Rosaceae* species suited to this purpose. These are reliable fruiting trees that have demonstrated good performance within the city's climatic conditions. In addition to their horticultural suitability, some of these species hold significant cultural value, with many local communities possessing

knowledge of how to harvest and use their fruit.

Species not yet recorded in Birmingham that present novel opportunities for future orchard diversification—particularly in the context of a changing climate—include *Diospyros kaki* (Persimmon), *Eriobotrya japonica* (Loquat), and *Asimina triloba* (Pawpaw). Each of these species demonstrates a degree of resilience to the warmer temperatures and longer growing seasons projected under current climate models. Persimmon is a hardy and ornamental tree capable of producing reliable crops of richly flavoured fruit once established, and it performs well across much of southern and central England. Loquat, while traditionally subtropical, has shown increased potential for successful outdoor fruiting in sheltered urban microclimates, offering early-season blossom and distinctive fruit. Pawpaw, a cold-hardy North American species, represents an exciting non-Rosaceae addition, combining excellent pest resistance with potential for local fruiting in warm, protected sites. Together, these species embody the next generation of climate-adapted orchard planting—broadening biodiversity, enhancing resilience, and expanding the palette of edible species available to Birmingham’s communities.



Photo 4, A young Cercis siliquastrum (Judas Tree) establishing in an orchard in South Birmingham, Stirchley, June 2025

While *Malus*, *Pyrus*, and *Prunus* will continue to play a central role in Birmingham’s orchard planting, a warming climate necessitates greater consideration of species and varieties adapted to conditions traditionally found further south. In the case of

apples, this shift is influenced not only by rising average temperatures but also by a reduction in winter chill hours—the cumulative period of cold required for many fruit trees to break dormancy and flower reliably. As winters become milder, traditional northern European cultivars may struggle to achieve adequate chilling, leading to irregular flowering and reduced yields. To safeguard future productivity and resilience, orchard planning should increasingly prioritise species and varieties historically cultivated in southern England and northern France, where climatic conditions match those projected for Birmingham in the coming decades.

Examples of apple cultivars with proven performance in warmer, lower-chill climates include *‘Reine des Reinettes’* (also known as *‘King of the Pippins’*), an old French variety noted for its excellent flavour and adaptability to variable conditions, and *‘Gravenstein’*, which performs well under mild winters. For pears, *‘Beurré Hardy’* and *‘Doyenné du Comice’*—both originating from northern France—are well-suited to warmer conditions and produce consistently high-quality fruit. In addition, modern southern European cultivars such as *‘Abbé Fetel’* and *‘Conference’* (a Belgian variety already well known and successful in the UK) show good drought tolerance and productivity under fluctuating rainfall. For Prunus at the species level, *Prunus persica* (peach), is suited to warmer, drier conditions and could play an expanding role in the city’s future orchards.

Nut species also present valuable opportunities for orchard diversification in Birmingham. Species with strong potential are *Prunus dulcis* (almond), *Juglans ailantifolia var. cordiformis* (Heartnut) and *Juglans cinerea* (Butternut), all of which offer distinctive nut crops and add structural diversity to orchard plantings.

Fruit tree distribution by ward

31 of Birmingham’s 69 wards are home to publicly accessible orchards, however there is a significant north–south imbalance in orchard distribution. The allocation and breakdown of North and South wards can be found in Appendix 2.

Region	Number of Wards	Number of Fruit Trees	% of total fruit trees
North Birmingham	30	286	17%
South Birmingham	39	1396	83%
Total	69	1680	-

The pronounced north-south disparity in orchard distribution reflects a combination of historical, social, and spatial factors. In particular, South Birmingham has benefited from a greater concentration of community-led environmental initiatives—most notably those led by Fruit & Nut Village. The distribution of fruit trees across wards mirrors the geographical and temporal focus of this organisation’s work, with the highest concentrations found in:

- 1. Stirchley - 311
- 2. Edgbaston - 135
- 3. Balsall Heath West - 132
- 4. Druids Heath & Monyhull - 120
- 5. Bartley Green - 104



Figure 5, Map showing 195 Fruit & Nut Village orchard trees in less than one square kilometre displayed on TreePlotter, Stirchley

To ensure a more equitable distribution of environmental and community benefits, future orchard planting should prioritise North Birmingham, where large areas of

open space exist but community orchards remain underrepresented. Targeted investment, partnership development, and community capacity-building in these wards would help to balance provision across the city and support Birmingham's wider ambitions for a resilient, connected urban food system.



Photo 4, Berryfields Orchard, home to 13 of the 286 orchard trees of the North, Sutton Walmley and Minworth, June 2025

Observations on Birmingham Orchard

During site visits across Birmingham, a range of design approaches were observed, with several examples of best practice consistently emerging. Key factors influencing orchard success included tree spacing, layout, rootstock selection, staking and guarding, mulching, irrigation, understory management, signage, and

the provision of orchard furniture.

Smaller orchards—typically comprising 10 to 15 trees—were found to be established more effectively. This scale provides enough trees to create a recognisable feature and community focus, while remaining manageable for volunteer-led maintenance.

A recurring issue, however, was insufficient spacing between trees, observed in both establishing and established orchards. To ensure healthy development and ease of management, fruit trees should be planted with a minimum spacing of 7 metres between tree centres. This allows for adequate air circulation—helping to reduce pest and disease pressure—while also enabling machinery access for ground maintenance and ensuring access for pruning and harvesting.

Whilst favoured for biodiversity, trees on larger rootstock grow to become unmanageable by volunteers. For apples, MM106 is the best rootstock for use in open grown orchards, its semi dwarfing qualities are perfect for community use. M116 is also worth considering for replanting and where P&D issues are present. Rootstocks with similar qualities for other species include Quince C for pears, and St Julien A for *Prunus*.

A consistent pattern of successful establishment practices also emerged. Fruit trees are best planted as bare-root maidens or feathered maidens, supported by a single stake (1.8 m × 75 mm) and a 50 cm diameter cage at a minimum height of 1.5 m. Using 4 screws and 2 brackets to attach cages to stakes, as opposed to fencing staples, enables cages to be temporarily removed for maintenance and easily reattached. A thin horticultural tie should be used to prevent abrasion where the tree meets the cage, while still allowing sufficient mechanical action to promote strong root anchorage. Where available, farm yard manure (1 wheel barrow load per tree), topped with wood chip (2 wheel barrow loads per tree) should be used as an organic mulch, moisture retainer and discourage over zealous strimmer and mower operators from damaging stakes and cages. The base of trees should be kept weed free at a radius of 0.5 meter minimum from the centre, until at least year 3 through weeding and mulching.



Photo 5, A fruit tree planted accorded to best practice in Minworth Community Orchard, Sutton Walmley and Minworth, January 2025

The infrastructure to provide irrigation—both during establishment and, in extreme conditions, for mature trees—is crucial to ensuring long-term orchard health. Access to rainwater harvesting systems, mains water, and the labour capacity to deliver watering can make a significant difference to survival rates during dry periods. Recent years have illustrated this contrast clearly: 2024 was a relatively mild and wet summer, with trees establishing well and requiring minimal intervention, whereas 2025 brought prolonged drought, causing widespread stress and higher mortality rates among newly planted bare-root stock.



Photo 6, Severely drought stressed trees in Tile Cross Community Orchard, Sheldon, August 2025



Photo 7, The scorched stem of an apple tree, surrounded by burnt grass as the result of a grassland fire in Stechford hall Park, Bromford & Hodge Hill, August 2025

These experiences underline the necessity of planning for drought resilience, including installing irrigation infrastructure, applying mulch to conserve soil moisture, and coordinating community-based watering during extended dry spells. One example of innovative practice is the Fruit & Nut Village watering sessions along the River Rea in Stirchley, where volunteers collect water directly from the river using buckets to irrigate newly planted trees.

Emerging technologies from the wider urban forestry world also present opportunities. Although traditional irrigation bags are too bulky and abrasive to attach directly to young bare-root maidens, they can still be used effectively by securing them to a freestanding stake, allowing water to infiltrate the root zone slowly and consistently.



Photo 8, A demonstration of the use of self supported watering bags on establishing fruit trees on display at RHS Rosemoor

The strongest orchard examples across the city were those supported by meaningful and ongoing community engagement. This was evident not only in the condition of the trees but also in the quality of the surrounding infrastructure. At Balaam Orchard in *Frankley Great Park*, for instance, an excellent orchard trail has been established, incorporating QR codes that allow visitors to access information about individual trees. Across Birmingham, many of the best-maintained orchards featured clear signage, maps, interpretive boards, and welcoming elements such as commemorative benches, archways, and seating areas—features that encourage visitors to pause and connect with the space. These orchards typically demonstrated higher standards of care and stewardship.

In contrast, sites with little or no community engagement frequently showed signs of neglect. One stakeholder provided a list of trees planted between 2023 and 2025; however, upon visiting these locations, many trees were found to be dying, dead, vandalised, or entirely absent. In this case, fruit trees had been distributed to small community groups without follow-up support, training, or ongoing engagement. The absence of this essential aftercare infrastructure resulted in poor outcomes and demonstrated that planting alone is insufficient without long-term, community-centred stewardship.



Photo 9, An orchard map at Mallard Community Orchard, Acocks Green, July 2025

Elsewhere, planting techniques novel in the community provide an interesting case study. At Ravenfield Close in *Alum Rock* and in Highbury Park, *Moseley*, dwarf fruit trees had been trained into cordons and espaliers. While these restricted forms allow productive fruit growing in small spaces, they require regular and skilled maintenance to remain healthy and fruitful. In both locations, however, the trees did not appear to be receiving the necessary ongoing care. Many had grown into one another, lost their intended structure, and were no longer producing fruit effectively. These examples highlight the importance of matching planting styles with the maintenance capacity of the community groups responsible for their long-term care.



Photo 10, Cordon trained dwarf fruit trees on verge in Ravenfield Close, Alum Rock, August 2025

Two orchards—Percy Road Park (Sparkhill, 4 trees) and a larger planting along the north bank of the River Rea in Frankley Great Park (82 trees)—were notable for the use of heavy standard nursery stock. The larger orchard was planted as part of a housing development under a landscape plan, rather than through community-led planting. Although both sites exhibited low mortality rates, overall growth since planting had been limited, reflecting the transplant shock commonly associated with larger rootballed stock. For most community projects, however, the high cost, specialist handling requirements, and physical weight of heavy standards make them an impractical alternative to bare-root planting, which is both more economical and more reliable for establishing resilient community orchards.

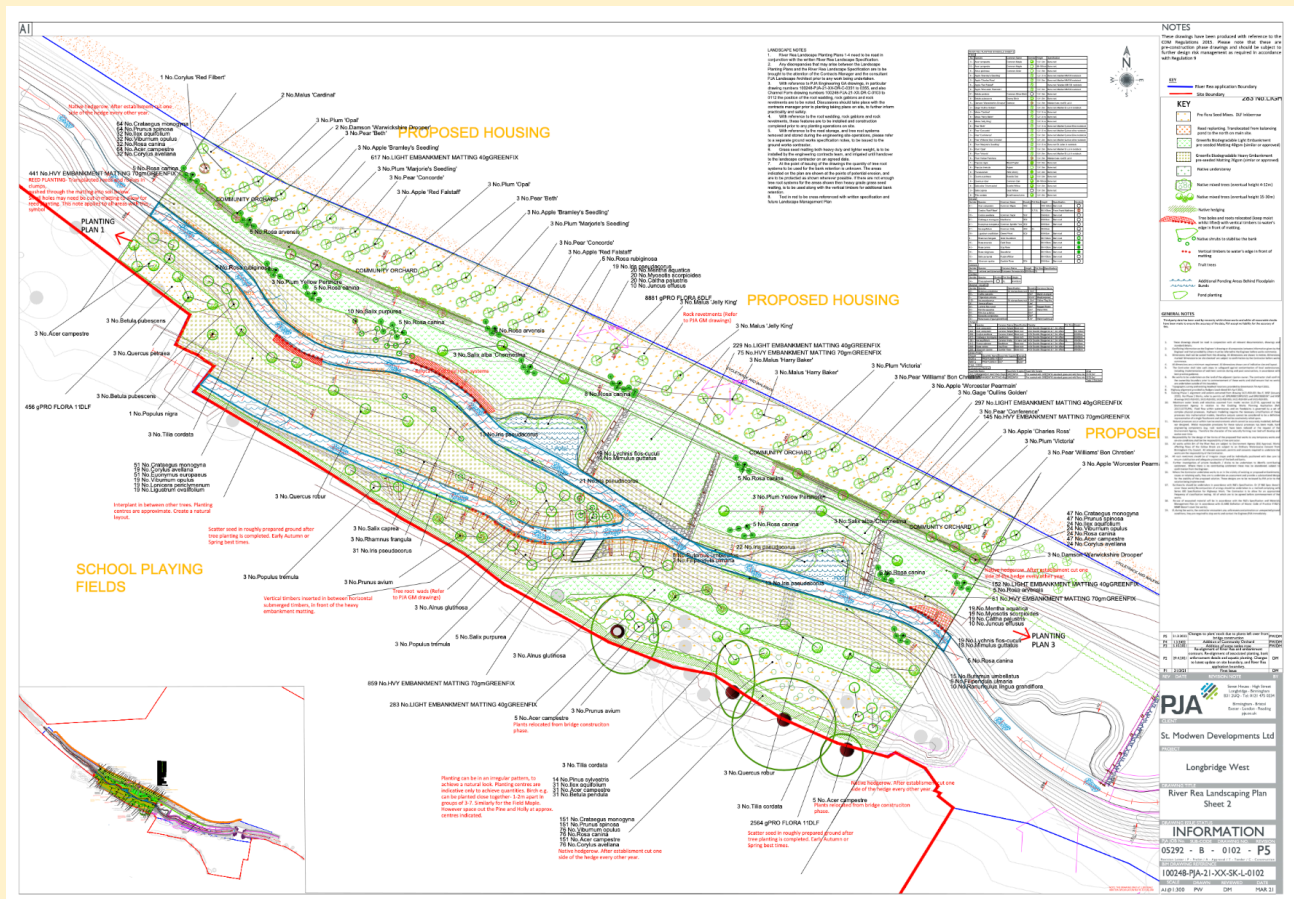


Figure 6, A landscape plan showing the planting along the north bank of the River Rea, Frankley Great Park

Volunteer Contribution

The project benefited significantly from the involvement of trained volunteer surveyors (see Appendix 3 for further details). Owing to the dispersed distribution of orchard sites across the city, travel was required between locations. This made group training sessions impractical; instead, volunteers accompanied the researcher individually for intensive, hands-on introductions to orchard surveying. These one-to-one sessions provided a focused crash course in fruit tree identification and the use of the TreePlotter software platform. Training opportunities were promoted through the Birmingham TreePeople network, helping to engage individuals already active in urban forestry and community environmental work.

In addition to supporting surveying activities, the project contributed to two community-focused practical events: a joint Fruit & Nut Village and Birmingham TreePeople fruit tree planting day at Stechford Hall Park, *Bromford and Hodge Hill*, and a Summer Pruning Workshop delivered in collaboration with the Women of Worth group at St John's House, *Alum Rock*. These events not only strengthened community connections but also helped build local skills and confidence in orchard establishment and ongoing tree care.



Photo 12, A summer Pruning Workshop at St Johns House, Alum Rock, May 2025

Limitations of the Methodology

This research provides the first comprehensive, city-wide inventory of publicly accessible fruiting trees in Birmingham, and is believed to be the first survey of community orchards of this scale in the UK. While the methodology developed for the study enabled the consistent recording of a large number of sites, several limitations became apparent during the process.

Despite extensive desk-based research and on-the-ground verification, it is likely that some publicly accessible orchards were not identified within the scope of this project. As additional sites come to light—either through community engagement or continued fieldwork—they can be incorporated into the map.

A key constraint was the decision not to record planting dates for each tree. Although this was judged impractical at the outset—given the lack of historical records and the scale of the survey—it became clear that capturing a simplified age-class metric (for example, categorising trees as *establishing*, *established*, or *veteran*) would have added considerable value. Such an indicator would have strengthened the ability to interpret tree condition, management needs, and potential productivity across sites.

The methodology also did not include the collection of i-Tree Eco parameters, meaning it was not possible to estimate wider ecosystem service benefits such as carbon storage and sequestration, stormwater interception, pollution removal, and avoided runoff. Similarly, while the survey provides an accurate distribution dataset, it does not allow for a reliable calculation of total annual fruit yield for Birmingham's orchards. As a broad reference point, a healthy, mature Worcester Pearmain apple on an MM106 rootstock (open-grown and well managed) typically produces 40–80 kg of fruit per year, with annual variation ranging from 25 kg in poor years to around 120 kg in very favourable seasons. However, the absence of age and canopy metrics in the survey means such yield modelling cannot currently be applied across the city's population of fruit trees.

Time constraints also shaped the data collection. A total of 1,680 trees were individually visited, plotted, and surveyed within the project window, but many additional attributes could now be collected given that location and species data

have been established. Developing a volunteer network—particularly one that engages residents living near surveyed trees—would enable ongoing data gathering at a scale and frequency not achievable within the timeframe of this study.

Finally, from a food-security perspective, the scope of the methodology was limited to *publicly accessible* fruiting trees and orchards. Expanding future research to include *semi-accessible* and *private* spaces—such as allotments, school orchards, community gardens with restricted access, and privately owned land—would provide a more complete picture of Birmingham’s urban fruit resource. Many private individuals or landowners may also be interested in contributing to a wider initiative focused on the management, use, or redistribution of surplus fruit.

Recommendations: Care of Existing Orchard Spaces

Birmingham’s network of publicly accessible orchards represents a valuable community and ecological asset. Currently, these spaces are managed to varying degrees—some excellently, others minimally or not at all. To ensure they continue to deliver environmental, social, and cultural benefits, proactive management and long-term investment are essential. Alongside future planting to improve orchard equity across the city, it is equally important to bring existing orchards under consistent, best-practice management. The following recommendations are proposed:

1. Establish a Birmingham Orchard Network

- Bring together existing orchard stakeholders—including Friends groups, community organisations, and volunteers—under a shared network.
- Provide coordinated training and resources to support consistent orchard care.
- Develop a citywide management strategy covering inspection, pruning, mulching, irrigation and pest management.

2. Plan for replacement and mitigate disease

- Conduct regular health assessments to identify disease, drought stress, vandalism, or structural issues.
- Prioritise replacing losses with diverse, climate-resilient species and cultivars, including more non-Rosaceae species.
- Maintain a balanced age structure to prevent simultaneous senescence and ensure long-term continuity.

3. Improve Interpretation and Engagement

- Install high-quality signage, orchard maps, QR-linked tree trails, and interpretive boards explaining species, cultivation, and seasonal activities.
- Organise events such as wassails, blossom walks, harvesting days, and apple pressing to encourage a sense of ownership.

4. Build on the Work of This Survey

- Provide TreePlotter training to community groups, enabling accurate recording of new plantings, rootstock choice, cultivar, establishment method, and aftercare records.
- Use the baseline dataset to identify neglected orchards and link them with volunteers or partner organisations.
- Expand future surveys to include metrics such as yield, pruning status, pest/disease incidence, canopy condition, and the presence of irrigation or mulching.

5. Secure Long-Term Governance and Funding

- Integrate orchard management within Birmingham's wider urban forestry, biodiversity, climate resilience and food-growing strategies.
- Establish a small grants fund to support annual maintenance, signage and replacement planting.
- Develop partnerships with local businesses and corporate sponsors to secure sustained funding through social value commitments.



Photo 11, Surveying with a volunteer along the River Rea, Frankley Great Park, June 2025

Recommendations: Future planting and establishment

Future orchard planting in Birmingham presents a significant opportunity to build on the foundations established by this project—addressing gaps in orchard distribution, improving species diversity, and planning for a more climate-resilient urban fruit tree population. The following recommendations aim to guide the strategic establishment of new orchards across the city in alignment with the Birmingham Food System Strategy, the Urban Forest Masterplan and the City of Nature Plan.

1. Prioritise Equitable Orchard Distribution

- Target new orchard planting in wards currently without publicly accessible orchards, particularly in North/East Birmingham where significant gaps exist.
- Use the orchard dataset to identify suitable planting sites within parks, schools, allotments, and community open spaces.

2. Diversify Family, Genera, Species and Cultivar

- Reduce overreliance on the Rosaceae family by incorporating a wider range of fruiting species, including Ficus, Morus, Diospyros, Eriobotrya, and Asimina.
- Within traditional orchard genera (Malus, Pyrus, Prunus), prioritise cultivars adapted to warmer southern climates with lower winter chill requirements and improved drought tolerance.
- Encourage mixed-species orchards to reduce vulnerability to pests and diseases and to improve ecological resilience.

3. Build resilience into Orchard Design

- Plant sufficient tree numbers to ensure long-term functionality and resilience, allowing for some losses during establishment.
- Favour bare-root stock for most community orchard projects due to lower cost, easier handling, and faster establishment compared with heavy-standard trees.
- Incorporate climate-adapted design principles, including mulched planting areas and access to reliable irrigation during establishment.

4. Create Orchards that Support Ecology and People

- Space and structure new orchards to allow for ease of maintenance, fruit harvesting, and community access.
- Integrate ecological features such as hedgerows, meadow grass understoreys, or non-orchard species planting to support biodiversity and natural pest regulation.
- Plan for inclusive access routes, clear pathways, and areas suitable for education and community events.

5. Embed Community Stewardship from the Outset

- Co-design orchards with local residents, schools, community groups, and cultural organisations to build long-term ownership.
- Provide hands-on training in planting, pruning, mulching, irrigation, and aftercare to ensure that communities have the skills needed for ongoing management.
- Establish stewardship agreements and clear maintenance plans to prevent the decline that has occurred in some existing orchards due to a lack of post-planting engagement.
- Encourage early community events—such as planting days, blossom walks, and harvest celebrations—to strengthen local identity and investment.

A Vision for the Future

Across Birmingham's orchard community, there is a collective shared goal: that every household in the city should be able to enjoy a bowl of fruit each year grown entirely from Birmingham's publicly accessible fruit trees. Our friends at Fruit Works in Leeds hold a comparable vision—aiming for every resident to live within a 20-minute walk of a public food-growing space. Together, these goals reflect a wider national movement to integrate food production into everyday urban life.

Birmingham has approximately 423,000 households. To provide each with 2 kg (1 bowl) of locally grown fruit per year, the city would need to produce around 846,912 kg annually. Using a medium annual yield estimate of 37.5 kg per mature tree this equates to a requirement for approximately 22,500 established, productive trees.

Spread evenly across the city's 69 wards, this equates to around 326 publicly accessible fruit trees per ward. Notably, this is only 15 more trees than are already present in Stirchley, demonstrating that the scale required to meet this city-wide vision is both tangible and achievable. If replicated across Birmingham, Stirchley's model offers a credible blueprint for creating a resilient, abundant, and community-led urban fruit network.

Additionally, we aim to strengthen the fruit tree nursery supply chain in Birmingham. This will be achieved by teaching more people how to propagate fruit trees through grafting and by establishing community fruit tree nurseries. Alongside this, it is important to create a Birmingham Fruit Collection or "mother orchard" of local fruit varieties from Worcestershire, Warwickshire, and Staffordshire, serving as a genetic resource to support future propagation efforts.

Conclusion

This project represents the first comprehensive mapping and survey of publicly accessible fruit trees and orchards in Birmingham, establishing an essential evidence base for future planning, management, and community engagement. The documentation of 1,680 fruit trees across 86 orchards provides a clear picture of both the strengths and the inequities within the city's current orchard network.

The findings demonstrate that Birmingham possesses a substantial foundation upon which to build a fairer, more resilient, and more productive orchard system. However, they also underline the importance of coordinated long-term care.

The report also identifies significant opportunities for future development. Diversifying beyond the Rosaceae-dominated composition of current orchards, adapting planting choices to a warming climate, and strengthening community stewardship will all enhance ecological resilience and long-term productivity. Equally, the establishment of a Birmingham Orchard Network and improved governance structures would provide the coordination needed to support sustained growth and equitable access across all wards.

Crucially, the project points toward an ambitious but attainable long-term vision: a city where every household can enjoy a bowl of fruit each year from Birmingham's own publicly accessible orchards. Achieving this will require the establishment of approximately 22,500 productive fruit trees city-wide—an aim made credible by existing successes such as Stirchley, where community investment has already delivered nearly the density required to meet this city-wide benchmark.

Through its mapping, analysis, and engagement work, this project lays the foundations for a new phase of orchard development in Birmingham—one that strengthens food security, enhances biodiversity, builds community capacity, and contributes meaningfully to the city's climate resilience and wellbeing. With continued investment, coordinated management, and community leadership, Birmingham has the opportunity to become a national exemplar for integrated, community-led urban fruit growing.

References

Birmingham TreePeople Tree Plotter - <https://uk.pg-cloud.com/BTP/>

Canal and Rivers Trust - [Great Canal Orchard](#)

Fruit & Nut Village sites map - fruitandnutvillage.org.uk/oursites

The Orchard Project's historic map of orchards planted - [Google Maps link](#)

Birmingham Food Growing Map - [BCC Website](#)

Leed Orchards - [BBC News](#)

George Fox Apple - <https://www.fruitworks.org.uk/trees/p/george-fox-potted>

Birmingham Orchards Map 2025 - [My maps link](#)

Appendices

Appendix 1 - Tree species Breakdown

Common Name	Scientific Name	Plant Family	Number of Trees in Birmingham	% of Total (1,680)
Apple	<i>Malus domestica</i>	Rosaceae	776	46.2%
Plum / Cherry / Other stone fruit	<i>Prunus</i> sp.	Rosaceae	563	33.5%
Pear	<i>Pyrus communis</i>	Rosaceae	223	13.3%
Quince	<i>Cydonia oblonga</i>	Rosaceae	33	2.0%
Walnut	<i>Juglans regia</i>	Juglandaceae	31	1.8%
Medlar	<i>Mespilus germanica</i>	Rosaceae	16	1.0%
Fig	<i>Ficus carica</i>	Moraceae	12	0.7%
Mulberry	<i>Morus nigra</i>	Moraceae	9	0.5%
Hazel	<i>Corylus avellana</i>	Betulaceae	5	0.3%
Sweet Chestnut	<i>Castanea sativa</i>	Fagaceae	4	0.2%
Bay Laurel	<i>Laurus nobilis</i>	Lauraceae	2	0.1%
Pomegranate	<i>Punica granatum</i>	Lythraceae	1	0.06%
Wild Service Tree	<i>Torminalis glaberrima</i>	Rosaceae	1	0.06%
Greek Strawberry Tree	<i>Arbutus andrachne</i>	Ericaceae	1	0.06%
Judas Tree	<i>Cercis siliquastrum</i>	Fabaceae	1	0.06%
Himalayan Dogwood	<i>Cornus capitata</i>	Cornaceae	1	0.06%
Juneberry / Serviceberry	<i>Amelanchier canadensis</i>	Rosaceae	1	0.06%

Appendix 2 - Distribution of Publicly Accessible Fruit Trees by Ward in Birmingham with North/South (N)/(S) indicator

Ward	No of fruit trees	Ward	No of fruit trees
Acocks Green (S)	29	Lozells (N)	0
Allens Cross (S)	0	Moseley (S)	51
Alum Rock (S)	12	Nechells (N)	0
Aston (N)	0	Newtown(N)	13
Balsall Heath West (S)	132	North Edgbaston (S)	0
Bartley Green (S)	104	Northfield (S)	83
Billesley (S)	13	Oscott (N)	0
Birchfield (N)	0	Perry Barr (N)	30
Bordesley & Highgate (S)	0	Perry Common (N)	0
Bordesley Green (S)	0	Pype Hayes (N)	0
Bournbrook & Selly Park (S)	56	Quinton (S)	0
Bournville & Cotteridge (S)	17	Rubery and Rednal (S)	0
Brandwood and Kings Heath (S)	0	Shard End (N)	0
Bromford & Hodge Hill (N)	20	Sheldon (S)	30
Castle Vale (N)	0	Small Heath (S)	0
Druids Heath & Monyhull (S)	120	Soho & Jewellery Quarter (N)	21
Edgbaston (S)	135	South Yardley (S)	0
Erdington (N)	0	Sparkbrook & Balsall Heath East (S)	42
Frankley Great Park (S)	30	Sparkhill (S)	24
Garretts Green (S)	0	Stirchley (S)	311
Glebe Farm & Tile Cross (N)	15	Stockland Green (N)	0
Graveley Hill (N)	0	Sutton Four Oaks (N)	0
Hall Green North (S)	15	Sutton Mere Green (N)	0
Hall Green South (S)	0	Sutton Reddicap (N)	0
Handsworth (N)	0	Sutton Roughley (N)	25
Handsworth Wood (N)	0	Sutton Trinity (N)	64
Harborne (S)	0	Sutton Vesey (N)	0
Heartlands (S)	0	Sutton Walmley & Minworth (N)	98

Highter's Heath (S)	15	Sutton Wylde Green (N)	0
Holyhead (N)	0	Tyseley and Hay Mills (S)	0
King's Norton North (S)	15	Ward End (N)	0
King's Norton South (S)	29	Weoley & Selly Oak (S)	28
Kingstanding (N)	0	Yardley East (S)	2
Ladywood (S)	101	Yardley West and Stetchford (S)	0
Longbridge and West Heath (S)	0		

Appendix 3 - Project Volunteer Engagement

Number of volunteers trained / involved in the project = 24

Number of people who contributed to the map = 6

Number of people accessing the map online = data not available

Number of community groups map shared with = all stakeholders/map is publically accessible

Gender of volunteers

- 75% female
- 12.5% male
- 12.5% non-binary / prefer not to say

Ethnicity

- 35% White
- 40% Asian
- 10% Black
- 10% Mixed, Other, or Prefer not to say

Age groups

- 20% under 25
- 45% 25-49
- 30% 50-69
- 5% 70+

Appendix 4 - Examples of signage found in Birmingham Orchards



Photo 12, Signage at Highbury Orchard, Moseley, June 2025



Photo 13, Commemorative bench at New Hall Valley Community Orchard, Sutton Walmley and Minworth, June 2025



Photo 14, Signage at Manor Farm Park Community Orchard, Weoley and Selly Oak, June 2025



Photo 14, Signage at The Fields Community Orchard, Kings Norton South, June 2025



Photo 14, QR Code at Balaam Wood Community Orchard, Frankley Great Park, June 2025