



Core Landscapes - a Core Arts project



A local response to tackling the climate and biodiversity emergencies



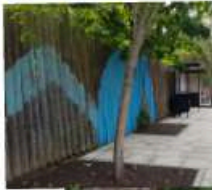
Core Landscapes is a Core Arts project
Charity no: 1043586

Greening up Homerton

Creating green havens for the community. By the Community

Core Landscapes promotes positive mental health by transforming underused land in deprived urban areas into hubs for community engagement using horticulture, design, workshops, training and events - improving mental and physical health, developing skills and creating opportunities. Our spaces increase biodiversity and address climate change empowering people to steward local environments. Core Landscapes is a Core Arts project.

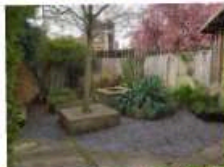
Since relocating from Whitechapel in 2019 Core Landscapes has transformed 5 urban sites in Hackney: Wardle Street, Core Arts roof garden and members garden, a meadow and orchard in Homerton grove, and Core Arts community garden behind St Barnabas Church.



Wardle Street planting



Roof garden



Core Arts members garden



Homerton Grove meadow



Homerton Grove Orchard



Core Arts Community Garden

Thank you to our funders:



MAKING OUR LONDON
GREENER CITY FUND



Hackney



www.corearts.co.uk | www.core-landscapes.co.uk | @corelandscapeslondon

Core Landscapes Urban Green Corridor (above and below)



Core Landscapes transforms under used green spaces in deprived urban environments to promote positive mental health and sustainable greening techniques, tackling climate change and increasing biodiversity in the local area. It is part of the award-winning mental health charity Core Arts who work across the arts, sports and horticulture to promote positive mental health. Our green corridor consists of:

- **Core Arts Community Garden: a new 1600sq2 community garden behind St Barnabas Church (above)**
- Roof Garden: Wardle Street
- Core Arts smaller Garden: St Barnabas Terrace
- Homerton Grove Community Orchard: public space
- Homerton Grove meadow strip: alongside pavement in front of Homerton Hospital
- Wardle Street tree pits and planters: 7x tree pits and 7x street planters



Green corridor map



Our wild roses on Chatsworth Road



Mullien along Wardle Street

Climate Change

Core Landscapes addresses the climate change emergency at a local level by raising awareness and demonstrating what we can do about it collectively, reusing, repairing, recycling, and repurposing resources, promoting solar-powered rain-harvested irrigation systems, demonstrating flood mitigation with a SUD's area (sustainable urban drainage system), recycling rainwater on from our roofs and using an array of regenerative growing practises. We aim for a zero carbon footprint across our green sites.



Living wall using recycled tyres



Food growing using recycled bowlers



Green roof for pollinators

Annually Core Landscapes works with 80 – 150 students and volunteers, and 250+ corporate volunteers to nurture the 6 very different growing areas across the green corridor surrounding the Core Arts centre in Homerton - each with its own set of challenges and opportunities. The public footfall across the sites is at least 10,000+ p/a.

(below) SUD's demonstration area in Core Arts community garden behind St Barnabas Church



Gravel grid infilled with site top-soil and grit impregnated with seed collected from our meadow strip in Homerton Grove (Above)



Prep for wheelchair accessible SUD's area



Plastic gravel grid made from recycled plastic in UK

Roof Garden – Rain Garden on Wardle Street



With funding from the “Our Space” grant we increased our capacity to:

- Collect 1,000 litres of rain water and water run off from our roof garden in the area below
- Pump run off back up to the roof with a solar powered pump
- Create 10x new growing containers from reconfigured recycled bowzers
- Create a roof top pond for thirsty invertebrates
- Install a 12sqm green roof utilising up-cycled materials
- Install a living green wall using recycled tyres
- Improved signage to attract more visitors



11,000litres capacity rain-water harvesters across our green corridor



Liquid fertilizer from nettles



and Comfrey



Cutting up compost



Any extra sourced is peat free

Reduce Reuse Recycle

For the past 11+ years, in 4 different locations across 3 boroughs, Core Landscapes has upcycled, recycled and reused materials creatively to construct and develop the project. This ethos has culminated in the permanent sites we now steward in Hackney and is integral to our projects identity and sustainability.

The waterproof membrane on our roof garden is covered with thick felt and astro turf - upcycled from Groundwork and the Olympic sites in Canning town 10 years ago. It has moved with us from site to site to create a safe ground over rubble on derelict land and to go under the containers on the current roof garden.

As the astro turf is porous and the felt under it is absorbant, plants are able to extend their root systems directly into it. This gives them more resilience to absorb more rainfall. This run off also enables self-seeders to germinate and root runs to extend from some of our large pot grown plants. It also creates more humidity on the roof lowering the rate of water loss through transpiration in the summer.

Green manure is regularly sown in late autumn as a means to replenish the soil and a large amount of seed is collected each year to sow again the following season. And drivers are encouraged not to idle outside the sites;



Phacelia grown as green manure



Planters from old bins



Drivers asked not to idle engines

Carbon footprint aware – across the sites we adhere to:

- No single use plastic on site - including drinking water bottles
- No disposable/breakable module trays
- Only use recycled plant pots
- Utilise up-cycled and recycled timber
- New Timber is FSC sourced

We now use solid module trays made from stiff durable recycled plastic that will not break up over time so should not need to be replaced. Our plant pots and carrier bags for plant sales are all from recycled donations or biodegradable.



Reconfiguring recycled bowsters



Solar panel to pump water back up to the roof



Improved signage



Street planters using rain run-off



Mobile solar powered



Improved signage

Across the sites there are;

- 7,000litres aerobic home-made compost systems
- Womery, Bokashi, and general garden composts to manage waste materials
- Homemade liquid fertilisers (nettle + comfrey)
- Separate leaf mould collections annually

Sustainability at it's heart

All the spaces utilise organic, sustainable + regenerative growing principles with sound soil management and “*Right Plant Right Place*” ethos at it's heart. We aim for a low carbon footprint across the projects aspiring to a zero carbon footprint, advocating a “closed loop” system wherever possible; reusing, retaining and replenishing within our site or locally. We do not use synthetically produced fertilisers, herbicides or pesticides requiring fossil fuels for production and that disrupt and destroy natural eco-systems.

Within our lessons and volunteer sessions people learn organic gardening techniques that make a positive difference to themselves and the environment whilst mitigating climate change and the ecological emergencies we are currently faced with.



(above and below)

Core Arts smaller street level garden developed and maintained by Core Landscapes volunteers and students using recycled timber, stone pavers and slate shingle, donated and home grown plants.



(Below) Core Landscapes roof garden



Biodiversity

Bio-diversity

The 6 planting areas that make up our green corridor provide habitats, food and water sources to promote biodiversity and through careful soil management, plant choice, and plant care we have vastly increased the range of flora and fauna in the local neighbourhood. The roof garden, street level garden, community orchard, meadow strip, and tree pits and planters, and the ongoing development of a new community garden, are all designed with bio-diversity in mind: to increase diversity through increase of habitats, food and water supplies and over wintering shelter.

Street signage installed with QR codes along Wardle Street and the meadow links to films explaining, and connecting to local people the aim of the planting to nurture bio-diversity. There is a particular focus on flowers to attract pollinating invertebrates such as bees, butterflies, moths, hoverflies, wasps, flies and beetles.

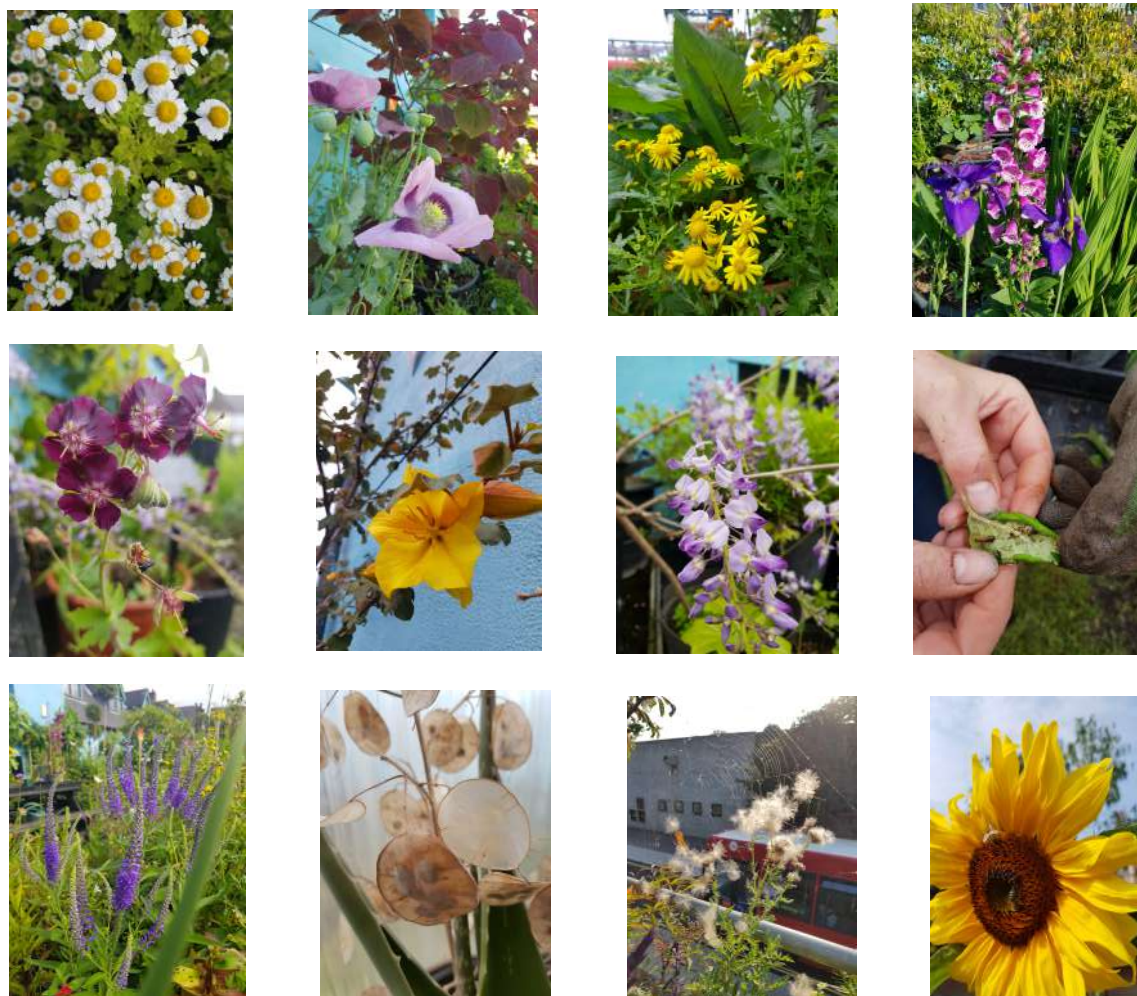
By inclusively, and purposfully engaging with the natural world people are empowered to help steward the range of green spaces that embrace these techniques across our 2,000m² green corridor that links Homerton Hospital with Homerton High street and has a footfall of over 10,000 p/a.

- Care of 60m long meadow strip with pollinator friendly planting
- Care for 7 x tree-pits and 7 x street planters with pollinator friendly flowers
- Wild flowers left to self-seed on the roof garden and in the meadow
- Wide range of pollinator friendly flowers and shrubs grown in the street level garden
- Pollinator friendly flowers, shrubs, trees and bulbs grown throughout the year
- 3 x ponds in the street level to increase bio-diversity and provide water for invertebrates
- 1 x pond created on the roof garden for thirsty invertebrates
- Log piles created under seating to provide habitats for beetles, frogs and toads
- Some area of bare soil left for specialised habitats
- Nest boxes provided for birds. Robins and Wrens often use them
- Seed heads left on for habitats, and food supply and seed collection

Sustainable and ecological practises employed across all Core Landscapes green spaces include:

- Homemade Garlic spray for natural deterrent
- Companion planting E.g Tulbagia for to deter black fly
- Catch crops E.g. Micro green Rocket in amongst sweet potatoes

Core Landscapes has never used peat based composts or soil, instead combining home made composts with peat free top soil and 'mulch and mix' organic based compost sourced from areas surrounding London, and bark chippings mulch sourced from Hackney based arboculturalist. We teach about the important role intact peat bogs in carbon sequestration. We reintroduce spent soil into our growing medium working towards a 'closed loop' model.



(Above) Wide variety of flowers of drought tolerant plants are grown and ones to promote bio-diversity

Efforts to reduce water loss

Core Landscapes focuses on preserving and increasing soil life and structure by replenishing the top layer of container growing plants with moisture retentive compost annually and mulching all planting with a 1- 2" layer of organic based mulch annually. A combination of homemade compost and upcycled locally sourced top soil from local landscaper is supplemented as required by peat free manure and bark chipping based mulch.

Effective soil and moisture management means more water retention and less irrigation. A rich soil bio-diversity is maintained using our homemade compost, wormery, and organic nettle + comfrey liquid feeds.

Annual mulch	Thick layer or organic based mulch: 1-2" on soaked soil
Incorporation of organic material for moisture retention	Home made compost, well rotted manure, well rotted bark chippings, leaf mould compost
Annual organic top ups for containers	To preserve soil integrity
"No dig" system	To preserve soil structure and soil ecosystem
Organic principles	No synthetic herbicides or pesticides used



Mulch is used around shrubs, perennials, and trees to conserve moisture

Water Conservation

Much consideration is given to collecting, storing and diverting rain water and water run-off to minimise the dependency on mains water supply for irrigation; A combination of regenerative soil management, appropriate use of container growing, mulching and utilising drought tolerant plants results in minimal need for mains irrigations systems. Additionally solar energy is utilised to increase water pressure for our water harvested irrigation systems.

Retaining moisture	By focusing on sound soil management, mulch, no dig systems, moisture retaining liners for container grown plants or use of moisture retentive plastic bowsers for large planters.
Regenerative soil care	For large containers the top 2 inches of soil is replaced with compost annually to add organic nutrients and help keep the soil life active.
Collecting rain water	We utilise 11 x 1000litres water bowsers, plus 4 x 210 litres water butts/storage units with additional run-off storage. 11,840litres in total.
Diverting rain water Diverting run off (from irrigation system and rainfall)	Irrigation run off and rain water from the roof garden is collected via guttering to collect in butts on the level below and used to water the plants under the roof that have no/little to natural rainfall.
Solar Powered pump for rainwater irrigation	Adequate pressure to pump the collected rain water in the Core Arts garden and the large street planters on Wardle Street are powered from 3 sets of solar panels in the 3 different locations.
Gravity powered rain water irrigation	5 x street planters are irrigated largely from rainwater collected and stored on the roof and diverted to the planters below.
Large containers for container growing	Where there is no ground to grow in the largest containers as possible are used to retain moisture.

Planting design to take account of climate change

The Roof garden

is especially susceptible to climate change, excessive heat in summer (40+ degrees at times) and exposure. Over the past 4years we have been observing what wildlife friendly planting has been thriving with little intervention from us and adding more of those plants, including allowing some wild self-seeders.

Particular favourites are:

Perennials: *Euphorbia mellifera*, *Bearded Iris*, *Agapanthus*, *Leucanthemum*, and *Scabious*.

Trees: *Conifers*, *Eucalyptus*, and *Hamamelis mollis*.

Shrubs: *Coronilla* and large leaved *Hebes*

Biennials: *Verbascum Mullein*, *Evening primrose*

Vines: *Parthenocissus henryana*, *Humulus lupulus* and Grapes

To encourage and increase bio-diversity drought tolerant self-seeders are left to seed along the edges of the astro turf of the roof garden including;

Rose bay willow herb

Herb Robert

Evening primrose

Clover and

Feverfew

Planting the Community Orchard in Homerton Grove



Weeping mulberry planted Feb 2021

Core Landscapes volunteers and students continue to look after the community orchard and meadow in nearby Homerton Grove. The orchard does require watering during London heat waves but this is mitigated with 3 -4 adding of mulch around the trees and keeping them clear of other plant growth.

- 7 x drought tolerant fruit tree varieties (apples, mulberry, golden gage, plum and apricot)
- Semi-vigorous root stocks for strong root growth
- Michorizzal fungi added at planting
- Root holes dug out deeper to replace aggregate from under the root systems
- Minimum of 1-2" mulch used with minimum 1 metre in diameter

The orchard was well-watered in this first growing season to establish the orchard successfully and regularly checked, pruned, watered and mulched, as required, by volunteers, students and staff.



Harvesting mulberries July 2021



Apricot tree in blossom



The adjacent perennial meadow strip will aid pollination, increase crop production and bio-diversity (see below)

The Meadow in Homerton Grove planted + sustainably maintained by Core Landscapes



Meadow after laying turf March 2021



Mid-summer 2021



Late summer 2023

Meadow Strip 1.2m x 50m

Was planted with;

- Perennial meadow turf with drought tolerant plants suitable for full sun

From the second year we made the decision not to water the meadow, even in excessively hot and dry weather. It is not sustainable to have to water it instead we increase the amount of drought tolerant planting as required year on year. 2024 had an increase in Verbascum mullein that has proved popular with local people for its statuesque presence and the meadow continues to increase in biodiversity of plants and wildlife year on year.

Plant examples include:

Eschscholzia californica, *Hesperis matronalis*, *Olympian Mullein*, *Verbascum olympicum*, *Coreopsis lanceolata*

The suitability of the perennials to the location means they are largely resistance to future dry summers and attract pollinators increasing bio-diversity in the area.



Meadow July 2024

Street Planting in Wardle Street

The street planting is a constant horticultural challenge and we are experimenting with what can survive the dry shade with minimal watering. Our street work includes:

7 x tree pits and 7 x street planters

Soil management:

To increase the drought tolerance of the new tree pit planting retaining edges were installed using upcycled decking boards being careful not to increase the soil level around the base of the tree trunks and the soil improved with fresh top soil and organic peat free compost.



Tree pits (Before)



Compacted soil



Retaining edges added



Soil improver added

'Right Plant Right Place':

The sunny tree pits contain drought tolerant planting (*as per above meadow planting*) and tree pits and planters in dapelled shade planted with woodland varieties that will tolerate dry shade during the peak summer months.

For example;

Silene dioica

Agrimonia eupatoria

Digitalis purpurea

Geum chiloens

Hesperis matronalis

Papavar

As the planting in the tree pits is especially vulnerable to drying out in the summer months and we irrigate with a portable water carrier at one end of the street that can be connected to a water butt for refilling. A battery, storing solar generated energy, is fixed to the bottom of the carrier and charged with via a removable solar panel.



(Before) Planting up Tree pits and planters on Wardle Street

Tree planters and tree pits on Wardle Street after planting



Portable water carrier for street watering – can connect to water butt to collect rainwater



Rain water is either pumped via solar power or gravity fed and is used for our street planting too

New Flower bed Designs

On the roof garden some new flowerbeds have been created from up-cycled crates, lined with up-cycled plastic around the edges using felt at the bottom to utilise capillary action from the rain run off on the up-cycled Astro turf on the roof garden. The felt absorbs rainfall and irrigation run off directly from the surface of the roof. The moisture within the Astro turf creates increased plant resilience and an additional root run – the roots pass through the felt at the bottom of the crate and through the Astro turf into the felt below the Astro turf. This system reduces the need for extra watering significantly.



Upcycled plastic crate flower beds



Silver birch street planters



Roof top tolerant Eucalyptus

In addition to our wide range of shrubs local air pollution is mitigated by 8 pollution absorbing Silver birches watered largely by harvested and diverted rain water.

Grass is allowed to get longer between mowings in Homerton Grove by Hackney parks dept (below) that promotes drought tolerance.



Homerton Grove meadow area

Feedback from participants and visitors to Core Landscapes



"I enjoy learning new skills and seeing the progress of our planting evolve in all the gardens. It's been nice working with new people and getting to know them. It gives me a good structure to the week in lockdown and it is good to be outside."

"I'm happy to do whatever needs to be done on the day. I like the variety of tasks needed – no session is the same and I like that. I don't have my own garden so am limited in what I can 'take home' but still enjoy learning about all the different things that others bring to the sessions too. Keep it up! The sessions are so relaxing at the same time as being informative and engaging."

"It has given me something to look forward to each week. New people to mingle with learning in a group – which means we can learn from each other mixing with different age groups, cultures etc. Being in nature in all seasons. Also working together on different projects like planting fruit trees in the park and planting up the public spaces."

"I would like to expand my knowledge of plants, how to combat disease and pests and the different soils for various plants and climates. I'd like more trips to gardens – and see how other differences in techniques."

"Walked past this space so many times it was amazing to see this beautiful space and hear more about the work you do. Looking forward to coming back in a few weeks for filming!"

"This is a truly amazing space to start with, spreading to the local area. I really love the mental health connection and how people to develop a relationship with themselves of self-care through gardening. Improving wellbeing and enjoying the experience."

"What a truly wonderful project! Made me very happy to finally visit and see the amazing work here Growing Green. An inspiration, and a little oasis for Homerton. Thankyou for showing me around and offering kind advice and practical solutions for my team to consider."

"I like the flexibility in the sessions and there are options of what to do. I like that slowly I have built up quite a bit of knowledge without having to get stressed out about trying to learn stuff. I like the relaxed atmosphere and I like the way the plants are flourishing and almost seem out of control but that it doesn't matter and they look lovely."

"I love this space and I'm really interested in the model used here in terms of a progressive path for participants as relevant to them. Very inspiring work."

Core Landscapes has also produced many 'How To' gardening films and garden tours via the website on vimeo
Core Landscapes online: www.core-landscapes.co.uk
And updates supporters regularly on facebook @communitymeanwhilegarden
and Instagram @corelandscapeslondon