



Choice

# IMPROVING STOREFRONTS IN CLINTON HILL



## Businesses for Biodiversity Project

Transforming empty public street edges into greener spaces with wildflowers that will attract pedestrians and strengthen the visibility of **small-businesses**



## Why go Green?

Vibrant wildflowers will **improve** the lively neighborhood scene and **increase** the amount of visitors in the area who can support businesses. With more flowers, comes more pollinators who will support **biodiversity** in the area.

## Revitalizing Local Charm

By maintaining local identity, individuals and businesses can continue to thrive through collaboration and finding a **sense of belonging**.



## The American Pokeweed

There are at least **30 bird species** who rely on the pokeberries as a major food source (Brooklyn Botanic Garden). Planting these would help improve the natural **ecosystem** by providing a food source and site for **pollinators**.



## Business Identity

Creating an aesthetic and vibrant storefront will **attract** customers, builds local brand **identity**, and increase sales.



## WHY WILDFLOWERS?

Wildflowers add beauty and color to a storefront and make a big **visual impact** on the street!

They can also be used as a way of **maintaining** accessible maneuvering clearances.

Scientifically, herbaceous vegetation and meadow plantings **intercept** a portion of traffic-emitted particulates (PM10/PM2.5) close to the curb. These particles are released from engine combustion, brakes, tires, and road surfaces. ([National Library of Medicine](#)).



## Final Term Project Summary

### Wildflowers: Improving Clinton Hill & Fort Greene

In the Clinton Hill and Fort Greene neighborhood, the community faces social challenges including rising commercial rents, vacant storefronts, and lack of foot traffic as smaller businesses compete with higher-end development. This economic exclusion resulting in storefront turnovers are causing a decline in local identity. The community is faced with a lack of visual appeal on the blocks that were once walkable, greener, and community-run. Empirical findings show retail areas with trees and plantings experience **9-12% increased foot traffic**. The journal article builds upon findings to show that environmental enhancement yields cumulative neighborhood economic benefits ([Cities and the Environment](#)). Access to attractive green areas correlates with higher adjacent property values and increased local tax revenue. The project highlights bringing street-level green areas with wildflowers as a plant-based response to social-economic divide: the issue may be relieved by transforming empty public street edges into places that will attract pedestrians and strengthen the visibility of small-businesses ([TPL](#)). This cause may be supported by the Storefront Improvement Program supported by the NYC Small Business Services. They aid storefront improvements to support the economic health of neighborhoods and aim to create identity. They say that plants near entrances and in front of windows add beauty and color to a storefront and make a big visual impact on the street. They can also be used as a way of maintaining accessible maneuvering clearances ([Storefront Improvement Program](#)). **Scientifically, an exclusive advantage** to planting wildflowers on a high-traffic street corridor is because herbaceous vegetation and meadow plantings intercept a portion of traffic-emitted particulates (PM10/PM2.5) close to the curb. These particles are released from engine combustion, brakes, tires, and road surfaces. While trees often remove

more PM overall, herbaceous strips at the road edge help capture freshly emitted particles before they disperse into sidewalks and homes ([National Library of Medicine](#)).

The impacted communities for this project are primarily **local-small business** owners and business entrepreneurs on Myrtle Avenue, DeKalb Avenue, and Fulton Street whose shops highly depend on neighborhood foot traffic. Additionally, long-time residents in the Fort Greene/Clinton Hill Area who may include but are not limited to working-class minority families face displacement and loss of cultural businesses/identity as rent prices rise. With higher property values, the issue of gentrification also arises. While new wildflower spaces may speed up the process of gentrification, there are ways to control the over-exploitation of developing new green spaces. In particular, Curran and Hamilton (2012: 1027) suggest that greening initiatives should go beyond glamorised visions including ‘park space, waterfront cafes, and luxury LEED-certified buildings’ to also include ‘industrial uses and the working class’. Building on this work, Wolch et al. (2014: 241) claim that JGE approaches should involve the construction of new parks that are ‘small-scale and in scattered sites’ instead of larger green spaces, engaging the community in planning to ensure that new parks fit their needs, and implementing antidisplacement initiatives to preserve and build affordable housing units ([Urban Studies](#)). New residents, students from Pratt, and visitors who are often in the area, but may not know its historical character and local charm are also considered. When thinking about these ideas, I referred to an article about improving foot traffic and made a point that creating a positive image requires keeping a place clean and well-maintained, as well as fostering a sense of identity. This identity can originate in showcasing local assets. **Businesses, pedestrians, and drivers will then elevate their behavior to this vision and sense of place.** ([Project for Public Spaces](#)).

The project focuses on native wildflowers. With this in mind, the concept of **pollination ecology** is brought into the picture. Wildflowers largely support insect populations that provide a foundation towards local food systems—hence why this project may improve the overall community. By choosing **native wildflower species**, they are able to support pollinators year-round because they have a range of blooming sequences. ([National Geographic 2023](#)).

After walking through the local neighborhoods, I found native wildflowers in Clinton Hill including **Daisy Fleabanes** (*Erigeron strigosus*) ([Observation](#)). **Common Milkweeds** (*Asclepias syriaca*) ([Common Milkweed 2020](#)), **New England Asters**, **the White Snakeroot**, and **The American Pokeweed**. After researching on iNaturalist, I found a page with wildflowers found in the New York area. These are also native to the area and may be a good scientific inspiration for the types of wildflowers that could be planted near neighborhood storefronts.

Recently, there has been construction in the area, which may contribute to degraded soils on the streetsides. A study shows that wildflowers are able to absorb metals, offering healing solutions to potentially degraded urban soils—providing a scientific outlook on improving the social issue at hand ([Nature/Cities GenoMines piece 2023](#)).

The envisioned solutions include transforming underutilized areas such as vacant lots, rooftops, storefronts, and roadside strips into wildflower-rich areas. There are a variety of advantages to incorporating **Daisy Fleabanes** to the community. They provide nectar and pollen for bees and butterflies. It is able to thrive in degraded soil and is drought tolerant, ideal for the Brooklyn streetsides. With Brooklyn having four seasons, the summers can be hot. By incorporating the Daisy Fleabanes, they can sustain these harsh conditions. Additionally they have nice aesthetic appeal with their blooming daisy vegetation and offer a natural aesthetic to any flowering lawn. ([The Rike](#)).

Research says that the **Common Milkweed** can propagate easily by seed or root cuttings and can naturalize in the garden. The fragrant flowers contain colors of green, pink, white, and lavender. The plant contains cardiac glycosides that can be absorbed by the monarch butterfly larvae whose sole source of food is milkweed foliage. The bark, flower, seed pods, leaves, roots, and stems are poisonous, deterring cats and dogs who may be walking along the street in Brooklyn. ([PennState Extension](#)). With this in mind, the Milkweeds will be fenced off to prevent animals who may be affected.

**New England Asters** fall under the *Asteraceae* family and are ranked high for beauty, ease of care, and pollinator/insect attractiveness. They are perennial spreading by seed or underground roots, they can live in full sun and partial shade and do well in most soil ([Cornell Cooperative Extension](#)). Their low-maintenance allows them to sustain most conditions. Planting asters can help preserve the native species while providing vibrancy to support the ecosystem.

The **White Snakeroot** species is abundant and widespread throughout New York City. It is able to sustain degraded natural areas and colonizes in newer areas where the shade and competition is not great. It thrives in the urban environment because it is shade tolerant and prefers neutral and basic soil. This description characterizes urban soils with generally high inputs of concrete, masonry rubble, plaster, road, salt, and more. (New York Soil Survey Staff, 2005) ([NYBG](#)). Since the White Snakeroot is another poisonous species, they will considerably be planted on raised beds and/or be covered by wired mesh.

The **American Pokeweed** has clusters of shiny, dark purple pokeberries hanging from its stems. They are distinctive, found in parks, empty lots, and gardens. It is an urban weedy plant that provides food for birds who disperse the seeds. There are at least 30 bird species who rely on

the pokeberries as a major food source ([\*Brooklyn Botanic Garden\*](#)). Planting these would help improve the natural ecosystem in the local neighborhood.

In light of these special adaptations and plant characteristics, these species are great choices for planting along the vacant streetsides and storefronts. By choosing these for my project, I found them effective in addressing my social issues because they are **highly adaptable, flourish in many soil conditions, provide pollinator support, and provide vibrancy** to the area to attract pedestrians and on-going cars. I decided to make a series of stylized acrylic paintings of my specified species over Clinton Hill storefronts to emphasize how integrating wildflowers and business facades may bring light towards this cause.

These paintings are going to be displayed in each of the local businesses and put up for sale by the business exclusively. The proceeds will go straight to the business and cause for planting wildflowers under the **wildflower funding organization** which has been created to be a part of my cause. Additionally, the paintings are going to be made into prints that can be exclusively sold at the Fort Greene local farmers market. These proceeds will also go towards the organization funding. With these growing funds, the organization will be able to help the businesses beautify their storefronts with the wildflowers in the art.

Each print and original work that is sold comes with a **brochure** providing information about each wildflower species and why they benefit the local community. They provide a **QR code** to the organization website that can provide further information and ways to donate towards the efforts. The original artworks for sale will also be listed on this site for exposure. The brochures will also be set out on public bulletin boards, the local business counters for customers to take. My creative intervention not only **significantly improves the local economy and**

**ecology**, but it may be an effective way of spreading the benefits of planting native wildflowers in the community itself while working towards local beautification.

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Empirical findings show retail areas with trees and plantings experience 9-12%. The journal article builds upon finds to show that environmental enhancement yields cumulative neighborhood economic benefits.

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National Geographic (2023) explains how wildflowers largely support insect populations that provide a foundation towards local food systems—hence why this project

may improve the overall community. By choosing native wildflower species, they are able to support pollinators year-round because they have a range of blooming sequences.

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Project for Public Spaces makes a point that creating a positive image requires keeping a place clean and well-maintained, as well as fostering a sense of identity. This identity can originate in showcasing local assets. Businesses, pedestrians, and drivers will then elevate their behavior to this vision and sense of place

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According to The Rike, there are a variety of advantages to incorporating a Daisy Fleabane to the community. They provide nectar and pollen for bees and butterflies. It is able to thrive in awful soil and is drought tolerant, ideal for the Brooklyn streetsides. Additionally they have nice aesthetic appeal with their blooming daisy vegetation and offer a natural aesthetic to any flowering lawn.

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traffic-emitted particulates (PM10/PM2.5) close to the curb. These particles are released from engine combustion, brakes, tires, and road surfaces. While trees often remove more PM overall, herbaceous strips at the road edge help capture freshly emitted particles before they disperse into sidewalks and homes.

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Wildflowers are able to absorb metals, offering healing solutions to potentially degraded urban soils—providing a scientific outlook on improving the sustainability of the plants and the health of the areas around the storefronts where they are planted.