



Article Community Perception of Brownfield Regeneration through Urban Rewilding

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Abstract: Brownfield regeneration using a rewilding approach could provide an opportunity to create new green spaces in our cities. However, studies on public perceptions of rewilding projects are limited. Thus, the purpose of this study was to better understand the public's perspective of brown-field regeneration and the perceived advantages that these regenerations may give if regenerated as urban green areas as part of rewilding projects. An online survey containing 21 dichotomous and multiple-choice items was created to learn about people's preferences for brownfield regeneration, the advantages of urban rewilding, and the value of biodiversity in urban contexts. Results show that most people are aware of the benefits of urban regeneration and receptive to the idea of rewilding for urban resilience. Our findings raise awareness of the possibility of regenerating abandoned lots to create accessible green spaces for our communities.

Keywords: nature-based solutions; urban biodiversity; ecosystem services; urban wilderness

1. Introduction

Cities have disproportionate environmental implications at the local, regional, and global levels that extend well beyond their borders. Despite the fact that they cover only a small fraction of the planet's surface [1–3], they are critical for sustaining urban biodiversity [4–7]. However, with rapid urbanization urban developments have led to substantial habitat loss and species extinctions [8–10]. Finding space for nature in densely populated cities presents a significant challenge for landscape architects and urban planners [11–13]. Designing new green areas will require cities to identify existing land uses that can be gradually replaced with nature-based solutions (NBS) [11].

Recently, brownfield land has been at the center of various urban greening projects to deliver quantifiable ecosystem services in terms of benefits to improve urban environments [14–17]. Brownfield land can have significant biodiversity and environmental value if its reuse is based on contextual analysis of the economic, social, environmental, and biodiversity factors. Brownfields can be less suitable for development, or can have greater benefit, especially in dense urban areas, to become open green spaces, form important wildlife corridors, support a large number of rare birds and species, or act as high-quality open mosaic sites that for many wildlife habitats are transient but still have value [18–20]. These pockets can add value to local communities and economies, in some cases having great value as green open space. Multi-functional green spaces created by regenerating brownfields can be considered NBS for the urban environment to restrict further urban sprawl and optimize urban green space systems, and play a vital role in sustainable and resilient urban development [14,21–24].

The UK has over 25,000 hectares of brownfield sites [25], most in urban centers. The regeneration of these brownfields may have the potential to optimize urban ecosystems, and for the benefit of the communities seems to be a widely accepted solution to renewing the urban ecological system and creating a sustainable and resilient urban development. Many governments, local groups, and commercial organizations have attempted to green brownfields in many developed and developing nations. [15,26–29].



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Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). The literature reports several good examples of brownfield regeneration projects that created new green urban spaces. One example is the Barking Riverside brownfield in London, UK, which was redeveloped, recognizing the relevance of habitat function as well as the value of many other ecosystem services, such as water management for stormwater storage and the provision of recreational space [30].

Recently, re-naturalization and rewilding strategies of brownfield land have been proposed as part of the initiatives needed to strengthen urban resilience [31].

Dave Foreman coined the term "rewilding" in 1992, and it was later revised by Soule and Noss in 1998 to integrate the notions of biodiversity and rewilding [32,33]. Rewilding has the potential to play an essential role in green infrastructure and the development of a global agenda of resilient communities [34]. Revitalizing patches of urban land can create possibilities for damaged ecosystems to regenerate, reverting to natural systems and processes that can help address many of the present concerns we face, including climate change, increased flooding risk, poor air quality, pollution and biodiversity loss, and by creating a chain of similar connected areas and networks [31,35,36]. Clancy and Ward (2020) investigated the concept of auto-rewilding in drastically transformed urban and post-industrial contexts [37]. They emphasized that the effects of having auto-rewilded species in post-industrial environments needed to go beyond the negative perception of invasion and harm [37]. Recently, Pettorelli et al. 2019 identified three main themes in the definitions of rewilding in academic literature, but the meaning can vary depending on the observer's perspective [38]. The first theme is about the resumption of wildness, i.e., the return of a natural state to an area that has been degraded, allowing it to regain biodiversity and develop on its own without human interference. The second theme involves the reintroduction of species that were previously extinct to bring back the functionality of an ecosystem and provide benefits to humans [38]. The third and emerging theme concerns the dynamic relationship between the environment and society, where decisions about wildness are influenced by cost and benefit considerations [38].

Rewilding can simply be defined as an idea, an initiative, or an ecological strategy to bring greater diversity to an urban area by introducing native flora and fauna into the urban infrastructure. Rewilding in urban areas might also include reintroducing native plant species, woodlands, grassland, or wetlands on empty lots, incorporating more biophilic design when building new structures, integrating wildflower mix plantings in private gardens, or simply allowing nature to reclaim space. In the urban context, it is also understood as a term that reconceives areas of abandoned industrial zones due to economic shifts, which are overgrown by vegetation leading to a return of wildlife [39]. Urban environments have the potential to support high levels of biodiversity, and greening urban areas enhances biodiversity and benefits humans. By combining the restoration of ecosystem services, or 'rewilding' inside an urban environment, we can reverse the degradation of the natural world, reconnect people with the wonder of nature, and embrace the notion of rewilding our cities to alleviate the stresses of expanding urbanization [40].

Restoring natural processes will make our cities more resilient, enhancing people's health and happiness, creating natural play and learning opportunities, boosting community spirit and boosting local businesses [31].

Today, rewilding forms an important part of conservation in Europe and America [32,41,42]. Worldwide, cities are rewilding their urban spaces [43].

In the UK, one-quarter of English councils are already working on rewilding initiatives [44]. There are various examples of rewilding at various levels, from large parks and nature reserves on the fringes of cities to small rewilding initiatives focused on smaller areas of existing parks. These rewilding projects offer a chance to mitigate the worst effects of climate change [28,45,46]. Rewilding pockets of urban land could compensate for some loss of biodiversity in cities, and can be an important step to enhancing biodiversity in cities and urban areas to safeguard the sanity and well-being of city people while also addressing the myriad environmental and ecological issues that confront us [31,47]. As analyzed in the research by Katherine Foo and colleagues [48], a study based on focus group studies, and a landscape design project to transform an urban plot, concluded that although vacant plots of land in urban areas (Boston in this case) were associated with economic and social degradation, the land was perceived to be far more attractive in terms of its ecological and recreational value [48]. The research also concluded that abandoned urban plots should be utilized to provide recreation opportunities and to add natural wilderness close to people's homes, incorporating landscape design to enhance the ecosystem services value [48]. These pockets of abandoned land can also be viewed as transformative spaces that have immense opportunities, and can contribute to community development and provide environmental ecosystem services that support the health and well-being of people in cities.

In central Europe, with the appearance of shrinking cities at the end of the 1990s, there has been a discussion in urban planning about the naturalization of cities, which has resulted in the use of the term wilderness to represent this phenomenon [49,50]. The concept of wildness is greatly valued, where vacant lots, former borderlands, abandoned industrial sites, and recreational parks are all being rapidly converted into urban wilderness [51]. These wilderness areas are typically small and isolated, and they frequently go through the rewilding process [51].

The urban wilderness is viewed as an ongoing learning process, and presents a significant challenge to the human occupants who must deal with this novel aspect of nature [50].

The fourth nature aspect of the four-nature concept [52–54] refers to rewilding that emerges after human disturbance, in contrast to the first, second, and third aspects that refer to pristine wilderness, the agricultural landscape, and planned landscapes and green spaces. The fourth aspect includes abandoned and vacant land and brownfields, and areas along transit corridors including roads and railways. However, the benefits, and the public's perception of diverse brownfield typologies are still under-studied, which serve as is a barrier to fully achieving resilient and sustainable development of these landscapes [55]. Furthermore, little research has, so far, been carried out into the role of community participation in relation to brownfields in the UK.

This study was conducted to understand the public's perception of brownfield regeneration and the perceived benefits such regeneration could provide as urban green spaces in rewilding initiatives. Specifically, this research was conducted to understand peoples' priorities for brownfield regeneration, the benefits of urban rewilding, and the importance of biodiversity in urban areas.

2. Materials and Methods

An online survey was used to determine the level of community perception about the regeneration of brownfields through rewilding which is important to the long-term sustainability and the life of such projects.

The survey had two sections, with part 1 consisting of a mixture of dichotomous and multiple-choice questions, a photo-elicitation section, and open-ended questions to gather insight into the perceptions of the respondents (see Supplementary Materials).

The content of the questions began with demographic information and progressed to questions about green space and biodiversity in urban settings. The participants were asked about their views, their preferences, and their level of awareness about the research topic.

This was followed by perceptions about brownfield regeneration and Likert scale questions regarding variables that should drive/be considered for brownfield regeneration in urban areas.

The latter part was a photo-elicitation survey. It was chosen as a data collection method as it allows control of the variables in studies of landscape preference [56] and conveys the actual and possible qualities of the landscape for the participants. For this part, various images of brownfield sites and completed brownfield regeneration projects were used for the respondents to state their level of agreement. The first two questions of the survey presented scenarios where pictures of an existing brownfield site were shown with two more rewilding scenarios of low and medium wildness, and the respondents were asked to state their opinion about which option they felt was more suitable for the regeneration of the brownfield land. The three conditions were labeled as 1 (no wildness), 2 (low wildness), and 3 (medium wildness).

Furthermore, questions were asked to state their agreement for various scenarios of brownfield regeneration that could be beneficial to the community in terms of its upliftment, public health, biodiversity enhancement, and upliftment of the monetary and socio-economic fabric of the area with a focus on understanding the priorities of the stakeholders (local communities in this instance) and their opinions with regard to brownfield regeneration and reuse. Open-ended questions were included that asked the respondents if the reuse decisions at brownfield sites should be made keeping in view the local specific characteristics of the areas, involving the community, and the need for green spaces, especially in the urban environments.

The questionnaire also contained an open-ended question with a text box to elicit authentic and unexpected feedback, highlight the diversity of responses or nuances in opinions, and capture the "why?" that supplements quantitative survey data [57], and captures any factors which have not been highlighted in the research.

Jisc Online Surveys was used to create the online survey. A participant information sheet was used as the initial web page of the online survey, which explained the purpose of the survey, the idea behind the research, and the confidentiality and data protection information. Only participants who were above the age of 18 were recruited. The survey was shared via a social media account and also sent as a recruitment email with the online survey link.

The survey was piloted online prior to going live to optimize the survey and ensure there were no technical issues, as well as to ensure that it was customized to the issue at hand and to guarantee that participants were restricted to the number of replies necessary for each question.

The poll received 102 replies, with all but two participants answering all questions and consenting to their responses being used for analysis. The surveys from two respondents who did not provide consent to use their opinions in the research were not included in the results, and no data was used from their responses. There were no withdrawals requested before the deadline.

Data Analysis

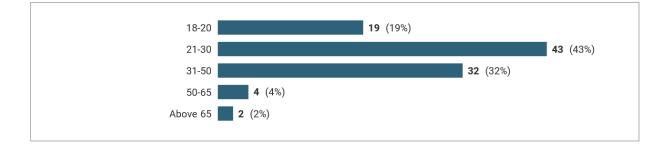
Data was collected from the Jisc Online Survey responses, and all quantitative and demographic data were compiled into tables and figures. Microsoft Excel was used to create spreadsheets of all participants' anonymous replies, which subsequently allowed tables and graphs to be created. Respondents were categorized based on their answers to specific questions for further study and dissemination, and the replies of each participant group were then analyzed and compared.

3. Results

Demographics

Analysis of demographics identified that most respondents were aged 21–30 years (n = 43) followed by the age range 31–50 years (n = 32) and age range 18–20 (n = 19) as seen in Figure 1. Additionally, 56% of the respondents identified as female and 43% identified as male.

Most respondents were white (51%), and the majority of respondents were educated to a degree level (39%), closely followed by 35% having a master's or a Ph.D./Doctorate. Full-time employment and students were the dominant work categories (n = 37, n = 46) followed by 14% in part-time employment (n = 14). The majority of respondents (39%) were from southeast England.



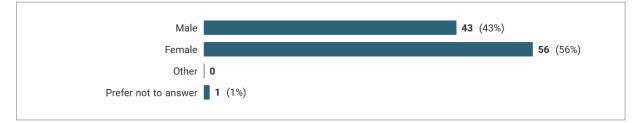


Figure 1. Sociodemographic information.

Almost 9 in 10 people (96% of people (n = 95)) responded in affirmative to having access to green space, and 8 in 10 people (84.7% of people (n = 83)) felt the need for more green spaces in urban areas. When asked how important they felt biodiversity is in urban areas, more than two-thirds of the participants (84%) considered it very important and extremely important and more than two-thirds of people believed that rewilding of brownfield sites/abandoned land in Urban areas would be useful to the community (Figure 2).

In your opinion, how important is biodiversity in urban areas?

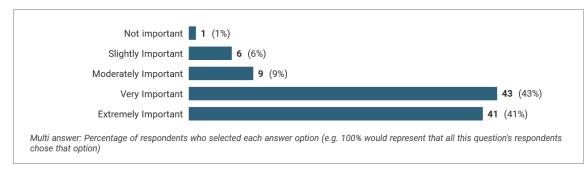


Figure 2. Public perceptions around biodiversity and rewilding of brownfield land.

Regarding the participants' preferences for the types of land-use functions that should be considered for the regeneration of brownfields in urban settings, nearly twenty-eight percent of people (n = 28) selected urban woodlands and areas for ecosystem services for community and wildlife, as their first choice followed by twenty-four percent (n = 24) who selected parks. Almost thirty-one percent of people (n = 30) chose areas to enhance biodiversity as their second option, followed by areas for food production and areas for ecosystem services for community and wildlife (n = 16; n = 16). Areas for parks and areas for enhancing biodiversity in an urban setting were the third most popular choices (n = 18; n = 17). Employment land and housing were popular as the fourth choice, and retail and leisure were less favored in comparison to the environmental benefits people want to derive from vacant urban land.

The least favored land use types for most people were regeneration which focuses on providing an area for retail and leisure (34.8%), areas to generate employment (23.7%), and other uses which were unspecified (74.7%). Figure 3 shows the preference of the participants

about options for brownfield regeneration in urban areas that should be considered for urban brownfield regeneration. Urban woodlands, areas for ecosystem services for the community, wildlife, and areas for biodiversity enhancement were found to be the most popular, with 42% of people selecting either of them as their top priorities, followed by areas for parks and green space (n = 24). Sports and leisure facilities were the least ranking options selected.

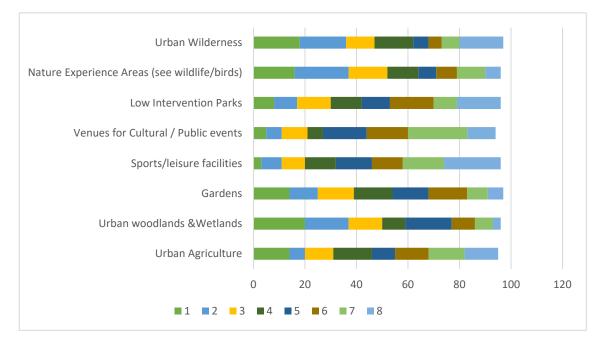


Figure 3. Responses to the question about the most important and least important land use options for urban brownfield regeneration with 1 being the most important and 8 being the least important. The respondents could only choose one option in any column and row.

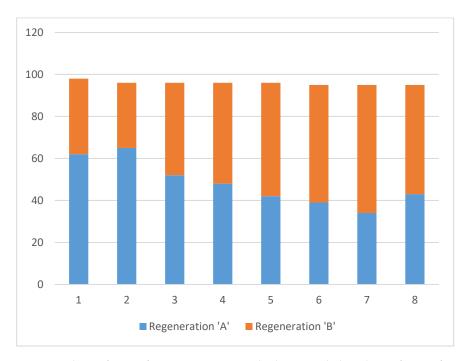
To obtain an overview, the ranking question was converted into a binomial format with the responses split into two categories, with urban wilderness, nature experience areas, low intervention parks, and urban woodland and wetlands being categorized as 'Regeneration A' with rewilding as the focus, and responses including venues for cultural/public events, gardens, urban agriculture and sports/leisure facilities being categorized as Regeneration B with a focus other than rewilding (Figure 4).

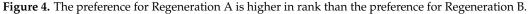
Ninety-one percent of the people believed that rewilding of brownfields and abandoned urban land would be useful to the community and that urban green spaces should approach a high level of ecological and environmental quality.

For the photo-elicitation part of the survey (see Supplementary Materials), there was a considerable difference in the responses where the medium wilderness option was significantly preferred by the population (63.6%) over low wilderness (32%) and no wilderness options (4%) (Figure 5).

In other photo elicitations participants were asked to state their agreement with various scenarios of brownfield regeneration that could be beneficial to the community in terms of its upliftment, public health, biodiversity enhancement, and upliftment of the monetary and socio-economic fabric of the area.

A large proportion (83.8%) of respondents believed that green regeneration of brownfields and abandoned land provides environmental benefit, with 8% thinking it would not have an impact and the remaining 8% thinking it would stay the same. Eighty-five percent thought that urban rewilding provides social benefits by improving access to green areas, and 82% of the participants thought that the rewilding initiative would improve the quality of life for the communities.





Which scenario provides more benefits?

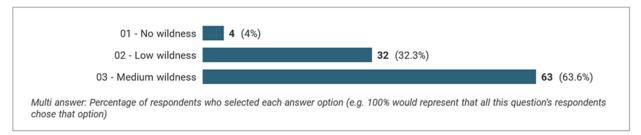


Figure 5. Responses to assess benefits from various levels of wilderness in the photo-elicitation survey.

Eight in ten participants thought that overall regeneration through rewilding would increase the land values of the surrounding area, with two in ten not sure of the impact or disagreeing.

Only 69.7% of people thought that rewilding brownfields would increase the socioeconomic fabric of the area compared to 22.2% of people who didn't know or were not aware of the link, and 8% disagreeing.

Over seventy percent (73.5%) of the participants linked the creation of an urban wetland to economic benefits for the community, with 11.2% disagreeing and 15.3% not sure if there was a link. Overall, more than two-thirds of participants (87%) believed that urban rewilding would benefit public health. Upon analysis of open-ended responses to the factors that should drive brownfield generation in urban areas, it was found that the most common words and themes used by respondents were biodiversity, community, location, needs and green space, followed by ecology, wildlife, housing, employment and others. Views of local communities, stakeholders, and local context and needs were the most consistent factors chosen by respondents to determine the nature of regeneration, with 34% of people mentioning it in their responses. The next most consistent answers were ecosystem services to combat problems of pollution, flooding, health, local food production, and socio-economic growth (19%) and biodiversity enhancement, habitat creation and augmentation of native species and wildlife (19%). Thirteen percent of people believed that the addition of green space should drive urban brownfield regeneration, and 7% thought ecological connectivity, rewilding and ecological balance should be the driving factors,

Ecological connectivity for rewilding, ecological balance. Biodiversity, habitat creation(whole system approach), native species enhancement Housing recreation / educational 7% 13% purposes 19% Local context and needs Views of local communtities and stakeholders Eco system services to counter pollution,flooding, urban sprawl, health, local food production, socio economic growth etc Green spaces Address existing urban problems like traffic, costs etc.

as shown in the chart (Figure 6). Only 5% of people mentioned housing (affordable and otherwise), and 3% believed brownfield land should be regenerated to address urban problems such as traffic and reduce cost of living.

Figure 6. Various factors as rated by survey participants to determine urban brownfield regeneration.

4. Discussion

4.1. Socio-Cultural Variables Related to General Preference

In this research, it was found that only 55 percent of people were familiar with the concept of urban regeneration of brownfield land. More than half (55%) of respondents in the 21–30 years age group were unfamiliar with the concept, compared to 34% in the 31–50 years age group.

There was a slight variation in awareness about brownfield regeneration, with 67% of males being familiar with the concept compared to only 46% of the women.

There is overwhelming evidence to argue that people support rewilding of brownfield sites/abandoned land in urban areas, with eighty-nine percent of respondents believing that rewilding of brownfield sites/abandoned land in urban areas is useful to the community. However, even though people might not be familiar with the concept of brownfield regeneration, a large majority of people (89%) believe that regeneration should happen and are very receptive to the idea of improving biodiversity, ecosystem services, increase woodlands and wetland in urban areas, and think it would be beneficial for the community.

4.2. Perception

Urban wilderness is an issue that is increasingly gaining attention internationally [54,56,58,59]. The survey used images of existing urban brownfield regeneration projects which were successfully completed and implemented but may have been subject to limitations and challenges which have not been highlighted; for instance, funding for urban regeneration and rewilding can be a challenge, and land is more likely to be regenerated if it is part of a larger effort [60]. An aspect of regeneration that was not investigated in this research study was access to the regeneration funds. Maintenance is necessary to guarantee that the environmental advantages to air, land, and water persist in the long term once the regeneration is complete [61]. This sort of regeneration has its own set of obstacles.

Funding for regeneration can be a challenge, and land is more likely to be returned to green infrastructure if it is part of a larger effort [60]. In addition to the regeneration funds, continuing maintenance is necessary to guarantee that the environmental advantages to air, land, and water persist in the long term once green infrastructure is built [61]. This highlights the importance of the engagement of all key stakeholders for a successful regeneration project. The participation of the local community and a co-creation approach among the stakeholders may result in a more progressive and wholesome approach to brownfield regeneration.

Urban green space is strongly associated with everyday activities and aesthetics rather than ecological ethics or playing an ecological purpose [56,62]. Interestingly, however, a slightly higher percentage of respondents indicated a preference for urban forests, and areas for ecological services for community and wildlife biodiversity, in contrast to green spaces and parks. This suggests that there is a clear differentiation between wildness e.g., urban wilderness, and green spaces in the responses, and a general acceptance of wilder vegetation in urban areas. Results showed that most respondents to this survey believed that the need for urban greenery varies depending on extrinsic factors such as environmental context and brownfield reuse options, and should be considered with the local distinctive qualities of the places in mind, as well as the requirement for green spaces.

Previous research on landscape preferences for wildness or neatness supports the generalization that people prefer a neat environment [63,64]. On the other hand, Hwang et al. 2019 found that people's preferred level of wildness in urban green spaces varied depending on the context but, as in our study, individuals were typically not opposed to moderately wilder urban green areas [65]. In Germany, Mathey et al. (2018) conducted a study to explore the perception of brownfields with spontaneous vegetation [66]. The survey found a spectrum of opinions, ranging from unfavorable to positive assessments. The perception of urban brownfields, particularly those with spontaneous vegetation, was found to be complex due to their continuous growth [66]. According to the study, the positive perception of brownfields increased as the vegetation advanced, with persistent ruderal and tall herbaceous vegetation [66]. Later successional stages with dense, wild structures, such as spontaneous wood, were rated less favorably [66]. The density and structure of vegetation on urban brownfields were found to have a considerable impact on people's perceptions [66]. In our study, we did not investigate the seasonal environmental changes [67] that occur on brownfields with spontaneous vegetation. Future research might, therefore, examine the possibility of utilizing a rewilding approach for urban regeneration, taking into account the impact of seasonality on communities' preferences for visual aesthetics [68].

4.3. Community Engagement and Stakeholder Participation in Brownfield Regeneration

Local community perspectives, stakeholder perspectives, and local context and requirements were the most consistently picked variables by respondents to decide the form of regeneration, with 34% citing it in their comments.

Brownfields are the major potential available lands in crowded urban areas for developing greenspaces, although various indications and parameters must be adjusted according to the local circumstances, keeping in view the local specific characteristics of the areas, involving the community and the need to address problems of biodiversity loss, green cover in the spatial framework and delivering of ecosystem services in the local and wider context. At the same time, if regeneration is not appropriate for the context, possible local resistance to brownfield redevelopment should not be ignored, particularly in metropolitan areas where important open space has been lost, traffic is clogged, and air, noise, and light pollution are prevalent and have a detrimental impact on the quality of life [17]. There is no guidance on how the local communities can engage in brownfield regeneration in an urban area, and this is mostly left to the developers and the local authority to decide. Sometimes the views of the local community are not addressed properly before decisions are made, and the importance of engagement of all key stakeholders for a successful regeneration project is often not realized. The participation of the local community and a co-creation approach among the stakeholders may result in a more progressive and wholesome approach to brownfield regeneration [69].

4.4. Limitations and Future Research

4.4.1. Sampling

In this study, snowball sampling was used to recruit respondents with networking and referrals at its core. The researcher in this type of sampling technique starts with a small number of participants who are invited to participate in the study. Once the initial participants are identified, the willing participants are then asked to suggest more contacts who fulfill the study criteria and may also be willing participants, who in turn recommend more potential responders, and so on. Consequently, friends, co-workers, neighbors, social media, and online survey forums were used to establish early connections, with sampling momentum forming from these, and a growing chain of participants accumulating [70].

The fundamental feature of the snowball sample, on the other hand, is impacted by a selection bias [70,71]. Initially, the sample is based on the researcher's own resources and ties. Because potential participants are created from a small number of initial seeds, the research runs the danger of being biased early in the process. For example, the sample may become entirely female or all from the same ethnic origin. This pattern may also be found in this study, with a dominating age group of 43% of respondents in the 21–30 years age group, and only 6% of the population above 50 years of age. Ethnicity was also influenced, with the majority of the respondents identifying as white (51%) British or Asian/Asian British (37%). Only 1% of the respondents were Black/African/Caribbean/Black British. This highlights an experimenter's bias, since participants were not selected randomly from the general population. Although bias exists, snowball samples are not necessarily bad or incorrect. It simply implies that researchers must be conscious of potential biases and ready to examine how they may affect any findings and advice derived from the study [72]. Therefore, future research should use appropriate sampling methods to ensure that ethnic minorities are adequately represented in the research [73–75].

4.4.2. Policy around Brownfield Regeneration

Another aspect of regeneration that was not investigated in this research study was the current government policies that currently drive brownfield regeneration.

These broad elements are related to the political, economic, and social climates of nations or larger areas.

Because this study did not just consider social opinions of brownfield regeneration for urban resilience, it did not consider the location, size, quality, quantity, or kind of brownfield or abandoned land. Government policies around Brownfield regeneration are an extensive topic, and were not included in the scope of the research. Public policies are the major determinants in deciding the future of brownfield regeneration, and the housing shortage puts land under considerable pressure for development. Over the years the government has committed to making better use of brownfield derelict sites, urging local authorities in 2014 to take action to bring brownfield back into use and introducing policies that included pre-planning approval for housing and local development orders (LDOs). In August 2020, the Government introduced more legislation to fast-track the brownfield regeneration in England (Town and Country Planning (General Permitted Development) (England) (Amendment) (No. 3) Order 2020 (S.I., 2020, No. 756)) for conversion to housing. An in-depth study of macro-level factors including government policies is important mainly to gauge if and how government actions and policies have an impact on how these sites are being reused or regenerated. To do this, a greater understanding of all government policies and incentives is required to draw analysis from the data.

4.4.3. Valuation of Brownfield Regeneration

Rewilding of brownfields can be valued by extending our understanding of ecosystem services to establish the long-term ecosystem benefits that may be provided with short-term efforts [23,26,76]. Various methods of ecosystem services valuation can provide quantifiable insight into the benefits of brownfield greening to a diverse range of stakeholders [15,23,77] to fully reflect the overall value of artificially green spaces regenerated from brownfields in dense urban areas. This understanding of the ecosystem services may need to be expanded to include economic cost-effectiveness to support the case for urban rewilding to provide an objective and widely accepted valuation system in the urban context [26,29,78] and support the growing demand and need for an integrated urban green space network. Despite the uncertainty, emerging ways of valuing ecosystem services imply that the economic advantages of restoration may outweigh the costs and incentives. Imbursement for Ecosystem Services programs might provide incentives for restoration, but they will need to be developed to guarantee biodiversity and multiple services are boosted, as well as the requirements of many stakeholders are addressed [40].

Such measures must be extensively used if new worldwide restoration objectives are to be met.

5. Conclusions

Our findings contribute to the awareness that vacant lots are not empty: when left to local communities, they may provide opportunities for restoration, play, leisure, education, and a peek of nature close to people's homes. With growing awareness, change in public perceptions and change in public policies, there has been a drive to quantify the potential biodiversity and ecosystem service benefits of urban flower meadows, for example, the UK Urban Pollinators Project,; and net biodiversity gain (BAP) and Biodiversity and Ecosystem Service Sustainability (BESS) project (www.nerc-bess.net), which, if combined with practices to increase and restore nature and ecology in the urban realm, would lead to ecological enhancements and habitat creation [79]. The Government should plan and encourage the restoration of habitats through Local Nature Recovery and Landscape Recovery schemes to support the rewilding of abandoned and brownfield land to benefit the wider area.

Rewilding will be an attempt to reconnect and reset, to reverse species extinction and to help nature flourish on a large scale. It is a chance to mitigate the worst effects of climate change. It is important that we work to ensure everyone has access to wilder nature, even in our urban areas.

More nature is better for all of us, providing us with clean water, flood defenses, food, healthy soils, breathable air, and good health. However, the economic implications of innovative management practices have received little attention and need more research. This is an essential study path because sharing information on the cost-benefits of alternative management practices with a broad variety of stakeholders is likely to improve urban greenspace management for biodiversity. Such evaluations are especially significant across time spans relevant for management, since increasing habitat for biodiversity might be expensive in the short run.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/su15043842/s1, Online survey.

Author Contributions: Conceptualization, N.M. and A.R.; methodology, N.M.; formal analysis, N.M. and A.R.; investigation, N.M.; resources, A.R.; data curation, N.M.; writing—original draft preparation, A.R.; writing—review and editing, N.M. and A.R.; visualization, N.M. and A.R.; supervision, A.R.; project administration, A.R.; funding acquisition, A.R. All authors have read and agreed to the published version of the manuscript.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: All data generated or analysed during this study are available from the corresponding author on reasonable request.

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