Urban Garden Survival
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EES201 – Introduction to Geographic Information Systems – Fall 2014, Furman University, Greenville, SC

Abstract

Urban gardens are community-based places where people cultivate plants, flowers, and other non-food plants, to beautify and/or interact with their environment. They provide a number of benefits and serve a variety of purposes, from generating income to enhancing the environment. In Greenville County, South Carolina, urban gardens are built in a variety of locations, including wetlands, parks, and public spaces. The purpose of this study was to investigate the survival of urban gardens in Greenville County. Results indicate that urban gardens with a high level of surrounding social land cover are more likely to survive. The highest survival rate was found in areas with churches and schools close to the garden, and the lowest survival rate was found in areas with commercial land cover. These findings suggest that urban gardens can be used as a tool for urban planning and community development.

Results and Discussion

The survival analysis was used to identify factors that contribute to the survival of urban gardens in Greenville County. The analysis identified social and ecological factors as significant predictors of garden survival. Social factors included proximity to schools and churches, while ecological factors included proximity to wetlands and parks. The survival analysis also identified a number of significant variables that contribute to the survival of urban gardens. These variables included the type of land cover, the proximity to other gardens, and the proximity to schools and churches.

Methodology

The survival analysis was used to identify factors that contribute to the survival of urban gardens in Greenville County. The analysis identified social and ecological factors as significant predictors of garden survival. Social factors included proximity to schools and churches, while ecological factors included proximity to wetlands and parks. The survival analysis also identified a number of significant variables that contribute to the survival of urban gardens. These variables included the type of land cover, the proximity to other gardens, and the proximity to schools and churches.

Future Research

Further research is needed to identify additional factors that contribute to the survival of urban gardens in Greenville County. This research could include factors such as the proximity to other gardens, the type of land cover, the presence of social and ecological amenities, and the type of garden. Additional research could also focus on the survival of urban gardens in other locations and how these factors may differ across different locations.

Conclusion

Urban gardens in Greenville County are a valuable asset to the community. They provide a variety of benefits, from generating income to enhancing the environment. The survival analysis identified social and ecological factors as significant predictors of garden survival. These factors include the proximity to schools and churches, and the type of land cover. Further research is needed to identify additional factors that contribute to the survival of urban gardens in Greenville County. This research could help to identify additional ways to support the growth and sustainability of urban gardens in the area.

References/ Data Sources

Grimm, Nancy B., Grove, Morgan J., Pickett, Steward T.A., Redman, Charles L., 2000, Economic: A Literature Review. In: Grimm, Nancy B., Grove, Morgan J., Pickett, Steward T.A., Redman, Charles L. (Eds.), Benefits of a shared space in which people come together to grow food are widespread and can be economic, ecological, and social. Elements of interaction between social and ecological systems (Grimm, 2015). Using Geographic Information Systems (GIS), we looked at attributes such as income, median age, land cover, and other spatial data to identify which communities have increased opportunities for urban gardens.

Denver Urban Gardens’ Best Practices Handbook for Growing and Sustaining Community Gardens (2013). Urban gardens are community-based places where people cultivate plants, flowers, and other non-food plants, to beautify and/or interact with their environment. They provide a number of benefits and serve a variety of purposes, from generating income to enhancing the environment. In Greenville County, South Carolina, urban gardens are built in a variety of locations, including wetlands, parks, and public spaces. The purpose of this study was to investigate the survival of urban gardens in Greenville County. Results indicate that urban gardens with a high level of surrounding social land cover are more likely to survive. The highest survival rate was found in areas with churches and schools close to the garden, and the lowest survival rate was found in areas with commercial land cover. These findings suggest that urban gardens can be used as a tool for urban planning and community development.

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Tables

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<tr>
<th>Income</th>
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Figures

1. Greenville County social indicators related to the median household income.
2. Greenville County social indicators related to the median age.
3. Median Age & Urban Gardens

Figure 1. Greenville County social indicators related to the median household income.

Figure 2. Urban gardens are community-based places where people cultivate plants, flowers, and other non-food plants, to beautify and/or interact with their environment. They provide a variety of benefits and serve a variety of purposes, from generating income to enhancing the environment. In Greenville County, South Carolina, urban gardens are built in a variety of locations, including wetlands, parks, and public spaces. The purpose of this study was to investigate the survival of urban gardens in Greenville County. Results indicate that urban gardens with a high level of surrounding social land cover are more likely to survive. The highest survival rate was found in areas with churches and schools close to the garden, and the lowest survival rate was found in areas with commercial land cover. These findings suggest that urban gardens can be used as a tool for urban planning and community development.

Figure 3. Greenville County social indicators related to the median age.

Figure 4. Greenville County land cover related to a 500 meter perimeter around each garden.

Figure 5. Income block group information from Figure 1 and the percentage of gardens in each group.

Figure 6. Median Age & Urban Gardens

Figure 7. Results from first survival analysis: quantitative

Figure 8. Results from second survival analysis: qualitative